Appendix F Future Demand Projections

This section describes the data sources for the Study Team's future demand scenarios as well as manipulations made to these data and the ultimate inputs to the Study Team's scenario analyses. The Study team developed three future demand scenarios: Current Trends, Low, and High.

Historic data (1998-2005) on water demand by urban, agriculture, and environmental sectors was obtained from DWR's Regional Water Balances, a part of Bulletin 160. These document water demand for sub-uses within the urban, agricultural and environmental sectors. Urban demand sub-uses include: Commercial, Industrial, Residential Interior, Residential Exterior, Large Landscape, Energy Production, Conveyance Applied Water, and Groundwater Recharge Applied Water. Agricultural sub-uses include
Applied Water for Crop Production, Conveyance Applied Water, and Groundwater Recharge Applied Water. Environmental sub-uses include: Instream, Wild & Scenic, Required Delta Outflow, and Managed Wetlands.

To enable detailed modeling of policies that affect specific demand sectors, the Study Team modeled future water demand in the same sub-use categories as those presented in DWR's Regional Water Balances (with exceptions in the Environmental Sector)

Data for future demand scenarios were obtained from DWR. DWR presented California water demand scenarios in its 2005 Water Plan Update (Bulletin 160).[1] Four scenarios were presented: Current Trends, More Resource Intensive, Less Resource Intensive, and Low Water Demand. DWR scenarios are briefly described in Table 1.

[1] Department of Water Resources. *Quantified Scenarios of 2030 California Water Demand*. 2005

Table 1: DWR Demand Scenarios

DWR Scenario	Description
Current Trends	• Water demand based on current trends • Assumes naturally occurring 10% conservation
More Resource Intensive	• Higher population than current trends • Increase in high-water intensity activities across all sectors • Assumes naturally occurring 5% conservation
Less Resource Intensive	• Lower population than current trends • Decrease in high-water intensity activities across all sectors • Assumes naturally occurring 15% conservation
Low Water Demand	• Slower population growth, increasing conservation, low-water use development. • Agricultural sector becomes more water efficient than expected • Lower urban and agricultural demand allows greater allocations to the environment • Assumes naturally occurring 15% conservation

Data for the statewide future demand in each of three sectors (Urban, Agricultural, and Environmental) was available directly from Bulletin 160. Documentation by DWR indicated that the demand in each sector was projected for each of the four DWR scenarios for each of the 10 hydrologic regions in 5-year increments from 2000 to 2030. DWR demand scenarios are calibrated to match Regional Water Balances by DWR for the year 2000 in the agricultural and urban demand sectors.

The Study Team communicated with modeling staff at DWR to obtain the detailed data of the demand scenarios presented in Bulletin 160. The Study Team obtained data in a yearly time step for both the urban and agricultural sectors in each hydrologic region. Furthermore, the Study Team requested any detailed data on urban or agricultural sub-uses as utilized by the Regional Water Balances. DWR staff was able to provide projections for sub-uses in the urban sector but not the agricultural sector. The sections below describe the data received, modifications made, and final numbers used for each sector.

F.1 Agricultural Sector

While the Regional Water Balances project demand disaggregated into sub-uses, the future projections for each sub-use were not available from DWR Staff. Only the future projection of the total agricultural sector demand was available.

The Study Team used historic data from the Regional Water Balances to disaggregate the future projections received from DWR Staff into sub-uses. The Study Team calculated the total demand for each of the three sub-uses within each hydrologic region from 1998 to 2005 using data from the Regional Water Balances. A distribution ratio between each sub-use in each region was calculated from these totals. Future agricultural demand projections within each

hydrologic region were then disaggregated into the three sub-uses using the calculated ratios for each respective region.

The Study Team used three of the DWR scenarios to develop its three future demand scenarios. The Current Trends Scenario was developed using the above described methods applied to the "Current Trends" dataset from DWR. The High Demand Scenario was developed using the above described methods applied to the "More Resource Intensive" dataset from DWR. The Low Demand Scenario was developed using the above described methods applied to the "Low Water Demand" dataset from DWR.

