

Background

The Sierra Nevada Conservancy (SNC) 2006 Strategic Plan identified the need to develop System Indicators to measure progress in improving the environmental, economic, and social well-being of the Sierra Nevada Region. Since that time, staff has worked diligently to overcome data limitations and other obstacles in order to develop a set of six Indicator Reports that include Board approved Indicators as well as other information:

- Demographics and the Economy (September 2011)
- Land Conserved and Habitat (December 2011)
- Water and Air Quality and Climate September 2012)
- Forest Health and Carbon Storage (December 2012)
- Fire Threat (September 2013)
- Agricultural Lands and Ranches

Five of the reports have been presented to the Board at past meetings and the sixth, Agricultural Lands and Ranches is being presented here.

Current Status

This report examines the status of working landscapes in the Sierra as reported through three major indicators:

- The total area in agriculture (farms) and ranches in the Sierra and the size of individual operations;
- The overall number of farms and ranches and crop types; and,
- The economic productivity of working landscapes in the Region.

The report also looks at the conversion of working landscapes in the Region and the status of the Williamson Act in the counties in the Sierra. The Williamson Act is currently a key program for preserving working landscapes in California that is facing severe funding challenges.

In general, data on agriculture and ranches is available strictly by totals per county for the Region. In those cases, the indicators address those counties that are fully within the Region compared to those counties that are partially within Region. Vegetation mapping was also analyzed to identify the areas of potential agriculture and ranches within the Region. Unlike county level data, this mapping conforms exactly to the SNC's boundary.

Report Highlights**Area and Size of Agriculture and Ranches**

- Amador County had the greatest percent of private land in working landscapes for a county fully within the Region at 56 percent followed closely by Mariposa County at 48 percent. Madera, Fresno and Tulare Counties, which cross the Region into the San Joaquin Valley, all had upwards of 70 percent of their private land in working landscapes.

- Ranches were the dominant working landscape in the Sierra in 2007. Amador County had 50 percent of private land in ranches while Mariposa County had 47 percent, which were the highest percentages for counties fully within the Region. For counties that are partly within the Region, Inyo County had the greatest proportion of private land in ranches at 52.6 percent followed by Modoc County at 46.4 percent.
- Of the counties fully within the Region, Lassen County had the largest acreage of agriculture (farms) at 82,567 or seven percent of the total private land with the majority being in forage production. The acres of land in agriculture in the counties fully within the Region show a trend of largest to smallest from north to south, and after Lassen County the largest number of acres in agriculture is in Plumas County at 18,487. Forage was the most common crop type.

Number and Types of Working Landscapes

- Cattle and Calves Operations were the most common agricultural production for the counties fully within the Region and these operations were one of the leading agricultural commodities in all 22 counties fully or partly within the Region.

Economic Productivity

- Counties in the South Sierra Subregion led the State in agricultural and ranch production in 2011. The majority of the agricultural production in the counties in this Subregion occurred outside of the Region.
- The counties fully within the Region produced over \$317 million in gross agricultural production in 2011, and the counties partly within the Region produced close to \$21 billion.
- Of the counties fully within the Region, Lassen, Mono and Mariposa Counties had the leading agricultural commodities sales in 2011 at \$89,539,000, \$53,068,000, and \$30,975,000, respectively. Lassen and Mono Counties also had the highest irrigated water use of the counties fully within the Region.
- The counties fully within the Region accounted for about two percent of the total irrigated land in California while the counties partly within the Region accounted for 46 percent of the irrigated land in California. Irrigated water use correlated strongly with total gross agricultural value and net cash farm value in the Sierra. Use of irrigated water decreased from north to south in the Sierra.

Preservation and Threats to Agriculture and Ranches

- Placer and El Dorado Counties, which are both partly in the Region, saw the greatest percent change in conversion of working landscapes to other land uses between the 2000 and 2010 Census. Further, these counties had the least amount of private land in working landscapes, and the median farm size was the smallest compared to the other counties in the Region.

- In 2011, 994,201-acres (approximately 70 percent of the working landscapes) in the counties fully within the Region were in prime (agriculture) and non-prime (rangeland) Williamson Act contracts. In the counties partly within the Region, there were 5,972,286-acres (about 71 percent of the working landscapes) in prime and non-prime Williamson Act contracts.

Next Steps

The data in this report, along with the methodologies and frameworks that have been developed, will allow consistent analysis of agricultural land and ranches in the Sierra over time. Information relative to these indicators will be available on the SNC Web site and will be updated periodically as the underlying data is updated.

In addition to providing information relevant to the administration of SNC's programs throughout the Sierra Nevada Region, we hope that this information will also be useful to others located in or working in the Region, including other State agencies, as they develop and implement their own projects and programs.

Recommendation

Staff recommends the Board approve the Agricultural Lands and Ranches System Indicators Report after making any revisions resulting from its review.