Conceptual Description of New
Western Sierra Mountain Counties Regional Overlay
For Water Plan Update 2013
-DISCUSSION DRAFT- NOT APPROVED BY DWR-
March 30, 2011

Overview

This reconnaissance-level narrative describes the benefits of expanding the existing Water Plan Update Mountain Counties Overlay to include a larger portion of the western Sierra Nevada Mountains and foothills. The purpose of overlays in the California Water Plan is to enable planners and decision-makers to study and properly address areas where both of these criteria apply: (1) statewide significance - water management strategies and actions in one area affect much of remainder of the State; and (2) common water management conditions, issues and integrated planning opportunities span more than one of the 10 hydrologic regions identified in Water Plan Update 2009.

There is a significant and unique statewide interest in the greater western Sierra region. Statewide interest includes source water supply, source water quality, as well as the vast forestry and other natural resources that warrant special resource planning and management considerations. For example, with an average annual water supply content of over 11 million acre-feet, the western Sierra snowpack is California’s largest “reservoir”. In addition, over 60% of the State’s surface storage reservoir capacity and about 80% of hydroelectric generation capacity is located in the western slope of the Sierra Nevada Mountains and foothills.

There are also several unifying water management conditions and issues that support an overlay encompassing the greater western Sierras such as limited groundwater storage in fractured rock formations as well as socio-economic issues that cross hydrologic regions and go beyond the existing Mountain Counties overlay. Socio-economic issues include high proportions of under -served communities, relatively constrained revenue and economic development alternatives or employment bases as well as land use issues associated with public lands and development pressures as nearly 50 % of land in the proposed overlay is publicly owned and managed. A Western Sierra Mountain Counties Overlay will provide a special venue to highlight common resource management needs, opportunities and priorities in a sparsely populated area with statewide significance.

Background

The California Water Plan is a valuable reference and planning document for all regions within the state. Both the California Water Plan (CWP) Update 2009 and Update 2005 included regional reports for California’s ten hydrologic regions, and reports for two overlay areas of statewide significance: the Delta and the Mountain Counties areas. This Mountain Counties overlay area includes three water portfolio planning areas from the Sacramento River and San Joaquin River hydrologic regions. In turn, these planning areas include the foothill and mountain areas of the northern and central portion of the Sierra Nevada Range from the Feather River in the north through the upper San Joaquin River in the south. The overlay area reports followed the outline of the hydrologic region reports, and included input from the groups and programs active in the respective overlay areas.
Current Mountain Counties Overlay Area

As described in the California Water Plan, the Mountain Counties overlay area includes planning areas 508, 604, and 610 (see figure 1). It is very important for statewide water management due to its hydrologic setting and major contribution to California’s surface water supplies. About 40 percent of California’s developed water supply originates within the Mountain Counties overlay area, more than from any other source. Over half of California’s snowpack, which acts as the State’s largest reservoir during winter months, accumulates in this area. Water managers throughout most of the state rely on this natural storage and divert part of the subsequent spring runoff. Climate change is having a disproportionate effect on the watersheds and seasonal runoff patterns in this area, with consequences for downstream areas. Beneficial resource management strategies including forest and watershed management and water quality protection strain the resources of this lightly populated area, but are important for downstream water supply and quality. Finally, the small but growing population of this area has limited access to water supplies due to prior water right appropriations by downstream users and very limited groundwater resources in the fractured rock of the area, and local water agencies are beginning to apply for area of origin water rights, which would affect other water right holders in the state. Given these considerations, the CWP team worked with the Mountain Counties Water Resources Association and the Sierra Nevada Conservancy to produce the Update 2009 report for this area.

Potential Changes to Mountain Counties Overlay for Update 2013

The current Western Sierra Mountain Counties Overlay concept would add planning area (PA) 501, detailed analysis units (DAU) 145 and 147 in PA 504, and PA 707 to the Mountain Counties overlay area; expanding it to include the upper watersheds of the Sacramento through Kern rivers (see figure 2). These additional watersheds on the west slope of the Sierra Nevada Range, western and southern slopes of the Cascade Range, and parts of the Modoc Plateau, share the same characteristics and importance to statewide water management described above for the current overlay area. Including them will better portray this importance and the statewide benefits of watershed-related resource management strategies in the area.

Other Considerations

Changing the name of the Mountain Counties Overlay Area could have unintended consequences for any legislation or other legal documents that refer to this name. For example, WC sec 79722 (Senate Bill 2 of November 2009), if approved by the voters in a future election, allocates $44 million for integrated regional water management grants in this overlay area “as identified in the California Water Plan …”

Criteria for allocating future bond or other State funds for maximum statewide benefits can be discussed in the Finance Plan for Water Plan Update 2013. These criteria could inform legislative discussions, and could include population served, ability to pay, inter-regional or statewide benefits. Given these considerations, input will be solicited from the groups affected by this proposal before deciding to change the existing Mountain overlay. These groups include the Mountain Counties Water Resources Association, the Sierra Nevada Conservancy, and the Sierra Water Workgroup. In recognition of the increased role of the Integrated Regional Water Management groups in the area, the California Water Plan Update 2013 process seeks close coordination with the new Sierra Water Workgroup as well as the above mentioned groups.
Figure 1  Map of Mountain Counties Overlay Area (blue fill). From the California Water Plan Update 2009, Vol. 3 Regional Reports.
Figure 2  Map showing Mountain Counties Area, the Sierra Nevada Region, and existing DAUs and PAs. Map courtesy of North Central Region office.