

RESOLUTION NO. R-90-1

RESOLUTION OF THE BOARD OF DIRECTORS OF ANTELOPE  
VALLEY-EAST KERN WATER AGENCY ESTABLISHING CAPACITY  
CHARGES TO FUND THE CONSTRUCTION OF FACILITIES TO PROVIDE  
WATER SERVICE WITHIN UNDEVELOPED PORTIONS OF THE AGENCY

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WHEREAS, on June 4, 1974, the voters of this Agency authorized the Agency to issue general obligation bonds in the total face amount of \$ 71,000,000.00 to finance the construction of facilities to deliver imported water from the State Water Project to those areas of the Agency in need of a supplemental water supply; and

WHEREAS, the Agency has sold all of the general obligation bonds that it was authorized by the voters to sell, over the years has constructed significant capital improvements from the proceeds of sale, has spent all of the bond proceeds and more on the construction of capital facilities, and yet many more capital facilities must be constructed in order for the Agency to provide supplemental water service to areas of the Agency still to be developed; and

WHEREAS, this Board of Directors recently advanced monies from its General Fund to its Bond Construction Fund in order to finance the further expansion of capacity in the Agency's Quartz Hill Water Treatment Plant and Eastside Water Treatment Plant to serve property planned for future development, and in so doing, seriously depleted the Agency's reserve; and

WHEREAS, in order to raise the revenue needed to repay this advance and to finance the construction of significant additional capital facilities that will be needed to provide supplemental water to those wholesale customers of the Agency that will be supplying retail water service to the areas in the Agency projected for development, this Board of Directors believes that a water capacity charge program should be approved and implemented which will fairly allocate the burden to those developing

areas of the Agency which will benefit from the construction of these capital facilities; and

WHEREAS, this Board of Directors has engaged the Agency's consulting engineers, Boyle Engineering Corporation, to solicit projections of the growth that is likely to occur within the Agency in the near future, to identify the capital facilities that must be constructed to provide the supplemental water service to the retail purveyors that will be serving those areas, to estimate the costs of constructing those facilities, and to calculate a capacity charge that would fairly allocate those costs according to the areas that would benefit from construction of the additional facilities; and

WHEREAS, Boyle Engineering Corporation has performed the study requested by this Board of Directors and has prepared a report, a copy of which is attached hereto as Exhibit "A," which proposes a schedule of charges to be paid by each of the Agency's wholesale customers whenever application is made for connection to that customer's retail water system; and

WHEREAS, the study attached hereto as Exhibit "A" was available for public inspection and review at least ten (10) days prior to the public hearing on the adoption of this Resolution, and written notice of the proposed capacity charges set forth herein was mailed to all parties requesting written notice at least fourteen (14) days prior to the public hearing, all as required by Government Code Section 54992; and

WHEREAS, this Board of Directors has conducted a public hearing on the adoption of this Resolution establishing capacity charges, noticed as required by Government Code Sections 54994.1 and 6062a; and

WHEREAS, until new legislation is introduced and enacted to enable the Agency to charge a property owner directly upon connection to the retail system of a wholesale customer of the Agency, implementation of the

capacity charge program set forth herein will require execution of written agreements between the Agency and its wholesale customers whereby the wholesale customers will agree to collect capacity charges from new development on behalf of the Agency and to pay these funds over to the Agency when collected; or in lieu thereof, to require the property owners themselves to pay said capacity charges directly to the Agency as a condition of receiving retail water service;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Antelope Valley-East Kern Water Agency as follows:

1. The engineering report dated February 8, 1990, and entitled Water Supply Capacity Charge, attached hereto as Exhibit "A," is hereby approved.
2. Effective upon execution of agreements between the Agency and its wholesale customers ("Purveyors"), but in no event prior to sixty (60) days after adoption of this Resolution, a capacity charge shall be due and payable to the Agency for each new equivalent dwelling unit which makes application for water service from a Purveyor of the Agency, unless the equivalent dwelling unit is exempt pursuant to Paragraph No. 3 of this Resolution. The capacity charge shall be due and payable at the time said application is made and prior to actual connection, according to the schedule set forth herein; provided, however, that on February 1 of each year, beginning in 1992, the schedule shall be adjusted by the Agency's staff in the same percentage as the percentage change in the Engineering News Record Construction Cost Index for the period ending December 31 of the immediately preceding year; and further provided that the charge shall be in the amount of only eighty percent (80%) of the schedule for applications for water service approved during calendar year 1990, only ninety percent (90%) of the schedule for applications for water service approved during calendar year 1991, and one hundred percent (100%) of the adjusted schedule for applications for water service approved thereafter.

