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KERN DELTA WATER DISTRICT

KERN COUNTY, CALIFORNIA

ENGINEERING REPORT
SETTING FORTH A PLAN OF WORKS
FOR
ACQUISITION OF
KERN ISLAND WATER COMPANY

September, 1975

KD 023618



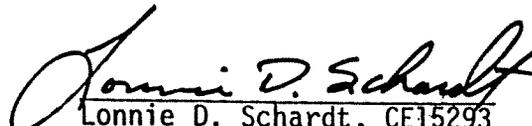
Boyle Engineering Corporation

consulting engineers / architects

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Kern County, California

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KERN ISLAND WATER COMPANY

SEPTEMBER, 1975


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KERN DELTA WATER DISTRICT
Kern County, California
ENGINEERING REPORT SETTING FORTH
A PLAN OF WORKS FOR
ACQUISITION OF KERN ISLAND WATER COMPANY

SECTION I - INTRODUCTION

A. General

The Kern Delta Water District was formed in December, 1965 pursuant to the provisions of the California Water District Law (Division 13 of the Water Code of the State of California). Landowners formed the District to provide a public entity that could contract with the Kern County Water Agency for an imported water supply from the State Water Project, and also to protect the existing water rights of land within the District.

The District encompasses approximately 125,000 acres and is located in Kern County southerly of the City of Bakersfield. The California Aqueduct is located 5 miles to the west of the westerly most boundary of the District. The Arvin-Edison, Wheeler Ridge-Maricopa and Buena Vista Water Storage Districts surround the District to the east, south and west respectively. The Urban Bakersfield Improvement District No. 4 is to the north and Pioneer I. D. of the North Kern Water Storage District is to the northwest. The District and the districts that adjoin it are shown on Plate 1 - Vicinity Map.

The topography of the District is relatively flat, sloping gently from a maximum elevation of 415 feet in the northeast to a minimum of 280 feet in the southwest. Water demands for crop irrigation are met by a combination of three water supply sources: the Kern River; pumping from the groundwater basin; and more recently by State water through an exchange of Kern River water for imported State Project water with Buena Vista Water Storage District.

The surface water deliveries are made by the Kern Island Water Company, a public utility with first priority water rights on the Kern River. Kern Island distributes Kern River water for agricultural use to five service areas through an extensive gravity canal system, which largely lies within the boundaries of the Kern Delta Water District. These five service areas are from east to west, the East Side, Kern Island, Farmers, Stine, and Buena Vista. Total annual diversions by Kern Island for these service areas have averaged about 160,150 acre-feet for the 11-year period 1964-74.

Boyle Engineering Corporation was retained in October, 1964 to aid in the formation of the District. Following formation, the District authorized investigations and studies concerning the engineering and economic feasibility of importing and distributing State water. As a result of these studies the District advised the Kern County Water Agency that they would contract for a maximum annual entitlement of 40,000 acre-feet of firm water from the State Water Project and also requested an average delivery of 25,000 acre-feet of unregulated surplus water per year. The Kern County Water Agency allocated the District a maximum entitlement of 30,000 acre-feet per year because all other water had been previously allocated to other prospective member units.

A "Water Supply Contract" with the Agency was executed on October 22, 1972. The contract provides for annual water deliveries to the District on a buildup basis commencing with 10,700 acre-feet in 1973 and reaching the maximum of 30,000 acre-feet in 1990. The 1976 contract amount is 17,600 acre-feet. The contract also provides for delivery, upon request by the District, of unregulated surplus water on an as-available basis during four winter months for groundwater recharge.

During the period 1968-72 the District studied various methods of transporting their contracted water from the Aqueduct into the District. One means evaluated was a Joint Powers Agreement with Cawelo Water District for construction of a "Cross-Delta Canal". The method adopted by the District was a water exchange and on October 27, 1972, a "Water Exchange Agreement" was culminated with Buena Vista Water Storage District. This agreement provides for the exchange of the first 15,000 acre-feet of the District's annual State Project water buildup for an equal amount of Kern River water owned by Buena Vista. A similar exchange agreement involving the balance of the District's State Project water buildup has also been negotiated with Buena Vista, but has not yet been fully executed.

The District also entered into a "Water Distribution Agreement" with Kern Island Water Company. This agreement provides the means of transporting Kern River water obtained from Buena Vista through Kern Island facilities into the District for distribution to potential District customers for irrigation purposes or for groundwater recharge.

Having secured a supply of supplemental water and the means of transporting it into the District, it remained for the District to develop a program for its beneficial use. The plan put into effect by the District is outlined in the report dated April 1974 entitled "Engineering Report Setting Forth A Plan For Utilization Of Supplemental Water" prepared by Boyle Engineering Corporation.

B. City of Bakersfield Actions

On September 29, 1970 the City of Bakersfield and California Water Service Company initiated litigation claiming an interest in Kern River

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water against various subsidiaries of Tenneco and other parties with interests in the Kern River (City of Bakersfield, et al, v. Kern County Land Company, et al Kern County Superior Court Case No. 111404).

Also on September 29, 1970 the City of Bakersfield initiated an action in eminent domain against various subsidiaries of Tenneco and other Kern River interests seeking to condemn the first 77,000 acre-feet per year of water and water rights of the Kern River (City of Bakersfield v. Kern County Land Company, et al, Kern County Superior Court Case No. 111405).

In accordance with the basic reasons for the formation of the District and to protect the existing water rights of the land, the District initiated litigation in eminent domain seeking to condemn the Kern Island Water Company. (Kern Delta Water District vs. Kern Island Water Company, Kern County Superior Case No. 125566). The legal action was subsequently moved from Kern County (Ventura County Superior Court Civil Action No. 58140).

Case No. 111405 was dismissed by the City of Bakersfield in May of 1973. As a result of extensive negotiations with Tenneco, a settlement of Case No. 11404 was reached by the City. The Plaintiffs, in consideration of settlement of their lawsuit and an agreement to make a compromise payment of \$17.9 million, will acquire from Tenneco the properties and rights described below and dismiss Case No. 111404. Plaintiffs will acquire:

1. The Kern Island Water Company, a public utility, including all its properties, facilities, land rights, and water rights.
2. The Kern River Canal and Irrigating Company, a public utility, including all of its properties, facilities, land rights, and water rights.

3. All other Kern River water rights and surface water facilities of Tenneco (including properties and facilities operated under the name of Kern County Canal and Water Company) including its storage rights in Lake Isabella, its ownership of canals, its ownership of weirs and appurtenant facilities, and all contractual arrangements, benefits, and obligations of Tenneco involving its Kern River water rights.
4. Approximately 2,760 acres of land in and along the Kern River Channel between Renfro Road and Interstate Highway I-5.
5. Equipment and rolling stock related to Tenneco's operations of its water facilities, estimated to be valued at about \$250,000.

