



# Chapter 16

## NATURAL RESOURCES

A place where all citizens enjoy opportunities to thrive in a safe, healthy, and productive community.  
- The Tuolumne County Vision

### Introduction

Conservation is the planned management of natural resources so that they will be sustained for the use and enjoyment of future generations. To ensure the protection of the public's interest in conserving natural resources, the State Legislature adopted Government Code Section 65560, which established the criteria for open space to be addressed in the mandatory Open Space Element of a General Plan. The Legislature expanded on this need to manage the State's resources by requiring all General Plans to include a Conservation Element to address the "conservation, development and utilization of natural resources, pursuant to Section 65302(d) of the Government Code."

Because the management of open spaces is directly tied to the management of natural resources, the Conservation Element and Open Space Element are frequently combined into a single General Plan element. To ensure the maximum coordination between the management and use of natural resources and open spaces in Tuolumne County, these two required elements are combined in this Natural Resources Element.

### Overarching Vision

OAV1. Promote development in Tuolumne County that reflects the values and vision of the community and implements the latest legal, statutory, scientific, and technical changes and advances.

OAV2. Achieve, enable and preserve maximum flexibility within the constraints of state and federal law and an ever-evolving legal, cultural and environmental landscape.

OAV3. Recognize that the County has a unique role to collaborate with special districts/stakeholders within the County to promote the delivery of efficient and cost effective public services.

| Purpose                                                                                                                                                                                                                                                                         |
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| Employ a balanced approach to the conservation of biological resources, as natural habitats, fish, and wildlife provide biological functions, scenic value, recreational opportunities, and educational pursuits, which are important to County residents and attract visitors. |



## GOAL 16A:

**Balance property rights with the conservation of the environment and rural character of the County, which contributes to the quality of life of residents, encourages tourism and supports economic development.**

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### POLICIES & IMPLEMENTATION PROGRAMS

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**Policy 16.A.1:** Recognize that agricultural and timberlands have historically defined the rural character and scenic beauty of Tuolumne County.

#### Implementation Programs

**16.A.a** - Exempt lands designated on the General Plan land use diagrams as Timberland Production Zone, or Agricultural when the parcel is 37 acres or larger and supports an agricultural or residential land use or is vacant, from the County's programs for conserving scenic resources, as these lands provide scenic value without participating a scenic resources program.

**Policy 16.A.2:** Conserve the natural scenic quality and rural character along designated scenic routes in the County.

#### Implementation Programs

**16.A.b** - Continue to recognize the following sections of State Highways which traverse an area of outstanding scenic quality as local or State Scenic Routes

- State Highway Route 49: This route traverses the western foothills and Mother Lode and connects many historical sites and towns. This highway shall be designated as a Scenic Route from the Mariposa County line to Route 120 near Moccasin Creek and from Route 120 at Chinese Camp to the Calaveras County line, exclusive of the City of Sonora. This highway is included in the "Master Plan for State Scenic Highways".
- State Highway Route 108: The Sonora Pass Highway, from Route 49 easterly into Mono County. This, like State Route 49 described above, gives access and exposure to spectacular mountain country. This route is also in on the State Scenic Highways "Master Plan for State Scenic Highways".
- State Highway Route 120: From Route 49 near Chinese Camp easterly to Route 49 near Moccasin Creek. This route is also in the "Master Plan for State Scenic Highways".

The land use restrictions on Scenic Routes and lands adjacent to them as outlined in the Streets and Highways Code of the State of California shall only apply to lands designated as non-urban on the General Plan land use diagrams maps. Land designated as TPZ or AG when the parcel is 37 acres or larger and supports an agricultural or residential land use or is vacant shall be exempt from these restrictions.

**16.A.c** – The designation of additional local or state Scenic Routes shall only be approved by the Board of Supervisors after consent of the owners of a minimum of 51% of the property area and 51% of the owners of the property adjacent to the proposed Scenic Route. The determination of the consent of the property owners for the designation of a Scenic Route shall be based upon each parcel having one vote.

**16.A.d** - Encourage the conservation of the County's scenic resources along the transportation routes identified as Scenic by maintaining guidelines which provide recommendations for integrating new development with the surrounding landscape and natural topography. The guidelines should address the retention of trees and other native vegetation, screening of



outdoor storage areas, landscaping and revegetation, signage, architectural design and materials, lighting and retention of landscape features.

**Policy 16.A.3:** Conserve the natural scenic quality of hillsides and hilltops throughout Tuolumne County.

**Implementation Programs**

**16.A.e** - Encourage hillside development to be designed and located to be compatible with, rather than imposed on, the landscape and environment by minimizing the amount of grading and topographical alteration it necessitates.

