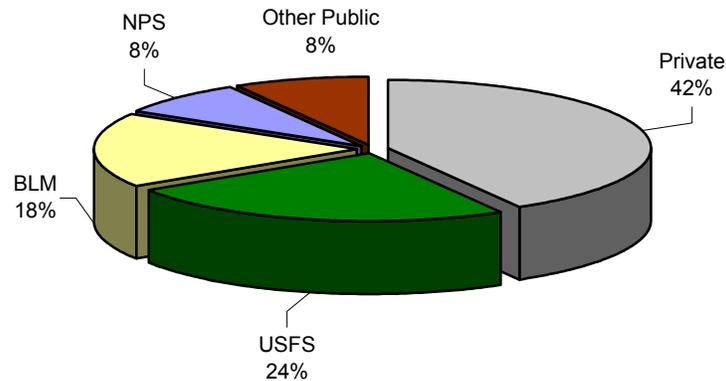


### Findings on ownership of California's forest and rangeland

Forest and rangeland acreage is roughly split evenly between private and public ownership. Forty-two percent of forest and rangeland habitats within California are in private ownership and 58 percent are in public ownership (Figure 6). This ownership pattern varies among the bioregions of the State (Table 5). Three bioregions (Bay/Delta, Klamath/North Coast, and Central Coast) have a majority of forests and rangelands in private ownership.

Figure 6. Percentage area of forests and rangelands by ownership



BLM – U.S. Bureau of Land Management; NPS - National Park Service; USFS – U.S. Forest Service

Source: FRAP, 1999; FRAP, 2002b

These ownership characteristics are highlighted by the extensive private industrial timberland holdings on the north coast and by U.S. Forest Service (USFS) and National Park Service (NPS) lands in the Sierra Nevada range (Table 5).

Table 5. Percentage area of forests and rangelands ownership by bioregion

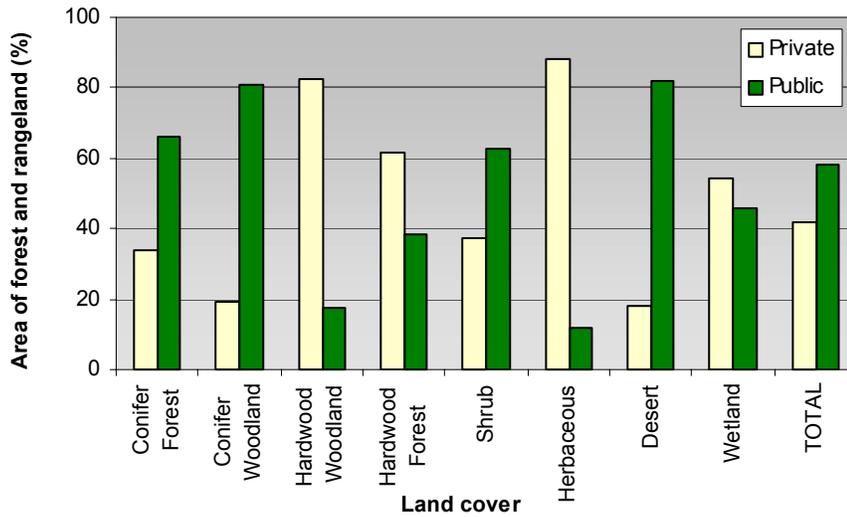
Owner	Bay Area/Delta	Modoc	Klamath/ North Coast	Sierra	Central Coast	South Coast	All others*	California
Public	12	61	49	64	33	53	71	58
Private	88	39	51	36	66	47	29	42

\*Others include Mojave, Colorado Desert, Sacramento Valley, and San Joaquin Valley

Source: FRAP, 1999; FRAP, 2002b

Forest and rangeland types are not evenly distributed across ownerships. Hardwood Forest and Woodland, Grassland, and Wetland are mostly in private ownership. In contrast, Conifer Forest and Woodland, Shrub, and Desert Shrub and Woodland are predominantly in public ownership (Figure 7).