As a result of negotiations with the City of Bakersfield, the Kern Delta Water District will acquire ownership of the Kern Island Water Company (1. above), excluding the Ashe Water Service Area, in settlement of its action in eminent domain and for an agreed payment of \$3,500,000 to the City of Bakersfield.

C. Plan of Works

Based on the foregoing actions, the Board of Directors of the District authorized the preparation of a plan of works for the acquisition of the Kern Island Water Company, excluding Ashe Water Service Area. The report sets forth a description of the Kern Island Water Company including its known properties, facilities, land rights and water rights. In addition, the plan of works include proposed improvements to the Kern Island canal system that may be necessary in the near future to maintain continued efficient operation.

It is also intended that this report be used in support of the District's application to the Districts Securities Division of the California State Treasurer's Office for approval of the settlement agreement with the City of Bakersfield and a specific financing plan to provide for the acquisition of the Kern Island Water Company and the improvements to the canal system.

A supplemental report examining the economic feasibility of the plan of works is concurrently being prepared which will also be used in support of the District's application.

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SECTION II - KERN RIVER WATER SUPPLIES

A. Kern River Flows

The average annual natural flow of the Kern River at First Point of Measurement (located about 5 miles upstream of Bakersfield) for the 79 year period 1896-1974 is 703,900 acre-feet. Since April 1954 Kern River flow has been regulated by Isabella Dam. The two years with the lowest annual flow are 1898 and 1972 when the recorded flows were 215,813 and 268,346 acre-feet respectively. The two years with the highest annual flow are 1916 and 1969 with flows of 2,520,216 and 2,461,405 acre-feet respectively. Peak flows normally occur during April, May and June with lowest flows occurring from August to February.

In accordance with a 1962 agreement among the principal Kern River water users, the General Manager of the Kern County Canal and Water Company (a subsidiary of Tenneco West, Inc.) was appointed Watermaster with the responsibility to prepare and keep complete records of the daily flows of Kern River and the storage thereof in and releases thereof from Isabella Reservoir. The annual computed natural flow and the regulated flow of the Kern River at First Point of Measurement as reported by the Kern River Watermaster is shown in Table 1 for the 21 year period 1954 through 1974.

KERN DELTA WATER DISTRICT

TABLE 1

KERN RIVER FLOW
AT
FIRST POINT OF MEASUREMENT
(Acre-Feet)

| Calendar Year | Natural Flow | | Regulated Flow |
|------------------|----------------------------|------------------------------|-------------------|
| | Computed at First Point | % of 79 Year Average Flow | |
| 1954 | 531,509 | 76 | 505,400 |
| 1955 | 444,306 | 63 | 367,800 |
| 1956 | 840,874 | 119 | 755,500 |
| 1957 | 444,544 | 63 | 445,900 |
| 1958 | 1,104,746 | 157 | 967,500 |
| 1959 | 257,972 | 37 | 353,200 |
| 1960 | 300,043 | 43 | 324,000 |
| 1961 | 177,649 | 25 | 177,000 |
| 1962 | 697,716 | 99 | 607,848 |
| 1963 | 802,869 | 114 | 676,237 |
| 1964 | 339,273 | 48 | 361,624 |
| 1965 | 720,374 | 102 | 634,303 |
| 1966 | 678,616 | 96 | 504,506 |
| 1967 | 1,396,249 | 198 | 1,465,855 |
| 1968 | 453,768 | 64 | 497,026 |
| 1969 | 2,461,405 | 350 | 2,313,769 |
| 1970 | 589,481 | 84 | 601,254 |
| 1971 | 427,432 | 61 | 442,651 |
| 1972 | 268,346 | 38 | 311,292 |
| 1973 | 979,652 | 139 | 785,133 |
| 1974 | 818,606 | 116 | 745,903 |
| 21 Year Average | 701,687 | 99.7 | 659,224 |

1896-1974 Average Flow = 703,900

B. Water Rights on the Kern River

Basic to a discussion of water rights on the Kern River is an understanding of the diversion entitlement and priorities and of the administrative procedures in the allocation of the available stream flow.

Under the terms of the Miller-Haggin Agreement, dated July 28, 1888 (which resulted from Lux vs Haggin, a suit between lower riparian owners and the upstream appropriators on the Kern River) the water rights of the Kern River were allocated between the First Point users (Second Parties) and the Second Point users (First Parties). The agreement provided for the establishment of two permanent stations for measuring the river discharge. "First Point of Measurement" (commonly referred to as "First Point") was located in Section 2, T 29 S, R 28 E, MDB&M at a point on the river channel above the diversions of all appropriative irrigation rights party to the agreement. With the exception of one or two small upstream diversions to riparian river bottom land, the entire run-off of the Kern River has been measured regularly at this station. This daily record of discharge is the basis for the agreed water allocation to First and Second Point diversion rights on the Kern River. Since construction of Isabella Reservoir, water allocations have been made on the basis of computed natural unregulated flow at First Point.

The Second Point selected as a permanent station for stream flow measurement is located about 20 miles downstream in Section 24, T 30S, R 25E, MDB&M and is located just upstream from the Buena Vista Water Storage District diversion. During a period of six months each year from March to August inclusive when flow primarily occurs at Second Point, the daily discharge is measured

to check the deliveries with the calculated allotment to the diversion rights below Second Point.

The allocation of water at the river as between the First Point and Second Point rights is controlled on a day to day basis under the terms of the original Miller-Haggin Agreement and the 1964 Amendment of Miller-Haggin Agreement. The Kern Island Canal entitlement, one of the First Point rights, has priority to the first 300 cfs of natural stream flow. The agreements provide that during March, April, May, June, July and August of each year, 33-1/3% to 50% of the unregulated flow above 300 cfs is apportioned to Second Point entitlements undiminished by river losses. The percentage allocated to Second Point rights varies with the river flow in accordance with the schedule contained in the 1964 Amendment. During the months of January, February, September, October, November and December of each year, 33-1/2% of all flow in excess of 1500 cfs is apportioned to Second Point rights undiminished by river losses. Second Point water users have the right to take delivery in Isabella Reservoir or at Second Point. These users are entitled to a maximum delivery rate of 750 cfs through the Carrier Canal System or higher rates when the Kern River channel is utilized or when the estimated Kern River runoff during the April-July period exceeds 600,000 acre-feet. The Buena Vista Water Storage District is the principal distributor of Second Point water.

The Kern County Canal and Water Company (KCC & WC) has operated the facilities necessary to carry out the provisions for the diversion of Kern River Water under these agreements. They have also been owners of many of the canal companies with high priority water diversion rights. In order to achieve operating economics and apparently for other reasons, certain joint and common operations are carried on with KCC & WC and the canal companies.