**17.A.f** - Maintain hillside development guidelines which provide recommendations for integrating new construction with hillsides and hilltops. The guidelines should address fire-safe construction techniques, color and building materials, vegetation retention, retaining wall enhancement, alternative road construction techniques to reduce cuts and fills, and illustrate techniques for blending new construction with the surrounding hillsides and hilltops.

**16.A.g** - Encourage the design of new development to blend with the natural contour of the land and the natural vegetation.

**16.A.h** - Regulate signage in terms of size, quantity and location in commercial and industrial portions of the County in order to improve the visual attractiveness and appeal of the County to new business, and to protect and enhance its visitor-serving and recreational activities.

**Policy 16.A.4:** Support the efforts of identified communities which desire to promote compatibility of new development with their historical character through the development of design guidelines or other means.

**Policy 16.A.5:** Conserve scenic resources, landmarks and the natural landscape.

**Implementation Programs**

**16.A.i** - Provide flexibility in development standards to facilitate the clustering of new development in order to encourage the retention of scenic resources, landmarks and the natural landscape.

**16.A.j** - Recognize that Table Mountain has significant cultural, scenic and natural resource values and is a County landmark and, as such, adopt regulations and incentives for conserving Table Mountain.

**Policy 16.A.6:** Encourage the protection of clusters of native trees and vegetation and outstanding individual native and non-native trees which help define the character of Tuolumne County.

**Implementation Programs**

**16.A.k** - Establish an incentive program to retain existing vegetation, such as Heritage Trees, stands of oak woodlands, or clusters of native shrubs within new development

**16.A.l** - Maintain the Premature Removal of Native Oak Trees Ordinance.

**16.A.m** - Establish a Heritage Tree Program which:

- Establishes criteria for identifying individual or groves of native and non-native trees and street trees as heritage trees, based on outstanding scenic, historic or biological value and/or the status of the tree as unique in terms of age and/or size when compared to other trees of the same species. Trees considered local landmarks and those contained in the National Register of Big Trees also should be considered as heritage trees.



- Creates programs encouraging the preservation of heritage trees including recognition and public education programs and participation in inter-county and interstate competitions.
- Addresses health and safety issues associated with trees located adjacent to local airports.

**Policy 16.A.7:** Encourage and support the voluntary conservation of scenic resources through recognition programs and the provision of incentives, such as flexibility in development standards or reductions in appropriate County fees.

**GOAL 16B: Support the diversity and quality of biological resources while balancing the needs of public use and private property rights.**

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## POLICIES & IMPLEMENTATION PROGRAMS

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**Policy 16.B.1:** Recognize and map the variety of open space types and areas that are located within the county, including natural resources, recreation areas, geologic hazards, floodplains, groundwater recharge areas, managed resource areas and other open areas that support biological resources.

**Policy 16.B.2:** Recognize that agricultural and timberlands may be compatible with conservation of biological resources.

**Implementation Program**

**16.B.a** - Recognize that the open area provided by land designated as Agricultural or Timber Production on the General Plan land use diagrams that supports an agricultural, timber management or residential land use or is unimproved may be used to provide on-site or off-site mitigation for development projects, such as conservation easements, mitigation banks for plant and wildlife species impacts, and other in perpetuity mitigation options.

**Policy 16.B.3:** Require property owner consent prior to designating areas as Open Space on the General Plan land use diagrams, or zoning areas to Open Space or Open Space-1.

**Policy 16.B.4:** Recognize that wildlife, fish and their habitats provide opportunities for recreational uses and educational pursuits and are a source of revenue to the County.

**Implementation Programs**

**16.B.b** - Encourage the preservation of open areas for recreational activities, including provision of an appropriate balance of facilities suitable for intensive use (e.g. playgrounds, sports fields) and low intensity use (e.g., hiking, camping) that meet the needs of residents and visitors. Preservation of open areas that provide cultural, historical and educational opportunities for residents and visitors should also be encouraged.

**16.B.c** - Allow trails, other recreational uses and educational pursuits in areas conserved for biological resources if the effects of such uses are determined to be compatible with conservation of the resources.



**16.B.d** - Design parks and trails incorporating scenic resources and biological and water resource areas consistent with the goals and policies of this Element of the General Plan.