Furthermore, variations in agricultural demand arise due to annual variation in hydrology. For the purposes of the model, the Study Team is only modeling applied water for agricultural uses (water that must be supplied by surface or groundwater supplies often requiring energy use). Precipitation also provides water needed for agricultural uses. Typically in a wet year, more rain falls on farmland requiring less applied water; less water must be pumped from groundwater basin or imported from surface sources requiring less energy. To model the variation in applied water demand in the agricultural sector due to varying annual hydrology, the Study Team examined historic data. The Study Team used the statewide historic agricultural demand in five representative year types to quantify variations in agricultural demand. The results of this analysis can be seen in Figure 1.

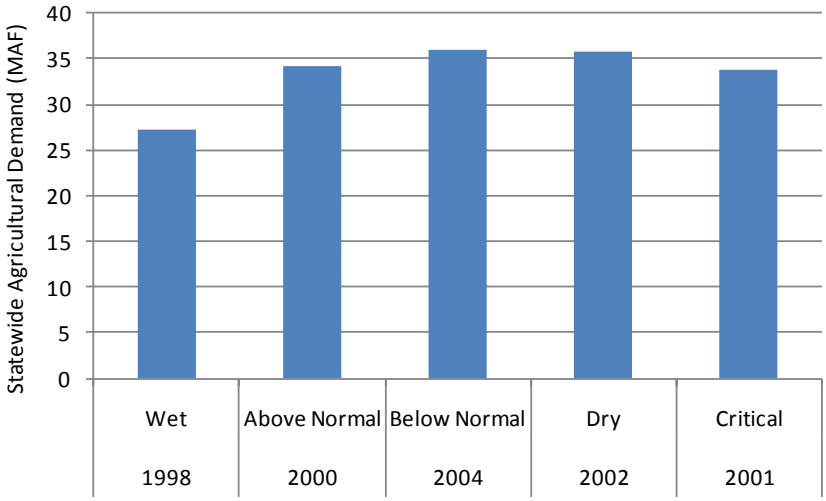

Figure 1: Historic Statewide Agricultural Applied Water Demand

As the future demand scenarios from DWR are calibrated to year 2000, the Study Team concludes that DWR future demand scenarios assume an Above Normal water year type. To adjust future agricultural applied water demand, the Study Team calculated the ratio of statewide demand between each year type and the Above Normal year type. The results of this can be seen in Table 2.

Table 2: Variation in Agricultural Applied Water Demand by Year Type

Year Type	Wet	Above Normal	Below Normal	Dry	Critical
Agricultural Applied Demand (% of Above Normal Year Type)	80%	100%	105%	105%	99%

The results presenting in Table 2 are used to adjust DWR future demand projections to account for varying hydrology. For example, if 2030 is modeled as a wet year, the projected demand for each sub-use in each hydrologic region is multiplied by 80%. If 2030 is modeled as a dry year, 105% of the projected demand is used.

The Above Normal demand projection used as inputs to the Study Team's scenarios can be found at the end of this section.

F.2 Urban Sector

The total urban demand by hydrologic region was available from Bulletin 160; additional data was obtained from DWR staff. DWR staff provided future projections for the following sub-uses: Large Landscape, Commercial, Industrial, Single Family Residential Interior, Single Family Residential Exterior, Multifamily Residential Interior, and Multifamily Residential Exterior. It was noted that the water demand for the Energy Production sub-use was included with Large Landscape; this was corroborated by the Study team by comparing year 2000 from the Regional Water Balances to and the received data. All other sub-uses in each hydrologic region matched the Regional Water Balances for year 2000.

When the data provided by DWR staff was totaled, it was found that the sum did not equal the total urban demand as reported in Bulletin 160. The absence of Conveyance Applied Water and Groundwater Recharge Applied Water caused this discrepancy. This was corroborated by the Study Team by comparing the sub-use data from DWR staff, the total urban demand in Bulletin 160, and the Regional Water Balances in year 2000.