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Since 1963, Second Point water has been delivered from the river channel below First Point through the Carrier Canal and Kern River Canal system. The concrete lined Kern River Canal was constructed by the Kern County Land Company (predecessor of Tenneco) in 1962 along the south side of the Kern River. The canal extends from the termination of the Carrier Canal at a point at the Kern River Channel in Section 33, T 29 S, R 27 E, near the outlet of the Friant-Kern Canal, to a point in Section 24, T 30S, R 25E, at the channel of the Kern River approximately one-half mile downstream of Second Point of Measurement. The losses which occurred in delivering water to Second Point through the river channel were substantially reduced after 1963 with delivery through the lined Kern River Canal. The Kern County Land Company claims entitlement to the salvaged river losses by transporting Second Point entitlement through the River Canal to Second Point of Measurement. The quantity of salvage is computed from a formula and is dependent upon the period of time after March 1 of each year and Second Point entitlement. The formula was developed by KCC & WC based on historic river losses.

Data obtained from the City of Bakersfield Draft Environmental Impact Report entitled "Re: Use and Disposition of Property and Water Rights Acquired by The City of Bakersfield From Tenneco West, Inc. in Settlement of Litigation" Volume I, July 14, 1975 states that entitlement derived from the Kern River Canal is the major portion of Tenneco's total entitlement. The Kern River Canal entitlement for the period 1963 through 1974 has averaged 122,940 acre-feet varying from 42,271 acre-feet in 1972 to 383,682 acre-feet in 1969.

The Kern River Water Service Agreement dated August 31, 1961 between KCC & WC owned canal companies and the Rosedale-Rio Bravo Water Storage District (RRBWS) recognized the possibility of reduced recharge to the underground water basin as the result of construction of the Kern River Canal. The agreement provides

RRBWSO with a cumulative annual average quantity of not less than 10,000 acre-feet of KCC & WC's entitlement delivered at RRBWSO's diversion work on the Kern River in Section 1, T 30S, R 26E. The maximum annual delivery amount without RRBWSO's approval was specified at 40,000 acre-feet. The first 400 acre-feet of each successive 10,000 acre-feet was at no cost. The price for water sold other than the free water is \$1.00 per acre-foot, plus escalation on the basis of Consumer Price Index for all commodities.

The Miller-Haggin Agreement of 1888 provided for the administration of Kern River as between the First Point and Second Point users. A need for adjudication of certain separate rights as between more than twenty of the First Point appropriators still remained. These First Point entitlements, aggregating 2296.5 cubic feet per second of river flow, constituted the major river rights. The Shaw Decree resulting from 1895 legal action, established an order of priority within the First Point entitlement. Certain other rights not involved in that adjudication have been uniformly recognized as having rights established by use to the First Point flow to the extent of an additional 866 cubic feet per second. The schedule of priorities and maximum diversion rights commonly recognized are shown in Table 2. Some canals have at times diverted water in excess of their individual prescribed or adjudicated rates. Except for a few years having extremely high flows, substantially all of the First Point flow has been diverted or placed in storage in Isabella Reservoir.

The entities which collectively divert the major portion of the First Point entitlement are the Kern Island Water Company and the North Kern Water Storage District. Tenneco West, Inc., is the owner of First Point canals noted in Table 2 in addition to the Kern River Canal.

Whenever Second Point has entitlement, the responsibility of delivering the daily allotment under that right, undiminished by percolation or seepage,

KERN DELTA WATER DISTRICT

TABLE 2

KERN RIVER WATER
SCHEDULE OF PRIORITIES
AND
MAXIMUM DIVERSION RIGHTS

| Priority | River ⁽¹⁾ Stage (cfs) | Maximum Diversion (cfs) | Name of Diversion Canal | Owner |
|----------|--|-------------------------------|---|-----------------------------|
| 1 | 300.0 | 300 | Kern Island | KIWC |
| 2 | - | - | KCL-4.563% 2nd Point ent. | NKWS |
| 3 | - | (2) | Kern River Conduit | TWI |
| 4 | 320.0 | 20 | Castro | 74.04% TWI - 25.96% Private |
| 5 | 330.5 | 10.5 | Old South Fork | 18% KIWC - 82% Private |
| 6 | 410.5 | 80 | Buena Vista | KIWC |
| 7 | 530.5 | 120 | James | NKWS |
| 8 | 550.5 | 20 | Anderson | NKWS |
| 9 | 700.5 | 150 | Stine | KIWC |
| 10 | 730.5 | 30 | Meacham | NKWS |
| 11 | 880.5 | 150 | Farmers | KIWC |
| 12 | 920.5 | 40 | Plunket | NKWS |
| 13 | 960.5 | 40 | Joyce | NKWS |
| 14 | 1000.5 | 40 | Johnson | NKWS |
| 15 | 1130.5 | 130 | Pioneer | NKWS |
| 16 | 1190.5 | 60 | Beardsley-Lerdo | 30% NKWS - 70% TWI |
| 17 | 1200.5 | 10 | Anderson (2nd) | NKWS |
| 18 | 1240.5 | 40 | James & Dixon | NKWS |
| 19 | 1250.5 | 10 | Wilson | 37.5% TWI - 62.5% Private |
| 20 | 1276.5 | 26 | McCoffrey | NKWS |
| 21 | 1376.5 | 100 | McCord - Lerdo (2nd) Beardsley (2nd) | 51% NKWS - 49% TWI |
| 22 | 2226.5 | 850 | Calloway | 80% NKWS - 20% TWI |
| 23 | 2426.5 | 200 | Railroad | 80% NKWS - 20% TWI |
| 24 | 2516.5 | 90 | Buena Vista (2nd) | KIWC |
| 25 | 2696.5 | 180 | James (2nd) | NKWS |
| 26 | 2866.5 | 170 | Pioneer (2nd) | NKWS |
| 27 | 3106.5 | 240 | Beardsley (3rd) | 70% TWI - 30% NKWS |
| 28 | 3162.5 | 56 | Kern Island (2nd) | KIWC |

KIWC - Kern Island Water Company
NKWS - North Kern Water Storage District
TWI - Tenneco West, Inc.

- (1) Flow required to realize full maximum diversion entitlement.
(2) Salvaged river losses between first and second point.

is shared by all First Point rights participating in the day's allocation, with the exception of Kern Island's first 300 cfs. For the purpose of determining the amount of loss in entitlement to each First Point right, the full river discharge is considered as allocated among those rights in the order of priorities to the point at which the cumulative total of maximum diversion rates is equal to the calculated natural flow at First Point. The combined requirement of the Second Point entitlement plus the calculated theoretical channel loss (Kern River conduit entitlement) is then satisfied by proportioned contributions from the preliminary allocations to the First Point rights. During the time of the year (January, February, and September through December) when Second Point users normally do not have diversion entitlement, the stream flow is administered for the benefit of the First Point Users.

