

Chapter 11

Financial Costs

The financial cost of a project is defined as the "out of pocket cost" to finance, build, operate, and maintain the project. This chapter identifies the financial costs associated with the proposed action. The costs are given as a total annual cost per acre-foot of delivery capacity. The "Economic Costs of Alternatives" in Chapter 7 discusses the difference between financial and economic costs.

Santa Ynez Extension costs are included only as representative of costs that a local distribution might be if it was constructed by local entities.

Construction costs, shown in table 11-1, are based on July 1990 prices and include right-of-way acquisition, mitigation, design, and construction supervision, costs. The right-of-way costs are based on permanent easements for the pipeline and purchase of the land in fee at the pumping and power plants, and tank sites.

Coastal Branch	Mission Hills Extension	Santa Ynez Extension
SWP Water 52,723 AF/YR		
\$239,300,000	\$31,700,000	—
SWP Water 70,486 AF/YR		
\$277,800,000	\$45,100,000	\$55,800,000
SWP Water 82,700 AF/YR		
\$299,000,000	\$49,100,000	\$61,300,000

Phase II and the two local extensions were divided into repayment reaches. Phase II reaches used in this study are those specified in the current SWP water supply contracts plus a reach for the Santa Maria River crossing. The Mission Hills and Santa Ynez Extension reaches were determined by such major features as pumping plants. The actual number of reaches used and their boundaries will be determined before the project is completed.

There are three repayment reaches for the Coastal Branch and two each for the Mission Hills and Santa Ynez Extensions. Table 11-2 describes each reach.

The estimated unit costs of water for each repayment reach are based on costs of construction, mitigation, operation and maintenance, interest during construction,

electrical energy, repayment of bonds, and SWP existing facilities cost. The electrical energy cost was based on \$0.045 per kilowatt hour (kwh) for the Coastal Branch and \$0.080 per kwh for the local distribution facilities. The annual operation and maintenance costs were estimated at 1 percent of construction costs. These unit costs assume the full entitlement will be taken starting the first year of operation of the project.

Reach	Length Miles	Starts	Ends
Coastal Branch			
33A	62	Devils Den	San Luis Power Plant
34	8	San Luis Power Plant	Lopez Turnout
35	17	Lopez Turnout	Santa Maria River
Mission Hills Extension			
1	10	Santa Maria River	Casmalia Pumping Plant
2	13	Casmalia Pumping Plant	Mission Hills Tank Site
Santa Ynez Extension			
1	24	Mission Hills	Santa Ynez Pumping Plant
2	8	Santa Ynez Pumping Plant	Lake Cachuma

For the aqueduct's capital costs, the annual bond repayment charges would be repaid in two elements. The first element is the repayment of capital costs and interest, calculated through 2035 at the current Project Interest Rate of 4.713 percent. The project interest rate is the melded rate paid on securities issued to finance the SWP. This element is paid entirely by the two agencies in proportion to their share of the capital costs.

The second element is the difference between the total annual charges of the first element at 4.713 percent and the actual annual financing cost of bonds to be sold at an anticipated interest rate of 7.5 percent. This difference or surcharge is paid by all SWP contractors. San Luis Obispo's portion of this surcharge is 1.1 percent and Santa Barbara's share is 2.2 percent.

The annual bond repayment for the two local extensions was calculated by using an assumed interest rate of 8 percent for 35 years.

Unit costs of water for the down-sized aqueduct (52,723 AF/YR) are higher than the full-sized aqueduct (70,486 AF/YR). The cost of the down-sized facilities would be only slightly lower than the full-sized facilities but substantially less water is delivered by the down-sized system. This raises the cost per acre-foot of water for the down-sized project substantially above that of the full-sized. Since the down-sized aqueduct is intended to be built in conjunction with the Bradbury Dam enlargement (Lake Cachuma), use of SWP funding to enlarge Bradbury Dam requires that DWR's Local Project Guidelines be satisfied. These guidelines state "The Local Project must not adversely affect either the costs or water deliveries to SWP Water Supply Contractors other than the sponsoring contractor." Annual costs to Cachuma water users have been increased so that San Luis Obispo County's unit water rates for the down-sized aqueduct will be the same as the costs for the full-sized aqueduct. Without the enlarged Lake Cachuma project, San Luis Obispo County's unit cost of water would increase by about \$30 per AF for Reaches 33A and 34 and by about \$50 per AF for Reach 35 since there would be no "local project" redistribution of costs.

Tables 11-3, 11-4, and 11-5 show the estimated cost of the water by repayment reach for the three levels of water delivery from the proposed Coastal Branch. These costs are based on a tentative allocation of water to the local entities. The final allocation will be made by SLOCFCWCD and SBCFCWCD. Water treatment and local distribution costs were estimated from information furnished by the two counties and are included. The local distribution line cost shown for reach 33A is for two lines. One goes north from the San Margarita turnout to the Atascadero-Paso Robles area. The other line goes west from the Chorro turnout to the Morro Bay area. SWP costs for reach 34 are reduced by credits for power generated at the San Luis Powerplant.

The unit costs include charges for SLOCFCWCD and SBCFCWCD's share of existing SWP conservation and transportation facilities. Planned future SWP facilities of Kern Water Bank, Los Banos Grandes Reservoir, and Delta facilities would increase the cost of water to the two counties by about \$50 per acre-foot. This cost is not included in these tables.