Future demand for Energy Production, Conveyance Applied Water, and Groundwater Recharge Applied Water was disaggregated by the Study Team. Energy production demand is calculated by disaggregating it from Large Landscape. The Study Team did this by first calculating the historic ratio of total demand between both sub-uses from 1998 to 2005 within each hydrologic region using data from the Regional Water Balances. Then Energy Production demand within each hydrologic region was separated using the calculated ratio for each respective region.

Similarly, Conveyance Applied Water and Groundwater Recharge Applied Water were calculated. The total demand for both sub-uses was first calculated using the difference between the future projections for total urban demand presented in Bulletin 160 and the summation of the future projections for each sub-use in the data provided by DWR staff. The resulting combined demand for both sub-uses was disaggregated using the ratio between historic demands for both

sub-uses within each region. The disaggregating ratio was calculated using the total demand for each sub-use in each region from 1998 to 2005 using data from the Regional Water Balances.

The Study Team used two of the DWR scenarios to develop its three future urban demand scenarios. The Basline Scenario was developed using the above described methods applied to the "Current Trends" dataset from DWR. The High Demand Scenario was developed using the above described methods applied to the "More Resource Intensive" dataset from DWR. The Low Demand Scenario assumes demand for each sub-use in each hydrologic region remains constant from 2010 through 2030. Thus, the demand projection for 2010 was obtained from the "Current Trends" dataset from DWR. Demand in the subsequent modeling years (2020 and 2030) is equal to the demand in 2010.

Data used as inputs to the Study Team's scenarios can be found at the end of this section.

F.2.1 Environmental Sector

The Study Team is only modeling Environmental Demand for Instream flows, Managed Wetlands, and Required Delta Outflows; flow for Wild and Scenic Rivers are not included as discussed in Chapter 4.

Environmental Demand for these sub-uses is assumed to remain at historic levels. The future demand for each environmental sub-use depends only on the water year type, and not the specific demand scenario. Environmental demand in each hydrologic region is equal to the historic demand in the Study Team's selected five representative hydrology year types. The Study Team's five representative years are: 1998, wet; 2000, above normal; 2001, critical; 2002, dry; and 2004, below normal.

For example, when modeling a wet year in 2030, the environmental demand will use the historic environmental demand that occurred in 1998 as input data. The exact same environmental demand is assumed to occur in a wet year in 2020. When modeling a dry year in 2020 or 2030, the environmental demand is assumed to match the historic data from 2002. Similarly, future above normal, below normal, and critical year environmental demand is determined from historic data.

Data used as inputs to the Study Team's scenarios can be found at the end of this section.

F.2.2 Baseline 2010 Demand Values

The model uses 2010 as its baseline against which future scenarios are compared. The 2010 demand value is constant regardless of which future demand scenario is assumed. The values used for demand in 2010 is taken from the DWR current trends scenario and applied to all three model scenarios (Baseline, Low Demand, and High Demand) in 2010. This is reflected in the data illustrated at the end of this section.

Table 3. Urban Demand Projections (TAF)