The Kern River Water Rights and Storage Agreement dated December 31, 1962 added two significant provisions to the Kern River documentary. The agreement divided all water of Kern River between an "Upstream Group" and "Downstream Group". The "Upstream Group" consisted of those parties diverting water under either the First Point or Second Point entitlements. The "Downstream Groups" consisted of parties with established rights north of the Wasco-Paso Robles Highway (State Highway 46). Included in the "Downstream Group" are the Tulare Lake Water Storage District and the Hacienda Water District. A water allocation only occurs to the "Downstream Group" in years of above normal runoff on the river. The aggregate flow must exceed 250,000 acre-feet between January - March and 550,000 acre-feet between April-July before any water goes to the Downstream Group. Between August-December there is no allocation.

The other important point in the agreement was the division of percentages of the right to purchase and use storage space for conservation use in Isabella Reservoir. Buena Vista WSD was designated 32% and North Kern 68%. However,

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20% of the storage space of North Kern was designated as Downstream space. Subsequent agreements and events provided Tenneco West, Inc. with one-half (32% of total storage) of North Kern's space. The Downstream Group has the perpetual right to rent 20% of the total storage space (10% from North Kern and 10% from Tenneco Inc.)

The Kern Island Water Company stores water, primarily during the irrigation season, in space owned by Tenneco. The Company pays Tenneco a storage fee as provided for in the agreements. The fee has been about \$0.005 per acre-foot per day during the past five years.

The total quantity of irrigation and recreation water in storage varies from not more than 170,000 acre-feet in November through January to as much as 570,000 acre-feet in early summer. The minimum recreation pool is 30,000 acre-feet. Isabella reservoir regulation is controlled by the Corps of Engineers. The quantity in storage will vary during the winter and early spring from year to year depending upon forecasted river runoff.

North Kern Water Storage District, one of the major First Point water users as shown on Table 2, acquired certain canal rights to divert Kern River water under the January 1, 1951, "Agreement for Use of Water Rights between North Kern Water Storage District and Kern County Land Company" and its subsidiary canal companies. By the agreement, North Kern's maximum monthly diversion quantities are limited by the agreement. These quantities vary from 52,400 acre-feet in July to 32,800 acre-feet in December and January. The canal companies under whose rights North Kern divert are shown in Table 2. These canal companies continue to own the right to divert any water under those rights which is not diverted by the District and any water available under those rights in excess of the monthly quantities specified in the agreement. These Tenneco owned canal companies are being acquired by the City of Bakersfield.

As is shown in Table 2, the acquired rights of North Kern occur under higher river flows. The exception is the KCC - 4.563% entitlement of Second Point (Priority 3). However, this entitlement occurs generally only during March through August and the annual historical entitlement is about 7300 acre-feet. The records of recent diversions shown in Table 3 reflect North Kern's annual water supply fluctuations attributable to rights at higher river flows occurring more often at times of above normal runoff. To better utilize their water supply, the North Kern Water Storage District stores water in Isabella Reservoir for carry-over and spreads surplus water for groundwater recharge. North Kern has also purchased additional water from Tenneco.

The remaining significant water diverter at First Point, other than Kern Island Water Company is the Kern River Canal and Irrigating Company. This Tenneco-owned canal company has operated under the Public Utility Commission and is also being acquired by the City of Bakersfield.

C. Kern Island Water Company Water Supply

The Kern Island Water Company (KIWC) derived its rights to Kern River water from the Kern Island Canal, Farmers Canal, Stine Canal, Buena Vista Canal and the Old South Fork rights. These canal companies and their predecessors have been diverting water from Kern River for irrigation users on a continual basis since the 1860's. Kern Island is the successor of the former Kern Island Irrigating Company which was formed in 1870. By authority of Public Utility Commission (PUC) Decision No. 71684, there was merged into Kern Island on December 31, 1966, four public utility irrigation companies which prior to that time had been associated with Kern Island and had served areas near Kern Island's

KERN DELTA WATER DISTRICT

TABLE 3

KERN RIVER DIVERSIONS
1964 THROUGH 1974
(Acre-Feet)

| Year | Kern River Flow (1) | Second Point (2) | North Kern Water Storage District (3) | Kern Island Water Company | Kern River Canal and Irrigating Company | Tenneco West Inc. (4) | Private (5) |
|----------------------------------|---------------------|------------------|---------------------------------------|---------------------------|---|-----------------------|-------------|
| 1964 | 339,273 | 59,125 | 56,137 | 135,879 | 10,732 | 75,562 | 767 |
| 1965 | 720,374 | 115,436 | 147,653 | 147,585 | 15,628 | 163,507 | 3,414 |
| 1966 | 678,616 | 98,276 | 112,226 | 135,296 | 12,780 | 114,114 | 2,713 |
| 1967 | 1,396,249 | 543,963 | 323,572 | 183,445 | 26,998 | 358,608 | 5,254 |
| 1968 | 453,768 | 96,555 | 61,430 | 156,534 | 14,889 | 133,066 | 3,298 |
| 1969 | 2,461,405 | 1,088,892 | 310,430 | 168,092 | 24,693 | 697,611 | 4,567 |
| 1970 | 589,481 | 115,363 | 110,103 | 176,907 | 16,469 | 152,649 | 4,077 |
| 1971 | 427,432 | 92,415 | 39,360 | 156,575 | 9,032 | 123,802 | 3,807 |
| 1972 | 268,346 | 9,183 | 65,084 | 128,630 | 0 | 82,126 | 2,677 |
| 1973 | 979,652 | 198,706 | 163,226 | 176,660 | 20,436 | 172,401 | 4,026 |
| 1974 | 818,606 | 168,952 | 183,347 | 186,059 | 21,023 | 145,098 | 4,697 |
| 11-Year Average | 830,291 | 235,170 | 142,961 | 159,242 | 15,698 | 201,686 | 3,575 |
| 10-Year Average (excluding 1969) | 667,180 | 149,797 | 126,214 | 158,357 | 14,799 | 152,093 | 3,476 |

(1) Computed natural flow at first point of measurement. (79-year average flow = 703,900 acre-feet)
 (2) Diversion to second point parties.
 (3) Includes diversions under right to 4.563% of the second point entitlement.
 (4) Includes diversions to Rosedale-Rio Bravo Water Storage District.
 (5) Consists of diversion rights of the Old South Fork, Castro, and Wilson Canals.

Source: Table III-2, DEIR City of Bakersfield dated July 14, 1975.

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service area. These four companies were the Stine, Buena Vista, Farmers, and East Side. Each of the companies, except East Side, was the owner of rights to divert water from the Kern River, which rights have succeeded to KIWC. These rights are apparently based on early riparian, appropriative, and pre-appropriative rights, as modified by the "Miller-Haggin Agreement" of July 28, 1888 and by the "Shaw Decree" entered by the Superior Court in and for Kern County in 1900 in an action entitled Farmers Canal Company, et al v. J. R. Simmons, et al.

At the time of the above merger, the name of Kern Island Canal Company was changed to Kern Island Canal, Inc., it has since been changed to Kern Island Water Company.