**16.B.e** - Review all revisions of the Recreation Master Plan prior to adoption for consistency with this Element of the General Plan. In addition, design plans for all trails, especially those adjacent to creeks, shall require the input and review of the Tuolumne County Community Resources Agency and the California Department of Fish and Wildlife for consistency with this Element.

**16.B.f** - To provide recreational use in water resource areas, continue to conditionally permit, in the O (Open Space) and O-1 (Open Space -1) zoning districts, recreational uses where such uses do not adversely impact water resources, such as beaches, picnic areas, non-motorized pedestrian and equestrian trails and other recreational uses.

**Policy 16.B.5:** Evaluate and mitigate impacts to biological resources in accordance with the requirements of State and Federal law.

### **Implementation Programs**

**16.B.g** - Maintain the Tuolumne County Wildlife Maps to assist in evaluating the effects of land development projects.

**16.B.h** - Provide the following information to assist in the evaluation of biological resources:

- Tuolumne County Wildlife Maps
- Deer Herd Maps and Management Plans
- California Wildlife Habitat Relationships habitat typing and mapping
- U.S. Department of Agriculture Forest Service Calveg mapping data

**16.B.i** - Require development that is subject to a discretionary entitlement from the County and to environmental review under the California Environmental Quality Act (CEQA) to evaluate potential impacts to biological resources and mitigate significant impacts for the following or as otherwise required by State or Federal law:

- species listed or proposed for listing as threatened, rare, or endangered under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA);
- species considered as candidates for listing under the ESA or CESA;
- wildlife species designated by CDFW as Species of Special Concern;
- animals fully protected under the California Fish and Game Code; and
- plants considered by CDFW to be “rare, threatened, or endangered in California” (California Rare Plant Ranks [CRPR] of 1A, presumed extinct in California and not known to occur elsewhere; 1B, considered rare or endangered in California and elsewhere; 2A, presumed extinct in California, but more common elsewhere and 2B, considered rare or endangered in California but more common elsewhere).
- Sensitive natural communities, including wetlands under Federal or State jurisdiction, other aquatic resources, riparian habitats, and valley oak (*Quercus lobata*) woodland.
- Important wildlife movement corridors and breeding sites.
- Oak woodlands, as provided in Implementation Program 16.B.j.



**16.B.j** - Establish thresholds of significance under the California Environmental Quality Act (CEQA) for the conversion of oak woodlands in Tuolumne County. The following provides the County's recommended standard guidelines for determining whether a project may result in a significant impact to oak woodlands, for purposes of review under the California Environmental Quality Act and Public Resources Code Section 21083.4.

- An oak woodland is defined in the General Plan as a woodland stand with 10% or greater native oak canopy cover. Tree removal from parcels with less than 10% native oak canopy cover is not considered a significant conversion or loss of oak woodland.
- For parcels with 10% or greater native oak canopy cover (i.e., parcels with oak woodland, as defined in the General Plan), a significant impact to oak woodland includes tree removal that reduces the total oak canopy cover onsite to below 10% (i.e., conversion to non-oak woodland), or a loss of 10% or greater of oak canopy woodland stand on the parcel, if the conversion or loss is determined by trained professional (ADDED FROM EIR) to be substantial in consideration of, but not limited to, the following:
  - Total acres and amount of woodland stand removed or disturbed, and amount retained onsite.
  - Pattern of development or habitat loss onsite (e.g., clustered vs. dispersed).
  - Existing habitat functions and quality (e.g., intact/high-quality, moderately degraded, or severely degraded).
  - Stand age- or size-class structure.
  - Rarity.
  - Landscape position in relation to larger wildlife corridors, stream systems, or other important natural features.
  - Loss of valley oak (*Quercus lobata*) woodland, which is a sensitive habitat.
  - Proximity to other oak woodland patches and connectivity to large blocks of intact habitat.
  - Contribution to a cumulative loss, degradation, or fragmentation of oak woodland across the County.

**16.B.j.1** - When considering discretionary development proposals, the County, through CEQA reviews, will require that project applicants map oak woodland resources on the project site and, where feasible, establish buffers around existing oak woodland stands to prevent adverse effects. For mapping purposes, project applicants may use the County's existing oak woodland map (developed for the Recirculated Draft EIR) as an initial base map for project-specific ground-truthing/field verification. The County will require implementation of BMPs while working near retained oak woodlands to avoid inadvertent damage to oak trees. BMPs will include establishment of no-disturbance buffers around the outer canopy edge to prevent root and crown damage, soil compaction, and standard management practices to reduce introduction and spread of invasive species and other indirect effects.

