

DEPARTMENT OF FORESTRY AND FIRE PROTECTION

1920 20th Street
SACRAMENTO, CA 95814
Website: frap.cdf.ca.gov
916-227-2652



FP1

September 26, 2001

Dear Vegetation Data Reviewers:

The Fire and Resource Assessment Program (FRAP) would like to express its appreciation to the numerous reviewers that took the time to provide extensive and thoughtful comments on our draft vegetation data. Many of you have received individual responses, but we would also like to respond collectively to a number of common themes that emerged from the comments.

Methodology

Almost all the reviewers, after providing the standard caution about combining data from different sources, seemed to agree that this was a reasonable course of action. No one offered a superior alternative for spatial depiction of vegetation.

Longer-term vegetation mapping strategy

Clearly, we need to build and expand on the existing long-term strategy for vegetation mapping provided by the California Land Cover Mapping and Monitoring Program (LCMMP). The strategy must address standards, accuracy, usefulness, consistency, comparability, and cost. FRAP is currently one of 10 co-signatories on a Memorandum of Understanding for cooperative vegetation mapping, as a sub-committee of the Biodiversity Council, that is focussed on this exact problem. We welcome others to join us.

Relation to plot-based statistical estimates

FRAP needs to reconcile differences between our mapped vegetation data and statistical acreage estimates from ground-based sampling efforts such as the USDA Forest Service's Forest Inventory and Analysis (FIA) program. FIA produces statistical acreage estimates with associated confidence intervals. Over broad strata with large plot samples, acreage estimates can be made with high confidence and comparisons can be used to assess validity of mapped vegetation data.

For example, the following table compares acreage of forestland derived from FIA plots* versus FRAP vegetation.

Comparison of Forestland Area (Thousands of Acres)

Region	FIA	FRAP VEG	% Difference
Sacramento Valley	6,047	6,520	7.3%
Central Coast	2,292	2,696	15.0%
North Coast	4,436	4,674	5.1%
San Joaquin Valley	9,296	8,960	-3.8%
North Interior	8,823	8,594	-2.7%
Total	30,894	31,444	1.7%

*FIA forestland estimates were derived by subtracting published estimates of Nonstocked and chaparral lands from published estimates of Forestland and Timberland.

Based on this comparison, estimates for the Central Coast require further examination. Much of this region is yet to be mapped by the LCMMP, and we used coarser GAP data as well as hardwood data from the early 90's.

FRAP will continue to work closely with the FIA program to determine appropriate methods of comparison. The results of these comparisons will become part of the supporting documentation for the FRAP Assessment and part of the vegetation metadata.

Use of local data sources

Local vegetation mapping efforts need to be incorporated into larger regional and statewide efforts. The LCMMP currently has an outreach strategy to locate data sources and involve local stakeholders early on in our mapping process. Unfortunately, we failed to locate all local sources that could have improved our overall product. Also, we neglected to cite several sources that were used as input to our mapping process, rather than merged in after the fact. This will be corrected in the Assessment citations and metadata.

Localized mapping deficiencies

As requested, several reviewers provided specific instances of over or under-mapped vegetation types in localized areas. The majority of these problems are in areas where the LCMMP program has yet to complete its first round of vegetation mapping. In the short-term, our only course of action is to document these areas of concern as a warning to the data users, direct the users to other high quality sources and ensure problems are corrected in future mapping efforts.

Availability

The FRAP vegetation data will be used extensively for various purposes, and many reviewers asked how they could access the data. Given the complexities inherent in the data, we first need to produce adequate documentation to minimize the

potential for misuse. Comments from this review process are an important part of the documentation. Reviewers provided a number of excellent suggestions for including additional information to better understand the data, for example providing the percent contribution of each data source to the final data product. Comparisons to plot-based estimates must be documented as well.

Once the documentation is complete, the data will be available in numerous formats:

- direct download from the FRAP website;
- CD-ROM distribution of statewide data;
- ArcIMS access for visual displays and simple acreage tabulations; and
- standard map products for each county in PDF format, available through the FRAP website.

Additional comments or questions should be directed to our vegetation mapping coordinator Mark Rosenberg at (916)-227-2658, email mark_rosenberg@fire.ca.gov. We will notify you when the product becomes available for distribution.

Sincerely,

William Stewart
Chief, Fire and Resource Assessment Program