Subsequent to this merger, the domestic Ashe Water Service operation was merged into KIWC on December 27, 1968. Ashe Water Service operates separately from the irrigation operation of KIWC and has no Kern River water rights. Its water supply is obtained entirely from wells pumping from the groundwater basin. It serves water for domestic M&I use in the Stockdale area of the City of Bakersfield. Ashe Water is included in the acquisition by the City of Bakersfield from Tenneco, but not in the transfer from the City to Kern Delta Water District.

Two agreements known as the Bloomfield and Balfour-Guthrie, entered into in 1896 and 1898 respectively, conveyed collectively to the Kern Island Irrigation Company 18 percent of the Old South Fork entitlement. In exchange, the Kern Island Irrigating Company agreed to serve the subject lands from the Kern Island canal system.

The East Side canal does not have a direct water right on the Kern River but is a consumer of Kern Island canal water. By order of the Railroad Commission in the 1930's, East Side Canal was allocated 83/300 (27.67%) of Kern Island Canal's entitlement from March 15 through August 15 of each year.

The service areas of Kern Island Water Company and its various canals are shown on Plate 2. The Bloomfield and Balfour-Guthrie lands are shown on Plate 3. The approximate acreage of land within the service area of each canal company within the Kern Delta Water District and the City of Bakersfield is shown on Table 4.

The KIWC-owned canal companies divert from the Kern River in accordance with the priority of appropriation shown in Table 2. The allocation of entitlement depends on the daily, natural flow at First Point.

The Kern Island Canal, which is entitled to the first 300 cfs of natural Kern River flow, provides KIWC with the firmest water supply on the Kern River. This is readily apparent in Table 3 when the annual diversions of the various water users are compared. KIWC diversions have not decreased significantly as a result of periods of low river runoff. KIWC's low year diversion in 1966 was 85% of the 11 year average (1964-1974) while NKWSD's diversion was 28% in 1971 and Tenneco's diversion was 37% in 1964.

Shown on Table 5 are the annual 1964-74 entitlements, diversions and deliveries for the Kern Island Water Company canal companies. Appendix A, which is bound with this report, contains a monthly tabulation of entitlements, diversions and deliveries for the years of 1967 through 1974. The diversion and delivery data were compiled from information provided by Tenneco West, Inc. The entitlements were computed in accordance with the priorities shown in Table 2 and provisions of the river agreements from records of daily computed natural Kern River flow at First Point. The computed annual entitlement and recorded annual diversions of the First Point users for the last five years (1970-74) are shown on Table 6.

KERN DELTA WATER DISTRICT

TABLE 4

KERN ISLAND WATER CO. CANAL SERVICE AREAS

| | (Gross Area in Acres) | | | | | |
|---|-----------------------|--------------------|----------------|--------------|--------------------|--------------|
| | <u>East Side</u> | <u>Kern Island</u> | <u>Farmers</u> | <u>Stine</u> | <u>Buena Vista</u> | <u>Total</u> |
| Total Service Area | 6,360 | 50,740 | 10,210 | 21,940 | 17,310 | 106,560 |
| Service Area in KDWD | 4,660 | 40,740 | 9,760 | 19,960 | 14,360 | 89,480 |
| Service Area Outside KDWD | 1,700 | 10,000 | 450 | 1,980 | 2,950 | 17,080 |
| Service Area within City of Bakersfield and not in KDWD | 150 | 3,850 | 160 | 1,263 | 210 | 5,633 |
| Service Area in City of Bakersfield and in KDWD | 0 | 60 | 0 | 700 | 0 | 760 |
| Non-Service Area in KDWD | 26,200 | 6,270 | 2,860 | 470 | 150 | 35,950 |
| Total Service and Non-Service Areas in KDWD | 30,860 | 47,010 | 12,620 | 20,430 | 14,510 | 125,430 |
| 1974 Assessed Acreage in KDWD | | | | | | 123,576 |

KERN DELTA WATER DISTRICT

TABLE 5

ANNUAL 1964 - 1974 ENTITLEMENT - DIVERSIONS - DELIVERIES
FOR
KERN ISLAND WATER COMPANY

| <u>Year</u> | <u>East Side (1)</u> | <u>Kern Island (2)</u> | <u>Farmers</u> | <u>Stine</u> | <u>Buena Vista</u> | <u>Total</u> |
|-------------|----------------------|------------------------|----------------|--------------|--------------------|--------------|
| 1964 | Entitlement | | | | | |
| | Diversions | 24,528 | 6,440 | 6,690 | 5,309 | 207,687 |
| | Deliveries | 15,900 | 1,800 | 900 | 1,800 | 130,300 |
| | | | 600 | 200 | 900 | 86,400 |
| 1965 | Entitlement | | | | | |
| | Diversions | 25,234 | 19,496 | 28,680 | 28,911 | 292,917 |
| | Deliveries | 12,700 | 2,800 | 4,400 | 8,100 | 147,600 |
| | | | 800 | 1,100 | 6,800 | 103,600 |
| 1966 | Entitlement | | | | | |
| | Diversions | 24,897 | 14,822 | 15,539 | 18,566 | 245,248 |
| | Deliveries | 12,400 | 3,100 | 3,900 | 5,900 | 140,535 |
| | | | 1,500 | 900 | 5,000 | 96,050 |
| 1967 | Entitlement | | | | | |
| | Diversions | 26,287 | 195,853 | 59,185 | 47,898 | 377,483 |
| | Deliveries | 10,550 | 125,144 | 16,083 | 24,579 | 186,554 |
| | | | 5,583 | 8,365 | 19,795 | 147,251 |
| 1968 | Entitlement | | | | | |
| | Diversions | 25,081 | 178,355 | 13,486 | 15,612 | 243,961 |
| | Deliveries | 14,527 | 130,710 | 3,430 | 5,774 | 156,534 |
| | | | 876 | 955 | 4,194 | 111,216 |
| 1969 | Entitlement | | | | | |
| | Diversions | 26,616 | 197,683 | 47,627 | 49,048 | 356,165 |
| | Deliveries | 10,372 | 129,148 | 8,006 | 16,845 | 168,092 |
| | | | 1,947 | 2,992 | 10,672 | 127,696 |
| 1970 | Entitlement | | | | | |
| | Diversions | 25,177 | 182,562 | 27,644 | 22,181 | 276,045 |
| | Deliveries | 15,047 | 140,881 | 5,029 | 12,185 | 176,907 |
| | | | 1,904 | 2,613 | 8,615 | 132,859 |