<u>SCHEDULE OF CAPACITY CHARGES</u>	
<u>PURVEYOR</u>	<u>CAPACITY CHARGE PER E.D.U.</u>
TABLE NO. 3 Exhibit "A"	

Each Purveyor which enters into an agreement with the Agency for payment of these capacity charges shall be responsible for payment of the capacity charges as set forth above; provided, however, that each such Purveyor may provide for payment by requiring each potential customer who makes application for retail water service from the Purveyor to make payment directly to the Agency, as a condition of receiving retail

water service, and said payment shall be credited to the Purveyor's payment obligation.

3. The capacity charges set forth in this Resolution shall not be applied to any lot within a subdivision which has received final approval of the subdivision map by the appropriate governmental entity on or before June 1, 1990, nor to any lot or parcel within a commercial or industrial development which has been scheduled for public hearing for conditional use permit or site plan approval by the appropriate governmental entity on or before June 1, 1990, provided that a permanent water service meter has been installed for that lot or parcel on or before June 1, 1992. Nor shall the capacity charges set forth in this Resolution be applied to any development which is the subject of a binding agreement between a private developer and the Purveyor which will supply retail water service to the development, provided that the agreement was executed prior to the adoption of this Resolution, and further provided that the agreement provides for payment of only those fees and charges for water service which are specifically identified in the agreement and which do not include the capacity charges set forth herein. It shall be the responsibility of each Purveyor to verify any assertion of exemption pursuant to this Paragraph No. 3 before approving any connection without payment of the capacity charge required by this Resolution.

4. The purpose of the capacity charges set forth herein shall be to raise the sums necessary to finance the construction of those capital facilities identified in the report attached hereto as Exhibit "A", the construction of which are necessary in order for the Agency to be able to satisfy anticipated demands for supplemental water service.

5. Upon collection, capacity charge revenues shall be deposited and kept in a separate Agency account and shall be used only to pay:

- (A) For the capital facilities identified in the report attached hereto as Exhibit "A";

- (B) For reimbursing the Agency for a development's share of those capital facilities identified in Exhibit "A" and already constructed by the Agency at the time of payment; or
- (C) For fair reimbursement to developers who have constructed excess capacity in public facilities described in Exhibit "A" beyond the capacity needed to service their own developments;

provided, however, that the Agency shall not use any of the capacity charge revenue to construct facilities for the benefit of any Purveyor which fails to enter into an agreement with the Agency for the payment or collection of capacity charges in accordance with this Resolution. If any of the capacity charge revenues remain in the Agency account, unexpended or uncommitted, for a period of five (5) years after deposit in said account, the Agency shall thereafter make findings once each fiscal year to identify the purpose for which such revenues will be expended and also to demonstrate a reasonable relationship between the capacity charge and the purpose for which it was charged.

6. A reasonable relationship exists between the use of the capacity charge revenue and the type of development for which the capacity charges will be imposed since the revenue will be used only for the purpose of constructing water production, treatment, storage, and transmission facilities actually needed to provide supplemental water to developing areas, and will be calculated for each development by determining the number of equivalent dwelling units attributable to each such development.

7. A reasonable relationship exists between the need for the capital facilities identified in Exhibit "A" and the type of development project for which the capacity charges will be imposed since the need for each type of development can be fairly calculated by determining the number of equivalent dwelling units attributable to each such development.

