

1. Natural Capital

The Foundation Environment

“ I think the quality of life here is pretty exceptional in terms of environment, air quality, having space. After having lived here through this COVID-19 experience specifically, I was watching things unfold in urban areas and just counting my blessings every day that I could go step outside and walk on the nature trail and not cross paths with a soul, enjoy nature, as I always do.

- local school teacher

”

The local natural environment exerts a powerful influence on every dimension of a community, especially in rural areas like Cobb Mountain where so much of life and the economy has historically been based in agriculture and forestry and on the restorative quality of nature. Indigenous peoples occupied seasonal sites throughout the area. The first white settlers were attracted by the accessible stands of old growth timber and built the first local economy on that basis. Prior to the



completion of Interstate 80 to Lake Tahoe in the early 1960's, the Cobb Mountain Area was a significant getaway destination for the Bay Area and the community supported dozens of small- to medium-sized resort hotels and spas where vacationers could enjoy the

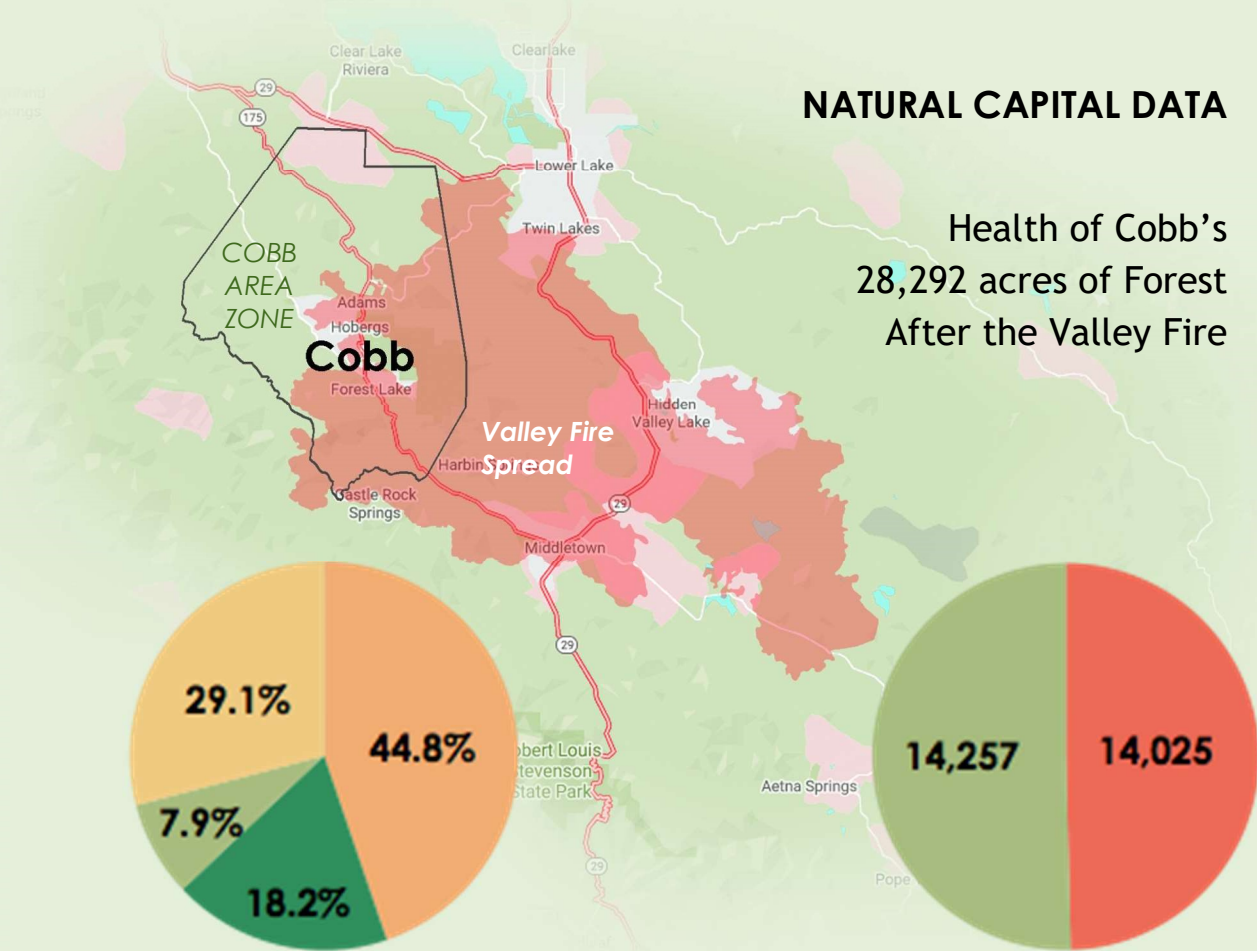
numerous hot and mineral springs in the area. Thus, the local natural environment and the community's relationship with it is a good starting point for building a strong resilience and development strategy¹⁵.