		Residential Interior			Residential Exterior			Commercial		
		2010	2020	2030	2010	2020	2030	2010	2020	2030
Baseline	**Region**									
	NC	48.2	52.5	57.1	49.0	53.8	59.0	18.3	19.5	20.7
	SF	336.1	357.6	379.3	376.4	403.3	431.2	239.0	255.0	271.2
	CC	129.7	138.5	147.5	73.9	79.0	84.2	56.0	59.5	63.0
	SC	1,934.3	2,080.2	2,231.6	962.9	1,037.8	1,116.0	972.0	1,031.0	1,090.0
	SR	267.7	320.3	382.2	349.6	418.2	499.1	164.3	191.7	223.1
	SJ	231.7	279.8	337.0	283.5	346.8	423.2	44.3	52.0	60.8
	TL	288.4	334.0	385.6	303.5	351.8	406.7	49.8	55.4	61.4
	NL	9.4	10.3	11.2	6.7	7.3	8.0	9.5	10.1	10.7
	SL	162.5	192.2	227.0	91.5	108.3	127.8	22.2	25.9	30.2
	CR	207.5	252.5	306.5	72.2	88.1	107.3	143.0	165.0	189.9
	Total	**3,615**	**4,018**	**4,465**	**2,569**	**2,894**	**3,263**	**1,718**	**1,865**	**2,021**
High Demand	**Region**									
	NC	48.2	57.8	66.2	49.0	62.3	73.3	18.3	21.6	24.2
	SF	336.1	381.1	418.9	376.4	464.2	532.3	239.0	278.4	309.8
	CC	129.7	154.3	173.8	73.9	89.3	101.3	56.0	65.3	72.5
	SC	1,934.3	2,386.6	2,746.2	962.9	1,221.2	1,424.1	972.0	1,152.0	1,289.0
	SR	267.7	377.7	491.0	349.6	522.7	697.3	164.3	225.2	284.4
	SJ	231.7	318.1	411.2	283.5	420.9	566.4	44.3	62.5	80.4
	TL	288.4	374.0	458.8	303.5	412.3	517.3	49.8	64.8	77.9
	NL	9.4	10.9	12.3	6.7	8.3	9.7	9.5	11.2	12.4
	SL	162.5	234.1	305.5	91.5	134.1	176.4	22.2	30.5	38.6
	CR	207.5	314.5	426.0	72.2	110.8	151.3	143.0	198.8	251.8
	Total	**3,615**	**4,609**	**5,510**	**2,569**	**3,446**	**4,249**	**1,718**	**2,110**	**2,441**
Low Demand	**Region**									
	NC	48.2	48.2	48.2	49.0	49.0	49.0	18.3	18.3	18.3
	SF	336.1	336.1	336.1	376.4	376.4	376.4	239.0	239.0	239.0
	CC	129.7	129.7	129.7	73.9	73.9	73.9	56.0	56.0	56.0
	SC	1,934.3	1,934.3	1,934.3	962.9	962.9	962.9	972.0	972.0	972.0
	SR	267.7	267.7	267.7	349.6	349.6	349.6	164.3	164.3	164.3
	SJ	231.7	231.7	231.7	283.5	283.5	283.5	44.3	44.3	44.3
	TL	288.4	288.4	288.4	303.5	303.5	303.5	49.8	49.8	49.8
	NL	9.4	9.4	9.4	6.7	6.7	6.7	9.5	9.5	9.5
	SL	162.5	162.5	162.5	91.5	91.5	91.5	22.2	22.2	22.2
	CR	207.5	207.5	207.5	72.2	72.2	72.2	143.0	143.0	143.0
	Total	**3,615**	**3,615**	**3,615**	**2,569**	**2,569**	**2,569**	**1,718**	**1,718**	**1,718**