KERN DELTA WATER DISTRICT

TABLE 5 CONTINUED

ANNUAL 1964 - 1974 ENTITLEMENT - DIVERSIONS - DELIVERIES
FOR
KERN ISLAND WATER COMPANY

| Year | (1) East Side | (2) Kern Island | Farmers | Stine | Buena Vista | Total |
|--------------------------|------------------|--------------------|---------|--------|-------------|---------|
| 1971 | Entitlement | 171,904 | 8,140 | 12,438 | 14,318 | 231,799 |
| | Diversions | 12,253 | 3,063 | 4,380 | 8,990 | 156,575 |
| | Deliveries | 5,787 | 88,939 | 2,304 | 6,488 | 111,237 |
| 1972 | Entitlement | 23,023 | 706 | 1,094 | 2,629 | 193,166 |
| | Diversions | 8,768 | 3,399 | 2,768 | 5,149 | 128,630 |
| | Deliveries | 3,986 | 81,690 | 1,410 | 3,931 | 93,515 |
| 1973 | Entitlement | 26,213 | 19,504 | 23,896 | 34,661 | 297,886 |
| | Diversions | 7,677 | 133,475 | 14,372 | 13,679 | 176,660 |
| | Deliveries | 4,124 | 89,372 | 4,751 | 7,082 | 110,351 |
| 1974 | Entitlement | 25,658 | 20,896 | 25,536 | 31,292 | 296,852 |
| | Diversions | 7,202 | 135,646 | 13,364 | 19,567 | 186,059 |
| | Deliveries | 3,995 | 93,473 | 4,672 | 11,997 | 120,172 |
| 11- Year Avg. | Entitlement | 25,246 | 18,488 | 23,801 | 24,584 | 274,474 |
| | Diversions | 11,581 | 125,131 | 6,967 | 11,143 | 159,495 |
| | Deliveries | 4,875 | 94,796 | 2,751 | 7,770 | 112,759 |
| %Entitlement Diverted | 46 | 69 | 25 | 29 | 45 | 58 |
| %Diversions Delivered | 42 | 76 | 54 | 39 | 70 | 71 |

(1) 83/300 of the Kern Island Canal entitlement during March 15 - August 15.

(2) Includes 18% of the Old South Fork entitlement.

Source: Information provided by Tenneco.

KERN DELTA WATER DISTRICT

TABLE 6

ANNUAL 1970 - 1974
ENTITLEMENTS - DIVERSIONS
FIRST POINT USERS

| <u>Year</u> | | <u>Tenneco¹ West, Inc.</u> | <u>NKWS</u> | <u>KIWC</u> | <u>KRC&C</u> | <u>Private²</u> | <u>Total</u> |
|-------------|--------------------------|---|--------------------|--------------------|------------------|----------------------------|--------------------|
| 1970 | Entitlement Diversion | 109,924 152,649 | 92,390 110,103 | 276,053 176,907 | 5,449 16,469 | 4,143 4,077 | 489,959 460,205 |
| 1971 | Entitlement Diversion | 87,003 123,802 | 41,155 39,360 | 231,805 156,575 | 1,882 9,032 | 2,710 3,807 | 364,555 332,576 |
| 1972 | Entitlement Diversion | 47,479 82,126 | 2,629 65,084 | 193,164 128,630 | 0 0 | 1,576 2,677 | 244,848 278,517 |
| 1973 | Entitlement Diversion | 213,192 172,401 | 144,206 163,226 | 297,896 176,660 | 21,396 20,436 | 6,022 4,026 | 682,712 536,749 |
| 1974 | Entitlement Diversion | 157,628 145,098 | 159,486 183,347 | 296,864 186,059 | 15,065 21,023 | 6,689 4,679 | 635,732 540,206 |

1) Includes diversions to Rosedale-Rio Bravo Water Storage District and sales to NKWS

2) Consists of diversion rights of Old South Fork, Castro and Wilson Canals

3) Source of diversion data - Table 3, page 20

4) Entitlements computed from records of unregulated natural flow at First Point in accordance with Kern River agreements

10
02
03
04
01

Comparison of the KIWC annual entitlements and diversions in Table 5 reveal that annual diversions have averaged 58 percent of the entitlement during the 11-year period. During that same period, the deliveries have averaged 71 percent of the diversions.

A comparison of the monthly entitlements and diversions in Appendix A for the 1967-74 period reveals that generally during the months of May through August, the diversions have exceeded entitlements. The higher diversions were made possible by storage in Isabella Reservoir during the months of January through April by Tenneco for Kern Island. Review of these entitlements and diversion records indicate that between 20,000 and 30,000 acre-feet of storage space is normally utilized. Records for 1971 indicate that a maximum of about 30,000 acre-feet of space and 7,000 acre-feet of winter carryover space was used by Kern Island Water Company. The calculated storage utilized by KIWC for the period 1967-1974 is shown by hydrograph on Plate 4. Under terms of the settlement agreement with the City of Bakersfield, the Kern Island Water Company will continue to have the perpetual right to utilize not less than the storage used historically.

As shown by the figures on Table 5, the deliveries to KIWC water users have varied between 79 and 62 percent of the diversion at the river. The differences can be accounted for as the seepage and percolation losses in the canals used to transport the water. These canal losses are instrumental in recharging the groundwater basin in the Kern Delta Water District and are, therefore, not treated as losses to the available water supplies of the District.

SECTION III - KERN ISLAND WATER COMPANY ASSETS BEING ACQUIRED

A. Water Rights

The Kern River water rights of the Kern Island Water Company are as follows:

| <u>Canal Company</u> | <u>River Priority</u> | <u>Natural Flow at First Point (cfs)¹</u> | <u>Maximum Diversion Right (cfs)</u> |
|----------------------|-----------------------|--|--------------------------------------|
| Kern Island | 1 | 300 | 300 |
| Old South Fork | 5 | 330.5 | 1.9* |
| Buena Vista | 6 | 410.5 | 80* |
| Stine | 9 | 700.5 | 150* |
| Farmers | 11 | 880.5 | 150* |
| Buena Vista (2nd) | 24 | 2516.5 | 90* |
| Kern Island (2nd) | 28 | 3162.5 | 56* |

*At such time that there are Second Point entitlements, usually March through August, the allocation is reduced proportionally for river losses between First and Second Point.

1) River stage required to achieve full right

A discussion of the computed entitlement and historical diversion and deliveries under these rights preceded in Section II.

The water accruing under a canal company right is diverted for use in that canal company's service area. These service areas are shown on Plate 4. The exceptions are 1) the Old South Fork right is appropriated to Kern Island and 2) the East Side Canal has the right to 83/300 of the Kern Island entitlement from March 15 to August 15.

Ownership of the Kern Island Water Company by the Kern Delta Water District will continue in effect the rights of lands in the canal company service areas to receive water under the canal company's diversion rights.

B. Distribution Facilities

General: The Kern Island Water Company is the owner of a canal distribution system consisting of diversions works on the Kern River and approximately 130 miles

of mostly unlined canals and laterals. A tabulation of the major facilities is shown on Table 7. The general location of canals in this system are shown on Plate 4. Approximately 72 percent of the area of the Kern Delta Water District is within the service area of the KIWC. Historically, Tenneco has utilized the canal system to deliver other than canal company entitlement water to lands within and outside of the canal service areas and the District.

