

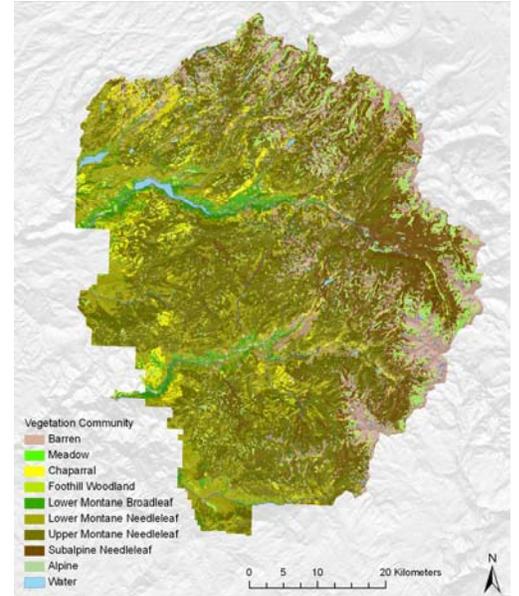


Yosemite Parkwide Vegetation Map

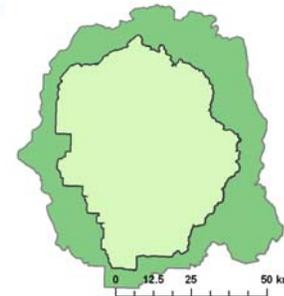
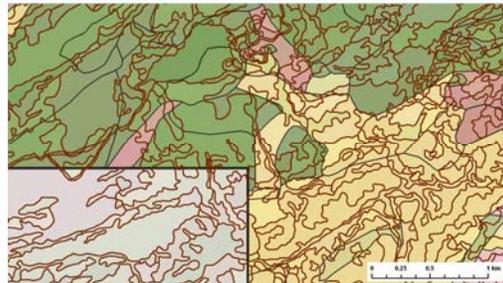
What is a vegetation map?

A vegetation map is just what it sounds like: a map that depicts vegetation. A vegetation map is critical information for any land manager, whether the land is managed for agriculture or forestry or recreation, and is relevant to just about every issue a land manager has to face. It provides an in-depth look at plant communities as they relate to elevation, geology, topography, and soils. This baseline data is valuable information to park managers for managing forests, watershed, wildlife, and fire, among other things.

A vegetation map of Yosemite National Park and lands immediately adjacent to the park has recently been completed. This project was initiated in 1997. It replaces the vegetation map developed in the 1930s and views vegetation as ecological communities instead of clumps of large trees. For instance, areas mapped in the 1930s as ponderosa pine are mapped today as ponderosa pine with mountain misery, or with shrubs, or with grass, or with no understory (leaf litter). Ecologically, these different types of ponderosa pine communities behave very differently.



The large swaths of color depict the 1937 vegetation classification while the overlaid lines show the new vegetation classification illustrating the much more detailed data in the current map.



A buffer area has been mapped beyond the park borders

How was the vegetation map created?

Creation of the vegetation map was a complex process with many phases. The vegetation of the project area is incredibly diverse due to changes in elevation, and diverse bedrock, soil types, and moisture regimes within the area: grasslands and chaparral in the west, forests in the mid elevations, alpine zones in the high elevations, and sagebrush communities in the east. The first phase was to acquire custom aerial photography for the area to be mapped. Over 1500 photos were taken, and each one had to be individually analyzed. Later phases included delineating polygons (areas) of distinct vegetation types, establishment of ecological plots to relate the aerial photographs to on-the-ground data, development of a classification scheme to assign names to those polygons, and accuracy assessment of the final product. 220 types were identified as possible to be mapped, although not all are vegetation types.

The vegetation map of Yosemite is a multi-agency project involving the National Park Service, United States Geological Survey (USGS), the California Department of Fish and Game, Environmental Systems Research Institute (ESRI), Aerial Information Systems (AIS), California Native Plant Society, the Nature Conservancy, and Nature Serve. Funding was provided by the NPS Inventory & Monitoring Program, NPS Fire Management Program, the Yosemite Fund, the City and County of San Francisco, and USGS.

How will the vegetation map be used?

The vegetation map has many applications for resource managers including:

Fire Management: Comparing the new vegetation map with the data gathered in the 1930s has shown that in areas where severe fires occurred, forest vegetation has changed to shrubland. For fire management vegetation data translates into a fuels (dead and down woody debris and flammable vegetation) map so that fire crews can model more accurately how a fire will behave in certain areas. This is important for fighting wildfires as well as for managing prescribed burns within the park.

Wildlife management: An understanding of where certain plant communities are occurring allows for a better idea of where different animals are likely to be found. It provides information relating to available habitat and food resources for those animals, which in turn allows wildlife managers to better assess how a species is faring and what the population numbers of those species should be.

Analyzing vegetation: The vegetation map is an important tool for understanding the extent and pattern of old growth forests, predicting rare plant habitat, modeling the spread of invasive species, and modeling how vegetation might change under various climate change scenarios.

The map also has applications for watershed management, archeological site prediction, general park planning, vista management and carbon sequestration data.

Public Participation

Public participation is essential for the success of this and all other park projects. Here are some ways to stay involved in the park:

- **Attend a National Park Service public open house** to talk with project specialists and obtain more information on this topic. Visit the park's planning website (listed below) for upcoming dates.
- **Add your name to the park's planning list** and receive the *Planning Update* newsletter as well as other planning- related notices. You can also submit your email address to receive the park's periodic electronic newsletter.
- **Additionally, you can submit comments with your thoughts about this topic or any other project in the park by any of the following means:**
Mail: Superintendent
P.O. Box 577
Yosemite, CA 95389
Phone: 209/379-1365; Fax: 209/379-1294
E- mail: Yose_Planning@nps.gov
- **Visit online:** www.nps.gov/yose/parkmgmt/planning.htm to find out about plans and projects or www.nps.gov/yose/naturescience/index.htm to find out about science & nature in Yosemite National Park.