For those impacts on oak woodland that cannot be avoided, the County will require the project applicant to minimize adverse effects. If substantial conversion of oak woodland will occur based on Implementation Program 16.B.j, the County will require one or more of the following mitigation measures be implemented to mitigate the impact from loss of oak woodland habitat



pursuant to Public Resources Code Section 21083.4, (which specifies certain projects, including commercial agricultural production, are exempt from the requirements of Section 21083.4):

- Conserve oak woodlands through the purchase of conservation easements.
- Plant acorns and container stock from a local seed source to replace oak woodland removed. The following parameters will be applied:
- Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees.
- Maintain trees for seven years after the trees are planted.
- Planting may not account for more than 50 percent of the required mitigation and must occur on lands that are subject to conservation easements, zoned open space, or similarly restricted from development.
- Mitigation through planting may be used to restore former or degraded oak woodlands.
- Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of Section 1363 of the Fish and Game Code, for the purpose of purchasing oak woodland conservation easements, the Tuolumne County Oak Woodland Conservation Fund, or other appropriate established oak woodland conservation fund.

**16.B.j.2** - The County will require project applicants to develop a mitigation and monitoring plan to compensate for the loss of oak woodland habitat. The mitigation and monitoring plan will describe in detail how loss of oak woodlands shall be avoided or offset, including details on restoration and creation of habitat, compensation for the temporal loss of habitat, success criteria ensuring habitat function goals and objectives are met, performance standards to ensure success, remedial actions if performance standards are not met, and requirements for reporting implementation actions and progress to the County. The plan will include detailed information on the habitats present within the preservation and mitigation areas, the long-term management and monitoring of these habitats, legal protection for the preservation and mitigation areas (e.g., conservation easement, declaration of restrictions), and funding mechanism information (e.g., endowment). If planting is used as part of compensatory mitigation, an oak planting plan will be developed by a qualified professional such as a professional biologist, arborist, or registered professional forester

**16.B.j.3** - Oak woodlands habitat placed under conservation easements will be at appropriate ratios to offset the loss of habitat functions and values of the oak woodland to be lost. Oak woodland habitat preserved this way should have similar tree sizes and densities, species composition, site condition, and landscape context to the oak woodland to be removed to serve the same function and have similar habitat value. At a minimum, 1 acre of oak woodland habitat providing similar functions and values will be placed under conservation easement for every acre of oak woodlands habitat lost.

**Policy 16.B.6:** Allow property owners to utilize the Tuolumne County Wildlife Handbook, which may be updated periodically, to assist in designing mitigation for impacts to biological resources resulting from new development.



### **Implementation Program**

**16.B.k** – Periodically update the Tuolumne County Wildlife Handbook in accordance with changes in State and Federal laws and environmental review standards, recognizing that state and federal laws may require mitigation beyond what is adopted in the Wildlife Handbook.

**Policy 16.B.7:** Encourage development in identified communities to minimize impacts to biological resources.

### **Implementation Programs**

**16.B.l** – Reserved

**16.B.m** - When evaluating land development projects proposed in identified communities, recognize that there may be reduced impacts to biological resources from concentrating new development within identified communities.

**16.B.n** - Conserve areas, such as wildlife habitat and corridors, wetlands, watersheds, and groundwater recharge areas, that provide carbon sequestration benefits and other biological functions.

**16.B.o** – Within identified communities, retain oak woodland habitat as much as practical, such as incorporating oak woodland into landscaped or public spaces to enhance project site aesthetics, using oak woodland as visual buffers between land uses, and using oak woodland habitat to maintain slopes and reduce on-site runoff.

**Policy 16.B.8:** Balance the conservation of biological resources with the need to reduce wildland fire hazards.

### **Implementation Program**

**16.B.p** - Encourage vegetation removal for fire protection purposes or as otherwise required by the Tuolumne County Fire Department in the Open Space zoning district or other areas conserved through zoning, provided such vegetation removal is addressed in a management plan and approved following review under the California Environmental Quality Act.

**Policy 16.B.9:** Encourage the eradication of invasive plant species to protect native habitats, conserve agricultural land, support ecological diversity and reduce the wildland fire hazard.

### **Implementation Programs**

**16.B.q** - Discourage the sale of invasive plant species and noxious weeds identified by the State.

**16.B.r** - Support efforts to control, and where possible, eradicate, invasive plant species in the County.

**16.B.s** - Seek grant and other funding sources for programs to eradicate invasive plant species from the County.

**16.B.t** - Refer applications for discretionary land development entitlements to the Agricultural Commissioner to identify potential impacts from invasive plant species and recommend appropriate mitigation measures.