Table 3. Urban Demand Projections (TAF) - Continued

		Industrial			Large Landscape			Energy Production		
		2010	2020	2030	2010	2020	2030	2010	2020	2030
Baseline	**Region**									
	NC	32.6	33.4	34.1	13.2	13.9	14.7	0.0	0.0	0.0
	SF	62.3	60.7	58.5	93.8	96.7	99.3	0.0	0.0	0.0
	CC	23.6	23.1	22.4	13.4	13.9	14.3	12.1	12.5	12.9
	SC	203.6	195.8	186.3	258.1	267.3	276.1	35.5	36.8	38.0
	SR	90.9	97.3	103.4	127.0	145.3	165.8	0.9	1.1	1.2
	SJ	94.6	99.1	102.5	37.0	43.7	51.4	1.9	2.3	2.7
	TL	64.3	64.1	63.3	21.6	24.2	27.0	0.0	0.0	0.0
	NL	14.3	14.3	14.2	2.4	2.5	2.6	0.1	0.1	0.1
	SL	5.0	5.4	5.6	9.8	11.2	12.8	5.0	5.7	6.5
	CR	5.1	5.6	6.2	195.8	230.8	271.0	70.6	83.1	97.6
	Total	**596**	**599**	**596**	**772**	**849**	**935**	**126**	**142**	**159**
High Demand	**Region**									
	NC	32.6	37.0	39.8	13.2	14.9	16.4	0.0	0.0	0.0
	SF	62.3	66.2	66.8	93.8	103.0	109.5	0.0	0.0	0.0
	CC	23.6	25.3	25.8	13.4	14.8	15.8	12.1	13.4	14.2
	SC	203.6	218.7	220.4	258.1	289.8	312.5	35.5	39.9	43.0
	SR	90.9	114.3	131.8	127.0	165.5	201.9	0.9	1.2	1.5
	SJ	94.6	119.1	135.6	37.0	50.5	64.0	1.9	2.6	3.3
	TL	64.3	75.0	80.3	21.6	27.3	32.4	0.0	0.0	0.0
	NL	14.3	15.8	16.5	2.4	2.7	2.9	0.1	0.1	0.1
	SL	5.0	6.3	7.2	9.8	12.8	15.6	5.0	6.4	7.8
	CR	5.1	6.8	8.3	195.8	266.5	337.2	70.6	96.0	121.5
	Total	**596**	**685**	**732**	**772**	**948**	**1,108**	**126**	**160**	**191**
Low Demand	**Region**									
	NC	32.6	32.6	32.6	13.2	13.2	13.2	0.0	0.0	0.0
	SF	62.3	62.3	62.3	93.8	93.8	93.8	0.0	0.0	0.0
	CC	23.6	23.6	23.6	13.4	13.4	13.4	12.1	12.1	12.1
	SC	203.6	203.6	203.6	258.1	258.1	258.1	35.5	35.5	35.5
	SR	90.9	90.9	90.9	127.0	127.0	127.0	0.9	0.9	0.9
	SJ	94.6	94.6	94.6	37.0	37.0	37.0	1.9	1.9	1.9
	TL	64.3	64.3	64.3	21.6	21.6	21.6	0.0	0.0	0.0
	NL	14.3	14.3	14.3	2.4	2.4	2.4	0.1	0.1	0.1
	SL	5.0	5.0	5.0	9.8	9.8	9.8	5.0	5.0	5.0
	CR	5.1	5.1	5.1	195.8	195.8	195.8	70.6	70.6	70.6
	Total	**596**	**596**	**596**	**772**	**772**	**772**	**126**	**126**	**126**