Figure 7. Percentage area of forest and rangeland land covers by ownership



Source: FRAP, 1999; FRAP, 2002b

Some specific habitats are predominately found within public or private ownership (Table 6). Subalpine Conifer, Lodgepole Pine, Jeffrey Pine, and Red Fir exist primarily on public lands. Redwood is the only Conifer Forest habitat primarily located on private land. The majority of Hardwood Woodland habitats are in private ownership, with Valley Oak Woodland, Blue Oak Woodland, and Eucalyptus having the highest occurrence. The Shrub and Desert habitats are predominately in public ownership, with Alpine Dwarf Shrub, Low Sagebrush, and Palm Desert having the highest occurrence. Grassland habitats are primarily in private ownership, with Annual Grassland having the highest occurrence.

Table 6. Percentage area of habitats predominately in public or private ownership

Habitat	Public (%)	Habitat	Private (%)
<b>Conifer Forest</b>		<b>Desert</b>	
Jeffrey Pine	93	Palm Oasis	99
Lodgepole Pine	94	<b>Conifer Forest</b>	
Red Fir	92	Redwood	83
Subalpine Conifer	97	<b>Hardwood Woodland</b>	
<b>Conifer Woodland</b>		Blue Oak Woodland	87
Pinyon-Juniper	91	Eucalyptus	84
<b>Hardwood Forest</b>		Valley Oak Woodland	92
Aspen	91	<b>Grassland</b>	
<b>Shrub</b>		Annual Grassland	88
Alpine Dwarf Shrub	100		

Source: FRAP, 1999; FRAP, 2002b

## Findings on management patterns of California's forests and rangelands

The Management Landscape is the geographic distribution of land use objectives, ownership, and population density. This Management Landscape can be classified into eight broad categories (see [Population and Land Use](#) for definition of Management Landscape classes) of which five classes are particularly relevant to forests and rangelands (Table 7).

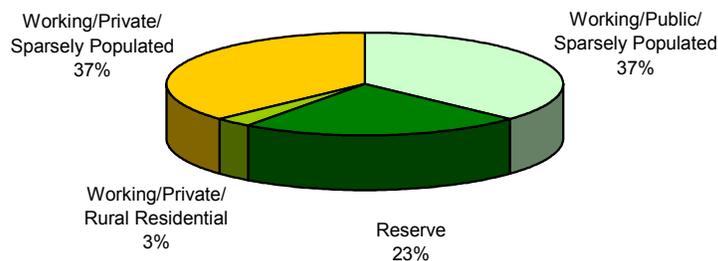
Table 7. Area and percentage area of forest and rangeland by Management Landscape class

Management Landscape classes	Forest and rangeland area (million acres)	Forest and rangeland area (%)	Management emphasis
Reserve	18	23	Consistent with these designations: wilderness, wild and scenic, national parks, national monuments. Commodity production prohibited or greatly restricted.
Working/Public/ Sparsely Populated	30	37	Lands under public administration with management consistent with agency mandates. Commodity production allowable. Housing density less than 1 unit per 20 acres.
Working/Private/ Sparsely Populated	29	37	Lands under private ownership with management and commodity production consistent with governmental regulations. Housing density less than 1 unit per 20 acres.
Working/Public/ Rural Residential	<1	<1	Lands under public administration with management consistent with agency mandates. Commodity production allowable but more complex due to surrounding people and structures. Housing density of one or more units per 20 acres and less than 1 unit per acre.
Working/Private/ Rural Residential	2	3	Lands under private ownership with management and commodity production consistent with governmental regulations but more complex due to surrounding people and structures. Housing density of one or more units per 20 acres and less than 1 unit per acre. Often readily available for conversion to more intensive uses.

Source: FRAP, 2002a; FRAP, 2002b

Most of California's forest and rangeland are in the Public and Private Working/Sparsely Populated classifications (74 percent) with the balance in the Reserve (23 percent) and Working/Private/Rural Residential (3 percent) classifications (Figure 8).