8. There is a reasonable relationship between the amount of the capacity charges imposed herein and the cost of the public facilities identified in Exhibit "A" since the capacity charges have been calculated by the Agency's engineers based upon their estimates of the actual construction costs in current day dollars for constructing those facilities, their determination of which retail service areas will benefit from each of the capital facilities, and their calculation of the equivalent dwelling units likely to be developed within each of those service areas over the next ten years based upon information provided by the Agency's Purveyors. Considering these factors, capacity charges at least in the amounts set forth herein are justified.

9. Except in unusual circumstances as may be determined by the Agency's Board of Directors, Purveyors or private developers shall be permitted to design and construct water transmission and storage facilities identified in Exhibit "A" for conveyance to the Agency, subject to the Agency's prior review and approval of design specifications and inspection of construction, and also subject to the Agency's prior determination of the facilities to be constructed. The Agency's staff shall determine the reasonable, actual costs incurred in the design and construction of said facilities, including the costs of document preparation and contract administration. Upon conveyance of the completed facilities to the Agency, and acceptance by the Agency, the reasonable, actual costs incurred shall be credited to the Purveyor for the capacity charges which would otherwise be due pursuant to this Resolution. In the event that the cost of the completed facility exceeds the capacity charges that would otherwise be due and payable as a condition of providing retail water service to a development, the Agency shall enter into a reimbursement agreement with the Purveyor benefiting from the facility and, if appropriate, with the developer who constructed the facility, to provide for a fair reimbursement of costs incurred in excess of the capacity charges that would have been due and payable otherwise, with such reimbursement to be paid from other capacity charge revenue that the Agency may subsequently receive over the next ensuing ten years from development which directly benefits from

that facility. Alternatively, at the request of the Purveyor, the Agency will grant credits against future capacity charges which may be transferred in accordance with Paragraph No. 10 of this Resolution. When approved by the Agency's Board of Directors, Purveyors or private developers may also utilize legally available funding mechanisms to finance the construction of any of the facilities identified in Exhibit "A", upon such equitable terms as may be agreed upon in each such case.

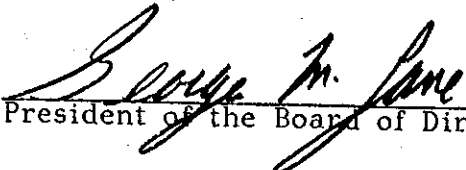
10. Any Purveyor, at any time, shall be entitled to prepay the Agency's capacity charges and shall thereupon receive credit for subsequent service to the number of equivalent dwelling units which the Purveyor would have been entitled to serve at the date of prepayment. In addition, if a Purveyor constructs or arranges for construction of facilities to be conveyed to the Agency in accordance with Paragraph No. 9, the reasonable, actual cost of which exceeds the capacity charges which would otherwise be due and payable to the Agency, the Purveyor may elect to receive credit against future capacity charges, in lieu of reimbursement, for the number of equivalent dwelling units which the excess cost would have otherwise entitled the Purveyor to serve at the time the completed facilities are conveyed to the Agency. Credits against future capacity charges may be transferred to other developments within the Agency, subject to prior approval by the Agency's staff.

11. This Resolution shall not be construed as a representation by the Agency that the facilities identified in Exhibit "A" will be constructed in any particular sequence or according to a definite schedule, it being the intent of this Board of Directors to construct the facilities in the order most urgently needed, subject to the availability of funds. Nor shall this Resolution be construed as a representation that the capacity charge program set forth herein will produce revenues at the rate needed to accommodate the development schedule of any party or landowner.



12. Any judicial action or proceeding to review, set aside, or annul this Resolution shall be brought within one hundred and twenty (120) days after its adoption in accordance with Government Code Section 54995.

ADOPTED this 13<sup>th</sup> day of February, 1990.

  
President of the Board of Directors

ATTEST:

  
Secretary of the Board of Directors

CERTIFICATION

I, Betty J. Regan, Secretary of the Board of Directors of the Antelope Valley-East Kern Water Agency, do hereby certify that the foregoing Resolution was duly adopted by the Board of Directors of said Agency at a Regular meeting of said Board duly held and convened on the 13<sup>th</sup> day of February, 1990, at which meeting more than a quorum of said Board was present and acting throughout, and that said Resolution has not been amended or repealed.