Table 3. Urban Demand Projections (TAF) - Continued

		Conveyance Applied Water			Groundwater Recharge Applied Water		
		2010	2020	2030	2010	2020	2030
Baseline	**Region**						
	NC	0.0	0.0	0.0	0.0	0.0	0.0
	SF	3.3	3.4	3.5	23.2	23.8	24.6
	CC	2.9	3.1	3.3	1.5	1.6	1.7
	SC	148.0	157.1	166.7	17.1	18.1	19.3
	SR	10.0	11.7	13.7	0.0	0.0	0.0
	SJ	20.9	24.7	29.4	0.0	0.0	0.0
	TL	13.8	15.3	17.2	3.7	4.1	4.6
	NL	0.0	0.0	0.0	0.0	0.0	0.0
	SL	5.4	5.8	6.1	13.4	14.2	15.0
	CR	11.1	11.1	11.1	89.5	89.5	89.6
	Total	**215**	**232**	**251**	**149**	**151**	**155**
High Demand	**Region**						
	NC	0.0	0.0	0.0	0.0	0.0	0.0
	SF	3.3	3.6	3.8	23.2	25.1	26.5
	CC	2.9	3.4	3.8	1.5	1.8	2.0
	SC	148.0	179.7	205.1	17.1	20.8	23.7
	SR	10.0	14.1	18.0	0.0	0.0	0.0
	SJ	20.9	29.2	37.9	0.0	0.0	0.0
	TL	13.8	17.4	20.7	3.7	4.7	5.6
	NL	0.0	0.0	0.0	0.0	0.0	0.0
	SL	5.4	6.2	6.9	13.4	15.2	16.9
	CR	11.1	11.1	11.1	89.5	89.5	89.5
	Total	**215**	**265**	**307**	**149**	**157**	**164**
Low Demand	**Region**						
	NC	0.0	0.0	0.0	0.0	0.0	0.0
	SF	3.3	3.3	3.3	23.2	23.2	23.2
	CC	2.9	2.9	2.9	1.5	1.5	1.5
	SC	148.0	148.0	148.0	17.1	17.1	17.1
	SR	10.0	10.0	10.0	0.0	0.0	0.0
	SJ	20.9	20.9	20.9	0.0	0.0	0.0
	TL	13.8	13.8	13.8	3.7	3.7	3.7
	NL	0.0	0.0	0.0	0.0	0.0	0.0
	SL	5.4	5.4	5.4	13.4	13.4	13.4
	CR	11.1	11.1	11.1	89.5	89.5	89.5
	Total	**215**	**215**	**215**	**149**	**149**	**149**

Table 4. Agricultural Demand Projections – Above Normal Year Type (TAF)

		Crop Production			Conveyance Applied Water			Groundwater Recharge Applied Water		
		2010	2020	2030	2010	2020	2030	2010	2020	2030
Baseline	Region									
	NC	759.0	749.7	740.8	37.2	36.7	36.3	0.0	0.0	0.0
	SF	107.8	106.6	108.7	1.0	1.0	1.0	0.0	0.0	0.0
	CC	926.7	878.3	839.4	10.4	9.8	9.4	7.1	6.7	6.4
	SC	781.0	697.1	616.2	9.7	8.7	7.7	6.5	5.8	5.2
	SR	7,730.5	7,631.9	7,537.0	869.3	858.2	847.5	0.0	0.0	0.0
	SJ	6,121.6	5,883.6	5,653.9	430.2	413.5	397.3	194.2	186.7	179.4
	TL	9,439.4	9,055.6	8,685.0	594.4	570.2	546.9	331.9	318.5	305.4
	NL	488.6	526.3	562.8	23.3	25.1	26.8	0.0	0.0	0.0
	SL	326.8	293.6	261.2	0.0	0.0	0.0	0.0	0.0	0.0
	CR	3,412.1	3,194.6	2,984.6	429.7	402.3	375.9	0.0	0.0	0.0
	Total	**30,094**	**29,017**	**27,990**	**2,405**	**2,326**	**2,249**	**540**	**518**	**496**
High Demand	Region									
	NC	759.0	762.2	759.3	37.2	37.3	37.2	0.0	0.0	0.0
	SF	107.8	100.8	96.9	1.0	0.9	0.9	0.0	0.0	0.0
	CC	926.7	907.9	874.2	10.4	10.2	9.8	7.1	6.9	6.7
	SC	781.0	662.2	562.7	9.7	8.2	7.0	6.5	5.5	4.7
	SR	7,730.5	7,999.8	8,001.0	869.3	899.6	899.7	0.0	0.0	0.0
	SJ	6,121.6	6,225.0	6,120.3	430.2	437.5	430.1	194.2	197.5	194.2
	TL	9,439.4	9,568.0	9,094.6	594.4	602.5	572.7	331.9	336.5	319.8
	NL	488.6	535.1	576.9	23.3	25.5	27.5	0.0	0.0	0.0
	SL	326.8	286.7	250.5	0.0	0.0	0.0	0.0	0.0	0.0
	CR	3,412.1	3,314.9	3,117.3	429.7	417.5	392.6	0.0	0.0	0.0
	Total	**30,094**	**30,363**	**29,454**	**2,405**	**2,439**	**2,377**	**540**	**546**	**525**
Low Demand	Region									
	NC	750.1	732.1	714.6	36.7	35.9	35.0	0.0	0.0	0.0
	SF	115.7	121.7	129.2	1.1	1.1	1.2	0.0	0.0	0.0
	CC	931.6	872.1	830.8	10.4	9.8	9.3	7.1	6.6	6.3
	SC	828.9	791.8	756.7	10.3	9.9	9.4	6.9	6.6	6.3
	SR	7,660.1	7,492.3	7,329.5	861.4	842.5	824.2	0.0	0.0	0.0
	SJ	6,062.7	5,770.5	5,490.8	426.0	405.5	385.9	192.3	183.1	174.2
	TL	9,348.4	8,881.2	8,434.2	588.7	559.3	531.1	328.7	312.3	296.6
	NL	472.1	493.1	512.7	22.5	23.5	24.4	0.0	0.0	0.0
	SL	344.7	328.8	313.2	0.0	0.0	0.0	0.0	0.0	0.0
	CR	3,420.4	3,226.7	3,035.3	430.8	406.4	382.3	0.0	0.0	0.0
	Total	**29,935**	**28,710**	**27,547**	**2,388**	**2,294**	**2,203**	**535**	**509**	**483**