Bound separately from this report is Appendix B, a series of 1"=1000 scale aerial photo strip maps showing the canal alignments. The locations of major structures and known widths of right-of-way are shown on these maps. Photographs of typical canal facilities are also included.

River Diversion Facilities: The river facilities necessary for the diversion of KIWC water include the Rocky Point and Calloway Weirs and the Carrier Canal System. These diversions works are also used normally to divert entitlements of Tenneco and Second Point users.

The Rocky Point Weir, a wooden structure, is located on the Kern River about one-half mile downstream of the Gordons Ferry Bridge in Section 9, T 29S, R 28E. The weir has a reported capacity of 7000 cfs with a sand plug washout capable of passing 30,000 cfs. The weir structure is 12 to 14 feet high with 20 foot bulkheads and is approximately 300 feet long.

The Calloway Weir, also a wooden structure, is located on the Kern River about one-half mile upstream of the Golden State Highway (Old Highway 99) Bridge in Section 13, T 29S, R 27E. The reported weir design capacity is 6000 cfs and has a 30,000 cfs sand plug washout. The weir is about 16 feet high with bulkheads to 20 feet and is about 335 feet long. A section of the weir was destroyed by fire and is dammed off with sand banks. Only about 50 feet of the weir is used to pass water downstream.

The Carrier Canal System is divided into the following three sections:
1) from Rocky Point to Four Weirs, at which point the Kern Island and East Side Canal divert up to 500 cfs. The capacity of this section is 1100 to 1000 cfs.

KERN DELTA WATER DISTRICT

TABLE 7

KERN ISLAND WATER COMPANY FACILITIES ¹

| | <u>Main Canal (Miles)</u> | <u>Major Laterals (Miles)</u> | <u>Weirs (Each)</u> | <u>Customer's Turn-outs (Each)</u> |
|----------------------|---------------------------|-------------------------------|---------------------|------------------------------------|
| Eastside Canal | 19.7 | 0 | 8 | 45 |
| Kern Island Canal | | | | |
| Main | 23.7 | 12.4 | 71 | 155 |
| Central Br. | 14.0 | 6.5 | 42 | 88 |
| Farmers Canal | 10.6 | 10.7 | 50 | 74 |
| Stine Canal | 11.9 | 4.2 | 33 | 33 |
| Buena Vista | <u>13.0</u> | <u>2.7</u> | <u>33</u> | <u>47</u> |
| Total | 92.9 | 36.5 | 237 | 442 |
| Carrier Canal System | 10.6 | 0 | 14 | 7 |

(1) Approximated from system maps provided by Tenneco.



Contained in this section are the river headgate and measuring weir. 2) from Four Weirs to the Calloway Weir with 600 cfs capacity. 3) from Calloway Weir to the head of the Kern River Canal with 900 cfs capacity. The Stine Canal has diversion capacity of 150 cfs in this section immediately west of Freeway 99.

The Buena Vista Canal utilizes capacity in the 1100 cfs Kern River Canal and has a diversion capacity of between 150 and 200 cfs at the north-south center line of Section 6, T 30S, R 27E.

The capacities of the various sections of the Carrier Canal and the diversion requirements within the sections are such that at certain times of the year, the river channel as well as the Carrier Canal are normally used down to the Calloway Weir. Likewise, if the diversions requirements of the Stine, Farmers, Buena Vista Canals, Second Point and Lower River users exceeded 900 cfs, the river channel is used along with the Carrier Canal to the River Canal.

Tenneco documents report Kern Island Water Company ownership to be 100 percent in the Rocky Point Weir and 21 percent in the Calloway Weir. Tenneco also reports that the rights within the various sections of the Carrier Canal have never been documented or set in any formal manner. Provisions of the 1964 Amendment of the Miller-Haggin Agreement, however, state that the Kern County Land Company (predecessor to Tenneco West, Inc) enlarged the Carrier Canal between the Calloway Weir and Kern River Canal to provide for 750 cfs capacity in excess of that required for other purposes. This excess capacity was then assigned to Second Point water users.

Records covering losses in the river channel between Rocky Point and Kern River Canal have not been made available.

Canal System: Five distinct canals of the five canal companies comprising the Kern Island Water Company are the backbone of the canal distribution system.

The East Side Canal begins at the Four Weirs diversion on the Carrier Canal. The Canal is unlined for its entire 20 mile length. Canal capacity at the diversion is about 80 cfs. The upper reach is located through the eastern urban area of the City of Bakersfield. South of Freeway 58, the East Side Canal follows the eastern boundary of the Kern Delta Water District. The last mile of the canal has been converted to a pipeline.

The Kern Island Canal, largest of the five canals, also begins at the Four Weirs diversion with about 400 to 450 cfs capacity. For the first 4 miles the canal is located within the commercial and residential center of the City. Portions of the canal in this section are earth ditch concrete lined and pipeline. Urban encroachment on right-of-way limits its capacity. The canal is used during times of rainfall for disposal of storm drainage. Reported storm flows are 100 cfs for 6 hours. In the southern urban area the canal splits to form the Central Branch and the Main Kern Island Canal.

The unlined Central Branch extends south-south easterly for about 14 miles before it terminates at the Rim Ditch. A landowner reservoir located on the canal in Section 16, T 31S, R 28E helps to regulate flows.

The main Kern Island Canal, also unlined, continues south, crossing freeway 99 near Greenfield, and then at a point 2-1/2 miles south of McKittrick Road turns west. Capacity at this point is reported to be 100 to 125 cfs. The canal continues for five miles before again continuing south as a concrete lined ditch for 2-1/2 miles to the Rim Ditch.

The Stine Canal extends from the Carrier Canal for 12 miles through the western urban area of the city and in a southwesterly direction through the Kern Delta Water District. The upstream canal capacity is from 50 to 75 cfs. Except for short sections of pipeline in the urban area the canal is unlined. The canal terminates in a landowner reservoir at the northeast corner of Section 24, T 31S, R 26E.

The Farmers Canal branches off the Stine Canal just northerly of the Kern Delta District boundary. The unlined canal runs south and southwesterly for about 11 miles before terminating at a spill site in Section 30, T 31S, R 27E.

The unlined Buena Vista Canal begins at the Kern River Canal and runs southwesterly about 13 miles generally near the west boundary of the District. The canal crosses the I-5 Freeway and McKittrick Road before terminating near the Maple Canal of the Buena Vista Water Storage District.

These five principal canals have smaller laterals and ditches that interconnect some of the canal reaches. Both concrete and wooden weirs regulate canal flow. Excess canal flow or emergency spill has been diverted in the past to wild lands due to the lack of adequate reservoirs. As more land is developed for farming, the need for adequate regulating reservoirs will increase.