DATED this 13<sup>th</sup> day of February, 1990.

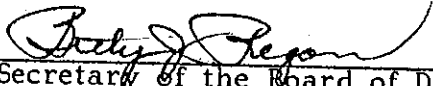
  
Secretary of the Board of Directors

Exhibit "A"

**Boyle Engineering Corporation**

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P.O. Box 670  
Bakersfield, California 93302

consulting engineers / architects

805 / 325-7253  
FAX 805 / 395-0359

BOARD OF DIRECTORS  
ANTELOPE VALLEY-EAST KERN WATER AGENCY  
6500 W. Avenue N  
P. O. Box 3176  
Quartz Hill, CA 93534

February 8, 1990

Attention Mr. Wally Spinarski

WATER SUPPLY CAPACITY CHARGE

As directed by the Board, we have identified the system improvements that we project will be required to serve the anticipated growth within the Agency boundaries in the next 10 years. Timing and sequencing of construction within the 10-year projection will depend upon the availability of funds and the urgency of the need, which have not been determined. We have estimated the cost of the facilities and identified what service area including their adopted sphere of influences would benefit from these improvements. Based on this information we have provided approximate supply capacity charges that may be applicable for the different service areas.

PROPOSED IMPROVEMENTS

The following summary indicates the proposed improvements needed to serve the next 10 years of growth. The improvements for the Quartz Hill Water Treatment Plant Expansion No. 2 and the Eastside Water Treatment Plant Expansion No. 1 which have recently been completed and the Acton Water Treatment Plant (2 mgd to 4 mgd) which is under construction have been included in our basis for water supply capacity charge determination. Because the Agency has loaned funds from its General Fund to its capital improvement fund to finance these improvements, the water supply capacity charge should generate revenues sufficient to repay that debt.

- o Water Treatment Plant Improvements
  - Acton Water Treatment Plant Expansion (2 mgd to 8 mgd)
  - Eastside Water Treatment Plant Expansion No. 1 (3 mgd to 10 mgd)

- Eastside Water Treatment Plant Expansion No. 2 (10 mgd to 25 mgd)
- Quartz Hill Water Treatment Plant Expansion No. 2 (28 mgd to 65 mgd)
- Rosamond Water Treatment Plant Expansion (14 mgd to 28 mgd)
- Westside Water Treatment Plant I (15 mgd)
- Westside Water Treatment Plant II (3 mgd)
- o Pipeline and Pump Station Improvements
  - East Feeder/South Feeder Interconnection & Pump Station
  - QHWTP/RWTP Interconnection & Pump Station
  - South Feeder Parallel Pipeline
  - QHWTP/Westside WTP I Interconnection Pipeline & Pump Station
  - Feeders and Pump Station from Westside WTP I
  - East Feeder Parallel Pipeline
  - Lake Hughes Feeder Parallel Pipeline/Pump Station
  - Leona Valley Parallel/Pump Station Addition
- o Reservoir and Basin Improvements
  - Vincent Reservoir
  - Westside Recharge Basin

It should be noted that while these improvements appear to be necessary within the 10-year growth pattern, there still remains significant improvements beyond those indicated. To provide a complete backup supply there will need to be wells, interconnecting pipelines and additional recharge basins. We did not include these improvements at this time.

ESTIMATED IMPROVEMENT COSTS

The following includes estimated costs for the improvements identified in the section above. The estimated costs for the improvements are in today's (1990) dollars.

Cost estimates for the treatment plants were based on bid prices of existing Agency treatment plants and adjusted to the year 1990 by using the ENR cost index. Included in the estimates are clearwater storage tanks at the plant sites to provide approximately 8 hours of storage. Sludge handling improvements were estimated on mechanical dewatering process where additional land acquisition may be limited.

The cost for pipelines and pump station improvements were also based on recent or previous Agency projects. Costs were adjusted as necessary to be equivalent to 1989 costs. The right-of-way cost has also been included for the individual improvements.