Figure 8. Percentage area of forests and rangelands by Management Landscape class



Source: FRAP, 2002a; FRAP, 2002b

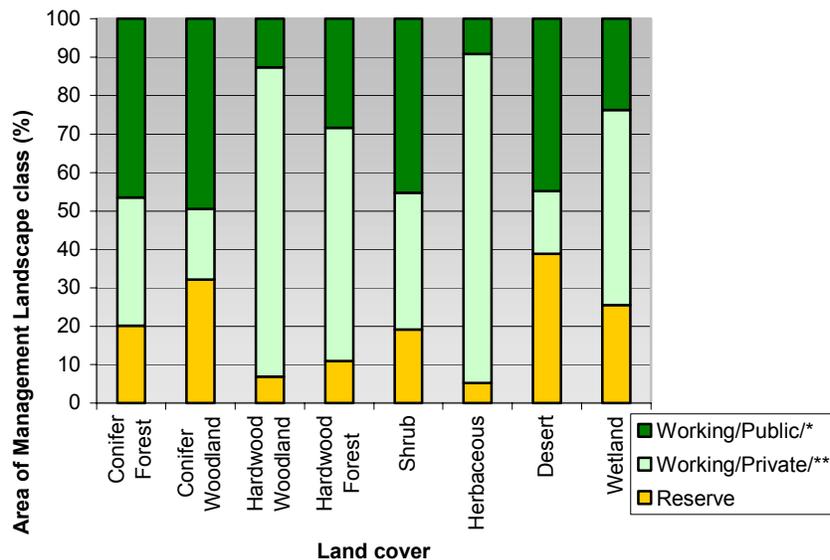
Lands in the Working management class are managed for a wide range of purposes. Public and private lands each cover about 29 million acres. However, management goals are usually different for private lands, which have more emphasis on the owner’s goals such as revenue generation and asset development. Working/Rural Residential occupies a small portion of the total landscape (three percent) but has high visibility and high conflict wildland settings due to the presence of many neighbors. Examples of this type of setting are found near places such as Santa Cruz, Placerville, Eureka, and Oakhurst.

Lands classified as Reserve are managed consistent with statutory designations such as wilderness, wild and scenic, national parks, and national monuments. Reserve lands cover 23 percent of the forest and rangeland base. These lands are typically in public ownership, such as state and national parks, or are designated as wilderness areas.

*Twenty-three percent of forest and rangeland are in Reserve, managed consistent with statutory designations such as wilderness, wild and scenic, national parks, and national monuments.*

Forests and rangelands are not evenly distributed among the different management classes. Grassland and Hardwood Woodland primarily occur in Working /Private classifications where the rural residential or urban components will grow along with California’s population (Figure 9). However, Conifer Woodland and Desert exist predominately in Reserve or Working/Public classes. These lands are considered to have a higher level of protection from threats typically associated with land cover types dominated by Working/Private. A complete list of the habitats by Management Landscape classes is found at [Habitats by Management Landscape class](#).

Figure 9. Percentage area of Management Landscape classes in forests and rangelands, by land cover



Source: FRAP, 2002a; FRAP 2002b

\*Includes Working/Public/Rural Residential and Working/Public/Sparsely Populated classes  
\*\*Includes Working/Private/Rural Residential and Working/Private/Sparsely Populated classes

## Findings on underrepresented habitats of California's forest and rangeland

More than 60 percent of California's forest and rangeland are in Reserve status or in public ownership where conserving biological diversity is a significant and permanent component of the management priority.

Some habitats types are rarely found within the Public/Reserve classifications and as such are not as protected from development threats. These habitat types are often referred to as "underrepresented" relative to their representation in public ownership.

To evaluate which habitat types are underrepresented, FRAP assessed two key elements of habitat distribution:

- Percentage of habitat in public ownership
- Percentage of habitat in Reserve status

Percentage of public ownership is a criterion because habitats largely in private ownership are not protected by formal designation and are at some risk for land conversion. Public lands are generally protected from permanent habitat conversion and typically have less intensive management for commodity production. With less intensive management, many more habitat elements that contribute to biological diversity such as large trees, snags (dead standing trees), and down logs are usually maintained. Conversely, less intensive management may not address some of the environmental risks associated with catastrophic fires, insects, and exotic species that also can negatively affect biological diversity.

For this Assessment, FRAP chose to highlight habitats with less than 30 percent in public ownership as underrepresented for protection from conversion. A complete list of habitats by percentage of public ownership is found at [Habitats by public ownership](#).