**16.B.u** - Encourage eradication of invasive plant species in biological resource conservation areas provided such eradication is addressed in a management plan prepared by a biologist on the County's list of approved environmental consultants and approved by the County following review under the California Environmental Quality Act.





**16.B.v** - Develop a programmatic approach to vegetation removal for the eradication of invasive plant species.

**16.B.w** – Develop an incentive program to encourage the eradication of invasive plant species and the removal of vegetation for fire protection.

**Policy 16.B.10:** Encourage planting of native species or other drought tolerant species.

**Implementation Program**

**16.B.x** - Encourage the use of native species and other drought tolerant species listed on the Tuolumne County Landscape Guidelines to promote water efficiency and reduce impacts associated with the introduction of exotic species.

**Policy 16.B.11:** Expand the list of permitted uses in the Open Space-1 zoning district in Title 17 of the Tuolumne County Ordinance Code for the conservation and utilization of the County’s water resources to include such uses as water monitoring installations, excluding wells, improvements to aquatic, plant and wildlife habitat, erosion control projects, and vegetation removal for flood control.

**GOAL 16C: Support efforts to conserve biological resources.**

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**POLICIES & IMPLEMENTATION PROGRAMS**

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**Policy 16.C.1:** Develop a Natural Resources Division in the Community Resources Agency to centralize County efforts and involvement in issues and projects involving natural resources.

**Policy 16.C.2:** Develop incentive programs to encourage private property owners to conserve areas that support high value biological resources.

**Implementation Programs**

**16.C.a** - Create a voluntary register of high value biological resources, such as habitat for rare, threatened and endangered species; habitats that are particularly valuable to wildlife and/or rare in the County; and undisturbed oak woodlands. Listing on the register shall only occur at the request of the property owner. Prior to listing an area on the register, the area shall be surveyed by County Staff or a biologist on the County’s list of approved environmental consultants to verify the value of the biological resources thereon. Surveys conducted on private property shall occur only with prior written permission from the property owner. The register would assist in implementing voluntary preservation efforts, assist in reducing the cost of new development associated with identifying biological resources and identifying areas which may be acquired and/or managed as off-site areas to mitigate impacts of new development. Lands listed on the register may qualify the owner for incentive programs, be acquired from willing sellers, or be managed in cooperation with willing property owners. Oak woodlands listed on the register could be purchased by the County or conserved through an easement using the Tuolumne County Oak Woodlands Conservation Fund.

**16.C.b** - Identify agencies to accept and/or manage land dedications, donations and conservation easements.



**Policy 16.C.3:** Support efforts to identify and protect high value biological resource areas on private lands from willing owners, especially on land that provides additional public benefits including educational, recreational and scenic opportunities.

**Implementation Programs**

**16.C.c** - Notify owners of high value biological resources of available incentive programs including tax incentives and the California Forest Stewardship Program.

**16.C.d** - Assist willing property owners to enter into conservation programs through coordination with outside stewardship programs and accessing financing programs to conserve biological resources.

**16.C.e** - Apply for grants from local, state and federal sources to assist in funding the acquisition of high value biological resources, such as habitat for rare, threatened and endangered species, habitats that are particularly valuable to wildlife and/or rare in the County, and undisturbed oak woodlands.

**16.C.f** - Protect biodiversity and habitats from climate change effects by cooperating with other agencies to acquire or otherwise protect open space areas that provide key habitat linkages and wildlife movement corridors on a regional level.

**Policy 16.C.4:** Support educational programs that describe methods of habitat conservation, encourage voluntary efforts to protect and enhance biological resources, provide opportunities for ongoing study by local students, and provide opportunities for recreation and enjoyment by the community.

**Policy 16.C.5:** Encourage the conservation of oak woodlands and the preservation of heritage trees.

**Implementation Programs**

**16.C.g** – Plant native trees throughout Tuolumne County.

**16.C.h** - Make the Tuolumne County Oak Woodland Voluntary Management Guidelines available to property owners upon request to assist them with voluntary conservation of oak woodlands.

**16.C.i** - Cooperate with agencies and entities in their efforts to encourage voluntary stewardship of tree resources including:

- Providing brochures, produced by these and other interested agencies, illustrating protection methods for construction near native trees.
- Distributing handouts promoting the retention of tree quality and quantity throughout the County by providing guidelines for replacing native trees removed during construction, including size and quantity.
- Promoting elementary and secondary school programs providing education on the benefits of native trees and including acorn and tree planting programs.