TABLE 1  
 ESTIMATED IMPROVEMENT COSTS  
 (\$1000)

<u>Item Improvement</u>	<u>Construction</u>	<u>Right- of-Way</u>	<u>Engineering Legal &amp; Contingencies</u>	<u>Total</u>
<b>Water Treatment Plants</b>				
<u>Recently Constructed</u>				
1. Eastside WTP (3 mgd to 10 mgd)	3,900	100	600	\$4,600
2. QHWTP (28 mgd to 65 mgd)	6,400	0	900	<u>7,300</u>
	SUBTOTAL			\$11,900
<u>Under Construction</u>				
2a. Acton WTP (2 mgd to 4 mgd)	3,200	0	500	<u>3,700</u>
	SUBTOTAL			\$ 3,700
<u>Proposed Construction</u>				
3. Eastside WTP (10 mgd to 25 mgd)	11,600	0	2,300	13,900
4. QHWTP (Reservoir & Sludge)	6,600	0	1,300	7,900
5. Acton WTP (4 mgd to 8 mgd)	2,800	0	600	3,400

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6.	Rosamond WTP (14 mgd to 28 mgd)	9,200	0	1,900	11,100
7.	Westside WTP I (15 mgd)	14,700	900	3,000	18,600
8.	Westside WTP II (3 mgd)	6,700	100	1,400	<u>8,200</u>
SUBTOTAL					\$ 63,100

Pipelines/Pump Stations/Reservoir

9.	East Fdr/South Fdr Intercon. Pipeline	5,900	1,500	1,200	8,600
10.	East Fdr/South Fdr Intercon. Pump Sta.	500	20	100	620
11.	QHWTP/RWTP Intercon. Pipeline	6,200	900	1,300	8,400
12.	QHWTP/RWTP Intr. Pump Station	1,100	30	220	1,350
13.	South Feeder Parallel Pipeline	4,300	700	900	5,900
14.	QHWTP/Westside WTP I Intrcon. Pipeline	8,600	1,200	1,800	11,600
15.	QHWTP/West WTP I Intrcon. Pump Sta	1,000	30	200	1,230
16.	Westside WTP I Feeder Pipeline	1,900	400	400	2,700
17.	West WTP I Fdr. Pump Station	700	10	140	850
18.	East Feeder Parallel Pipeline	4,400	0	900	5,300
19.	Lake Hughes Feeder Parallel Pipeline	1,500	400	300	2,200
20.	Lake Hughes Feeder Pump Station	600	10	120	730

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21. Leona Valley Feeder Parallel Pipeline	1,200	0	240	1,440
22. Leona Valley Feeder Pump Sta. Add.	400	10	80	490
23. Vincent Reservoir	800	0	160	960
24. Westside Recharge Basin/Inlet	1,000	1,600	200	2,800
25. North Feeder Pump Station	600	30	120	<u>750</u>
SUBTOTAL				55,920
ESTIMATED TOTAL				<u>\$134,620</u>

The total estimated cost identified includes the construction, right-of-way acquisition, engineering, legal and contingencies for the indicated improvements.

SERVICE AREAS/CONNECTIONS

Based on the different service areas and their sphere of influence we projected the number of equivalent dwelling units that would be requiring service in the next 10 years. The County WWD's provided future growth data which was used for determining anticipated new EDU's for their Districts. In other areas such as the Agency's Westside, where there is presently minimal development, it was very difficult to determine what might be the actual number of new EDU's in the year 2000.

The following summarizes the estimated new EDU's that will probably be developed in the next 10 years for different water purveyors within the Agency. These purveyors would benefit directly from the earlier described system improvements.