Table 5. Environmental Demand Projections – All Scenarios (TAF)

		Environmental Demand in 2010, 2020, and 2030				
		Wet	**Above Normal**	**Below normal**	**Dry**	**Critical**
Instream	Region					
	NC	1,445.3	1,444.5	1,710.7	1,421.6	1,473.5
	SF	23.1	21.5	739.0	787.3	20.0
	CC	20.3	21.4	26.0	10.7	10.8
	SC	3.5	3.5	3.5	3.6	3.5
	SR	3,699.6	3,759.8	3,797.3	3,590.2	3,747.5
	SJ	1,528.9	2,098.5	582.2	582.7	1,424.4
	TL	0.0	0.0	0.0	0.0	0.0
	NL	84.6	85.0	71.2	84.7	84.5
	SL	98.4	88.8	75.2	95.2	78.4
	CR	0.0	0.0	0.0	0.0	0.0
	Total	**6,903.7**	**7,523.0**	**7,005.1**	**6,576.0**	**6,842.6**
Required Delta Outflow	Region					
	NC	0.0	0.0	0.0	0.0	0.0
	SF	0.0	0.0	0.0	0.0	0.0
	CC	0.0	0.0	0.0	0.0	0.0
	SC	0.0	0.0	0.0	0.0	0.0
	SR	9,505.0	7,231.6	6,532.2	4,842.6	4,486.2
	SJ	0.0	0.0	0.0	0.0	0.0
	TL	0.0	0.0	0.0	0.0	0.0
	NL	0.0	0.0	0.0	0.0	0.0
	SL	0.0	0.0	0.0	0.0	0.0
	CR	0.0	0.0	0.0	0.0	0.0
	Total	**9,505.0**	**7,231.6**	**6,532.2**	**4,842.6**	**4,486.2**
Managed Wetlands	Region					
	NC	391.4	424.4	301.1	344.7	254.3
	SF	6.2	6.2	2.4	29.5	6.2
	CC	0.1	0.1	0.4	0.5	0.1
	SC	31.2	38.1	31.2	31.4	37.2
	SR	439.1	471.5	557.3	555.2	469.0
	SJ	414.5	444.8	491.6	477.3	414.7
	TL	62.9	73.7	124.1	120.9	76.3
	NL	18.7	25.9	21.5	21.1	20.5
	SL	0.0	0.0	0.0	0.0	0.0
	CR	31.6	30.2	30.3	29.6	29.6
	Total	**1,395.7**	**1,514.9**	**1,559.9**	**1,610.2**	**1,307.9**