Table 11-3. Cost Per AF of SWP Water from the Coastal Branch, Phase II

Repayment Reach	Delivery Options ¹			Local Costs	
	Down-sized	Full-sized	Up-sized	Treatment ²	Distribution
33A	\$360	\$360	\$350	\$110	\$180
34	360	360	340	110	----
35	420	420	390	110	----

¹ Includes \$56 AF/YR for SB County and \$54 for SLO's share of the existing SWP conservation and transportation facilities costs.
² Cost of treating the water at the proposed Polonio Pass Regional Plant.

Table 11-4. Cost Per AF of SWP Water from Mission Hills Extension

Repayment Reach	Delivery Options ¹			Local Costs	
	Down-sized	Full-sized	Up-sized	Treatment ²	Distribution
1	\$530	\$460	\$430	\$110	----
2	740	610	570	110	----

¹ Includes \$56 AF/YR for SB County and \$54 for SLO's share of the existing SWP conservation and transportation facilities costs.
² Cost of treating the water at the proposed Polonio Pass Regional Plant.

Table 11-5. Cost Per AF of SWP Water from Santa Ynez Extension

Repayment Reach	Delivery Options ¹		Treatment ²
	Full-sized	Up-sized	
1	\$860	\$770	\$110
2	1,000	880	110

¹ Includes \$56 AF/YR for SB County and \$54 for SLO's share of the existing SWP conservation and transportation facilities costs.
² Cost of treating the water at the proposed Polonio Pass Regional Plant.

As discussed in Chapter 3, the Santa Barbara Water Purveyors Agency has requested that the terminus of the Coastal Branch, Phase II, be moved from the Santa Maria River to but not including Casmalia Pumping Plant. The effect of this change would be to make this section a State Water Project facility instead of a local project. This would result in cost savings to the Santa Barbara Water

Purveyors Agency since the capital costs of this portion would be repaid at the SWP project interest rate instead of market municipal bond rates. This would not affect the cost of water to San Luis Obispo County. Tables 11-6 and 11-7 show the unit water costs if the terminus is at the Casmalia Pumping Plant.

Table 11-6. Cost Per AF of SWP Water if Coastal Branch Terminus is Extended to Casmalia Pumping Plant Mission Hills Extension				
Repayment Reach	Delivery Options ¹			Local Costs
	Down-sized	Full-sized	Up-sized	Treatment ²
1	\$510	\$450	\$410	\$110
2	720	590	550	110

¹ Includes \$56 AF/YR for SB County and \$54 for SLO's share of the existing SWP conservation and transportation facilities costs.
² Cost of treating the water at the proposed Polonio Pass Regional Plant.

Table 11-7. Cost Per AF of SWP Water if Coastal Branch Terminus is Extended to Casmalia Pumping Plant Santa Ynez Extension			
Repayment Reach	Delivery Options ¹		Local Costs
	Full-sized	Up-sized	Treatment ²
1	\$840	\$740	\$110
2	970	860	110

¹ Includes \$56 AF/YR for SB County and \$54 for SLO's share of the existing SWP conservation and transportation facilities costs.
² Cost of treating the water at the proposed Polonio Pass Regional Plant.

Tables 11-8 and 11-9 list the agencies, amount of SWP water each has subscribed to, and the reach it is in. The amounts and reaches are preliminary and will likely be revised once the project is authorized.

Table 11-8. Allocation of Water by Agency and Repayment Reach		
San Luis Obispo County		
Agency	AF/YR	Reach
Shandon Co. Water Service Area 16-1	230	33A
City of Paso Robles	1,930	33A
Templeton Co. Services Dist.	900	33A
Atascadero Mutual Water Company	1,420	33A
Santa Margarita (WWD 6)	100	33A
Morro Bay	1,310	33A
Los Osos (CSA 9)	1,620	33A
Cayucos Purveyors	280	33A
Cuesta College	200	33A
County Operation Center/Park	430	33A
California Mens Colony	600	33A
City of San Luis Obispo	2,250	33A
City of San Luis Obispo	750	34
Arroyo Grande	4,000	34
Grover City	2,000	34
Oceano Community Service Dist.	750	34
Pismo Beach	2,000	34
Avila Co. Water Dist.	130	34
Port of San Luis	100	34
Nipomo Community Service Dist.	3,500	35
Southern California Water Company	500	35
Total	25,000	

Table 11-9. Allocation of Water by Agency and Repayment Reach

Santa Barbara County				
Agency	AF/YR			Reach
	Down-sized	Full-sized	Up-sized	
City of Santa Maria	11,300	11,300	16,200	MH1
Guadalupe	300	300	300	MH1
So. Ca. Water Company (Orcutt)	3,000	3,000	3,000	MH1
Casmalia Community Service Dist.	20	20	20	MH2
Vandenberg AFB	8,000	8,000	8,000	MH2
Vandenberg Village CSD	600	600	600	MH2
Mission Hills CSD	500	500	500	MH2
City of Lompoc	4,000	4,000	4,000	MH2
Buellton Community Water Dist.		580	1,000	SY1
Santa Ynez Water Conservation Dist.		2,000	3,000	SY1
Carpinteria Co. Service Dist.		2,700	2,700	SY2
Goleta Water Dist.		4,500	4,500	SY2
La Cumbre Mutual Water Company		1,000	1,000	SY2
Montecito Water Dist.		2,200	2,700	SY2
Morehart Land Company		200	200	SY2
City of Santa Barbara		3,000	6,000	SY2
Santa Barbara Research Center		50	200	SY2
Summerland County Water Dist.		300	300	SY2
Reserved SWP Entitlement	1,150	1,150	3,000	SY2
Total	28,870	45,400	57,620	