

**Table 7-14. Annual Agricultural Applied Water Reductions and Related Reduction Depletions by Hydrologic Region 2020 (forecasted)**  
(thousands of acre-feet)

Region	Applied Water Changes* 1990-2020	Depletion Changes Due to Acreage Reductions or Crop Shifts		Depletion Changes from Irrigation Efficiency Improvement (Level I Programs)		Remaining Depletions		
		NO ACREAGE CHANGES	CHANGES	NO ACREAGE CHANGES	CHANGES	NO ACREAGE CHANGES	CHANGES	
North Coast	68	45		0				
San Francisco Bay	2	2		0				
Central Coast	49	27	1-5	1-5	0	4-8	6-12	
South Coast	-345	-278	1-5	1-5	-10	-57	20-30	30-50
Sacramento River	-290	-40	0	0	0	-250	200-300	320-470
San Joaquin River	-633	-316	10-20	30-40	-20	-297	150-250	250-350
Tulare Lake	-780	-464	20-25	25-35	-90	-226	300-400	420-600
North Lahontan	14	21			0			
South Lahontan	-64	-49			-10			
Colorado River	-342	-58	165-210	65-105	-200	-84		
<b>Net Change</b>	<b>-2,321</b>	<b>-1,070</b>			<b>-330</b>			

\*Applied water changes result from acreage reductions, crop shifts, and irrigation efficiency improvement.

**Urbanization of Agricultural Lands**

A primary consideration in projections of decreased agricultural acreage was the continued development of irrigated agricultural lands for urban use. In most cases, the conversion of agricultural lands to urban uses does not reduce water demands. Often prime agricultural lands are also prime lands for urban development as cities surrounded by agriculture continue to grow. Currently, agriculture moves onto less desirable lands as urban acreage expands. This trend could affect the trend of increased production per unit of water as illustrated earlier in this chapter.

The California Department of Conservation has estimated the conversion of prime farmlands to urban uses since 1984. Farmlands must be irrigated to be considered prime in California. Conservation's most recent report identifies nearly 32,000 acres of prime land converted to urban use since 1984. In this bulletin the primary agricultural areas impacted by such conversions are in the South Coast Region and in the Central Valley from Sutter County southward.

**2020 Agricultural Water Demands**

The applied water used by agriculture decreased by over 4 maf between 1980 and 1990. This was due to a reduction in acreage, a change in cropping patterns, and an average improvement in irrigation efficiency from 60 percent to 70 percent. The reductions in applied water of 2.3 maf by 2020 are due to a smaller increase in irrigation efficiency to 73 percent by the adoption of EWMPs, but are dominated by reduced agricultural acreage and shifts in cropping patterns.

The areas where reductions in applied water result in reductions in depletions are the drainage problem areas on the west side of the San Joaquin Valley and in the Imperial Valley. Reductions in applied water may be beneficial in certain cases (for example, pesticide movement) and detrimental in others (for example, wildlife habitat). Such analyses and decisions need to be made at the local level through local water management plans. The positive or negative effects of site-specific reduction in