Connections with Other Community Capitals¹⁶

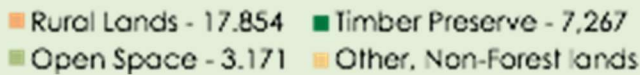
The natural environment sets the stage for the entire range of community development capitals. The Cobb Mountain community culture is based in a close relationship to the land. The fundamental natural capital of the area provides the basis for the community's economy. Dense trees and the area's complex topography are a challenge for built infrastructure such as water systems and broadband networks. Climate and soils provide the fundamental basis of both the local agricultural economy, as well as tourism, and residential appeal. The natural environment is a great source of healing and promotes overall wellness. Most of all, the natural environment is a wellspring of regeneration for all who live here.

NATURAL CAPITAL DATA

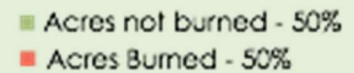
Health of Cobb's
28,292 acres of Forest
After the Valley Fire



Cobb Area Forest/Non-Forest Lands



Cobb Forest Acres

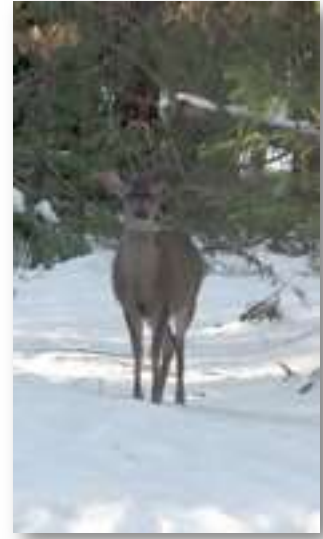


ADDITIONAL DATA WE WOULD LIKE TO HAVE

- Health of the Forest
 - Acres under timber management/ Forest Management plans
 - Extent of invasive species (especially spread of scotch broom)
 - Extent of hazardous brush accumulation (acres)
 - Location and status of fire breaks established and maintained
 - Priority list of new fire breaks desired
- Health of the Watershed
 - Description and status of local water basics/aquifers (micro-basin hydro geography, withdrawal rate, recharge rate)
 - Number of septic systems, number of failed local septic systems
 - Number, location and status of local wells,
- Status of the "Viewshed" – the natural environment that can be seen from a particular viewpoint, especially in this context, from local roads and home sites. The beauty of the Cobb Mountain views is a key natural asset of the community
 - Blighted views
 - Pristine views
 - Restored views

Analysis

The Cobb Mountain ecosystem was significantly damaged by the Valley Fire in 2015 and, as of 2021, is still in the early stages of recovery. Even prior to the fire, the forest had been (and continues to be) stressed by infestation by the pine bark beetle. The remaining stands of unburned forest remain at risk and beetle-killed trees and hazardous brush accumulations remain a source of concern. Fire scarred areas have also become subject to invasive species such as Scotch Broom that increase fire danger. Persistent drought and longer term warming due to climate change will continue to stress local forest and wildland health. Steady work by local residents has begun to establish sustainable stewardship practices but much work remains to be done to bring this to a sufficient level to secure the local environment. Finally, six years of new growth have begun to cover burned hillsides but significant stands of dead trees remain as a blight on viewsheds in key view corridors.



Wildfire and Ground Water - a Tight Connection

A connection between groundwater depletion and increasingly destructive and frequent forest fires has been observed in the United States and across the globe. Forests depend on both surface water and groundwater for survival. Inadequate monitoring and study of these ecosystems corresponds with a general lack of awareness that they are in trouble, especially during parching summers and droughts¹⁷.

It will be critical for the Cobb Mountain community to develop a much more detailed understanding of local groundwater resources, especially as new residents move in and drought continues to stress the resource. Local septic systems can also have a significant effect on groundwater. Without centralized or community scale wastewater treatment facilities, nearly all local residences and businesses rely on onsite septic systems, which do not allow for economic reuse of water resources and which can pose danger to the watershed over the long term¹⁸.

Climate Change - a crucial factor in the Cobb Mountain future

According to the US Fish and Wildlife service, virtually all future climate scenarios predict increases in wildfire in western North America due to higher summer temperatures and earlier spring snowmelt. Fire frequency and intensity have already increased in the past 50 years, and most notably the past 15 years in the forested regions of the West. The area burned by fire regionally is projected to double by the 2040s and triple by the 2080s. Researchers have linked these trends to climate changes. Drought and hotter temperatures have also led to an increase in outbreaks of insects, such as the mountain pine beetle, increasing the risk of fire¹⁹.

Natural Capital Goals:

- Establishing a robust system of forest and watershed stewardship that can reduce the community's vulnerability to projected climate change threats, particularly wildfire, and to protect the forests that provide the community with its fundamental character
- Increase in total acreage under formal forest management plans
- Increase establishment and maintenance of community fire breaks
- Increase landowner responsibility for proper forestland management
- Increase understanding and management of local aquifers and the total watershed.
- Provide support to homeowners and neighborhoods to manage hazardous brush and stressed trees

Strategies:

- Establish a Forest Stewardship Working Group of the Cobb Area Council to convene local forest health practitioners and develop a comprehensive Cobb Mountain Area Forest Stewardship Plan that identifies funding sources and an economic model for sustainable management of local forest and watershed resources.
- Establish a Watershed Education Program (WEP) for local community leaders and volunteers
- Revise the Cobb Mountain portion of the Lake County Community Wildfire Protection Plan (CWPP) and keep it current
- Conduct an area wide hydrologic survey, identifying the location and range of local water basins, especially in areas from which groundwater is being withdrawn.



Cobb Area forest lands burned in the Valley Fire 2015