A second, more conservative, criterion to help identify underrepresented habitats is percentage of land in Reserve status (i.e., managed consistent with statutory designations such as wilderness, wild and scenic, national parks, and national monuments, see [Population and Land Use](#)). Habitats with a low percentage of acreage in Reserve status generally have lower levels of permanent protection from commodity extraction, and other threats and other threats to biological diversity.

Six habitats are classified as underrepresented based on the less than 30 percent public ownership criteria (Table 8). These habitat types are found adjacent to California's central valley or along the coast where private land ownership predominates (Figure 10). Annual Grassland and Eucalyptus habitats were excluded from this list as they are generally viewed as being dominated by exotic species.



*Valley oak tree in Annual Grassland habitat.*

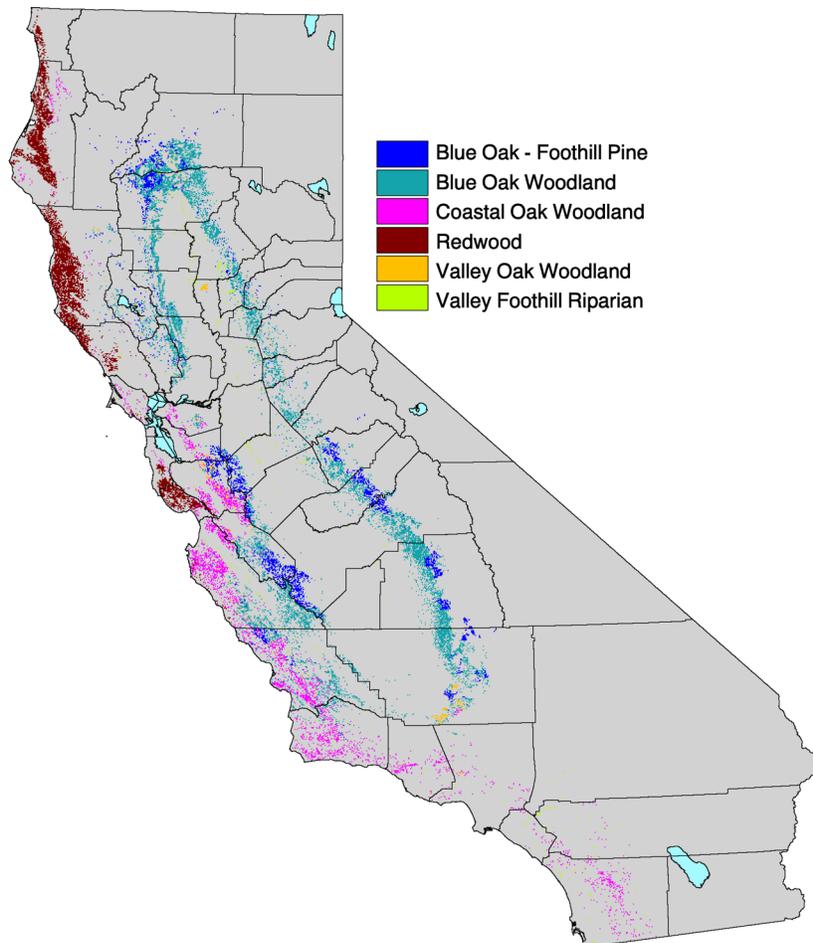
Table 8. Area and percentage area of habitats with less than 30 percent public ownership

Habitat	Area (acres)	Public (%)	Reserve (%)
Valley Oak Woodland	137,032	9	6
Blue Oak Woodland	2,818,674	13	4
Redwood	1,297,424	18	13
Valley Foothill Riparian	36,764	21	3
Blue Oak-Foothill Pine	147,396	24	11
Coastal Oak Woodland	979,051	24	6

Source: FRAP, 1999; FRAP, 2002b

Of the underrepresented habitats, Valley Oak and Valley Foothill Riparian are of particular concern. These types are particularly vulnerable to development threats as they are of limited extent, have little acreage in Reserve status and are often adjacent to intensively developed land uses. Blue Oak Woodland, Blue Oak-Foothill Pine, and Coastal Oak Woodland also have development pressures but all cover far larger areas.

Figure 10. Habitats with less than 30 percent public ownership



Source: FRAP, 1999; FRAP, 2002b