TABLE 2  
 CONNECTIONS

<u>Water Purveyor</u>	<u>Approximate New EDU's</u>
WWD 4 (Lancaster)	24,000
WWD 34 (w/Palmdale)	16,000
WWD 38 (Lake Los Angeles)	7,000
WWD 37 (Acton)	4,000
WWD 24 (Pearblossom)	}
WWD 27 (Littlerock)	
WWD 33 (Sun Village)	
WWD 35 (NE LA County)	
Quartz Hill Water District	4,500
White Fence Farms I & II	}
Shadow Acres MWC	
Sunnyside Farms	
Palm Ranch W.D.	
Antelope Valley W.C.	1,000
Lake Elizabeth MWC	1,500
West Valley/Gorman Area	5,000
North Valley (RCSD, MPUD etc.)	<u>5,000</u>
<b>ESTIMATED TOTAL</b>	<b>77,000</b>

As indicated, these new EDU totals are estimates based on the best available information. The totals are used to determine the approximate charge that would be required of each new EDU to construct the necessary facilities.

CAPACITY CHARGE

A basis for determining the Water Supply Capacity Charge includes the improvement cost information, water purveyors improvement benefit and the estimated new EDU's in the year 2000. In the following summary we have tried to identify what improvements would benefit the different water purveyors and then estimate an appropriate charge per EDU that would be justified by their benefit. The amount of the proportionate share for each water purveyor for an improvement cost is weighted on the projected new service requirements by the year 2000. The following Table 3 indicates the proposed improvements by number only, but they can be identified by referencing back to Table 1.

TABLE 3  
 ESTIMATED WATER SUPPLY CAPACITY CHARGE

Water Purveyor	Improvement Benefit Refer Table 1)	Share of Improv. Cost (\$1000)	New EDU's	Est. Supply Capacity Charge (\$/Conn.)
WWD4 (Lancaster)	2-4, 6-7, 9-17, 24	47,825	24,000	1,990
WWD 34 (W. Palmdale)	2-4, 6-7, 9-15, 24	29,550	16,000	1,850
WWD 38 (Lake L.A.)	1,3, 9-12, 18,24	9,031	7,000	1,290
WWD 37 (Acton)	2a, 5, 23, 24	8,259	4,000	2,065
WWD 24 (Pearblossom)	1,3, 9-12, 18, 24	9,031	7,000	1,290
WWD 27 (Littlerock)				
WWD 33 Sun Village)				
WWD 35 (NE LA County)				
Quartz Hill	2-4, 6-7, 9-12, 14, 15, 24	7,630	4,500	1,695
White Fence Farms I & II Sunnyside Fms Shadow Acres Palm Ranch WD	2-4, 6-7, 9-12, 24	2,836	2,000	1,420
Antelope Valley W.C.	2, 4, 21, 22, 24	2,289	1,000	2,290
Lake Elizabeth M.W.C.	7, 19, 20, 24	3,570	1,500	2,380
West Valley/ Gorman Area	8, 24	8,299	5,000	1,660
North Valley RCSD, MPUD, etc.)	6, 25	6,300	5,000	1,260
		\$134,620	77,000	



The estimated capacity charges indicated in Table 3 for the different service areas vary in the range from about \$1260 - 2380 per EDU. The EDU's actually constructed for this area may very well exceed that indicated, which would allow the Agency to subsequently reduce the charge per EDU.

Table 3 includes the large water purveyors of the area benefitting from the proposed improvements. While not all purveyors are identified, their appropriate charge per connection would be within the indicated range.

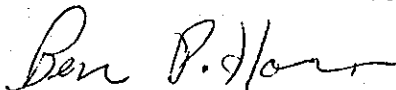
### Conclusion

In summary, the range of \$1000-2000 for a water supply capacity charge per EDU appears to be justified to provide the necessary funds to complete the construction of the improvements identified. As indicated in the study, this does not provide sufficient funds for a major groundwater recharge program.

The Agency may, like some other similar entities who have established a water supply capacity charge, want to consider allowing facilities to be donated to the Agency in lieu of payment of the water supply capacity charge.

If a water supply capacity charge is established by the Board, then it should be continuously reviewed to maintain adequacy of the amount based on the number of EDU's and the improvements necessary to serve them.

BOYLE ENGINEERING CORPORATION



Ben P. Horn, P.E.  
Project Manager

BK-A01-213-00/slc