Rights-of-Way: Incidental to the diversion works and the canal system are the land and rights-of-way upon which these facilities are located. Right-of-way widths generally vary from 50 feet to 240 feet. Most of the rights-of-way are documented in the deeds from Kern County Land Company to the canal companies dated June 25, 1928 recorded at Book 128. Pages 210 through 290 of Kern County Official Records.

C. Utility Company Operations

The Kern Island Water Company operation has been under the Public Utilities Commission jurisdiction since about 1930. Prior to their merger in 1967, the five canal companies operated independently of one another. Public utility commission application Nos. 16610, 16611, 16612, 16613, 16617 reports dated May 25, 1931, provides description of the facilities and early operation of these canals. The basic rates of the canal companies for service of irrigation water from the natural flow of Kern River became effective on May 1, 1936 by authority of Commission Decision No. 28765 dated April 27, 1936. Since that time the PUC has issued further decision reports in 1954, 1960, 1968, 1973 and 1975.

The operation and maintenance functions of KIWC is and has been performed by various wholly owned subsidiaries to Tenneco West, Inc. KIWC has no employees except for the general corporate officers. Work is performed through work orders by employees of Tenneco and equipment rented from Tenneco. December 31, 1974 Tenneco had approximately 36 employees assigned to water operations.

Annual reports of the KIWC operation are filed with the PUC. The 1974 report showed 389 active irrigation customers. The report also showed the gross value of plant in service on December 31, 1974 to be \$4,384,998 which included the Ashe Water facilities. Information recently furnished by Tenneco showed that the gross value of plant in service on facilities relating to irrigation operations only, was \$2,459,065.

A summary of the KIWC expense for operation and maintenance as provided by Tenneco during the five year period 1970 through 1974 is shown on Table 8. Revenue from irrigation water sales and other revenue as contained in reports

KERN DELTA WATER DISTRICT

TABLE 8

SUMMARY OF 1970-74 PUC EXPENSE AND REVENUE
FOR KERN ISLAND WATER COMPANY
(Excludes Ashe Water)

| <u>Expenses (1)</u> | <u>1970</u> | <u>1971</u> | <u>1972</u> | <u>1973</u> | <u>1974</u> | <u>5-Year Average</u> |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|---------------------------|
| Source of Supply | \$ 33,859 | \$ 35,665 | \$150,230 | \$ 60,186 | \$ 56,185 | \$ 67,225 |
| Transmission and Distribution | 280,748 | 240,746 | 223,753 | 243,120 | 287,387 | 255,152 |
| Customer Account | 10,683 | 9,479 | 7,303 | 7,461 | 8,073 | 8,601 |
| Administrative | | | | | | |
| and General | 905 | 81,533 | 42,076 | 43,903 | 49,737 | 43,630 |
| Taxes other than | | | | | | |
| Income | 40,000 | 43,716 | 45,525 | 44,422 | 86,317 | 51,995 |
| Depreciation | 25,010 | 26,698 | 27,606 | 43,523 | 44,779 | 33,524 |
| Total Expenses | \$391,205 | \$437,837 | \$496,493 | \$442,615 | \$532,478 | \$460,127 |
| <u>Revenue (2)</u> | | | | | | |
| Irrigation Water | | | | | | |
| Sales | \$437,286 | \$356,070 | \$412,183 | \$395,564 | \$571,414 | \$434,503 |
| Other Revenue | 66,859 | 44,743 | 36,347 | 51,317 | 97,791 | 59,411 |
| Total Revenue | \$504,145 | \$400,813 | \$448,530 | \$446,881 | \$669,205 | \$493,914 |

(1) Data provided by Tenneco West, Inc.

(2) PUC Reports

(3) Includes Ashe Water Revenue, if any.

to the PUC is also shown. Other revenue was derived from transportation of water owned by others, primarily Tenneco and the Kern Delta Water District.

Current rates for irrigation service as approved by the PUC in March of 1975 are as follows:

| | |
|--------------------------------|------------------|
| Kern Island Canal Service Area | \$4.87/acre-foot |
| East Side Service Area | 8.22/acre-foot |
| Buena Vista Service Area | 5.22/acre-foot |
| Farmers Service Area | 8.22/acre-foot |
| Stine Service Area | 8.22/acre-foot |

SECTION IV - DISTRICT OPERATION OF KERN ISLAND WATER COMPANY

A. Operation

There are no anticipated changes in the daily operation of the Kern Island Water Company under Kern Delta ownership. Deliveries will be made to irrigation customers in the canal service areas in accordance with their requests, delivery capacities of the canal system, and availability of entitlement.

It is expected that operation and maintenance functions will be performed by the same key personnel as under Tenneco ownership. The City of Bakersfield has offered to accept these people into their employment when the purchase becomes effective. The City will have the responsibility upon acquisition from Tenneco to operate and maintain the Kern River Canal and Irrigating Company, a public utility serving irrigation water north of Bakersfield, the Carrier Canal System, jointly with the Kern Island Water Company, and the Kern River Canal. The effective date of transfer is currently projected for November 15, 1975 when monies covering the purchase price are delivered to Tenneco. The equipment and rolling stock necessary for operation and maintenance is also being acquired by the City.

The City has indicated it will honor the agreement between NKWSD and Tenneco for operation and maintenance of the canal system serving NKWSD lands. The City has expressed a willingness to also provide initial operation and maintenance services necessary for the Kern Island Water Company.

As a permanent solution to Kern River operations, the District has proposed that a joint powers agreement be formulated between the entities controlling

the major portion of the First Point water right when the sale from Tenneco is final, namely the North Kern Water Storage District, the City of Bakersfield and the Kern Delta Water District. All Kern River First Point water activities including watermaster duties and operation and maintenance functions would be under this joint powers organization. Each of the three entities would have an equal voice in the policy decisions. Daily operation and maintenance would be accomplished by a group distinct and separate from other personnel of any of the entities. The Director of this group would report directly to a governing body of the joint powers organization. Water delivery schedules would be made to the Director who would also serve as Kern River Watermaster subject to approval of the other Kern River interests. Costs would be shared in accordance with ownerships and usage similarly as has been the case under Tenneco control. If this joint powers agreement cannot be finalized prior to District acquisition of KIWC projected for December, 1975, the District would have the option to either contract with the City or to establish its own operation and maintenance capability.

B. Estimated Annual O&M Expenses

As the operation of Kern Island Water Company is expected to continue as it has historically, the 5-year record of expense as shown in Table 8 should be a good indication of future expenses. This recent period would reflect current factors of cost, efficiency, etc., however, because of a sharp rise in costs the last few years, the estimated operation and maintenance expenses for 1976, except taxes, are estimated to be 115% of the 5-year average.

District ownership will also eliminate or reduce certain expenses. Depreciation, a necessary expense for a private, profit-oriented operation would

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not be an annual cost per se. However, improvements funded as capital improvements will be a cost to the District. The state tax laws provide that facilities located within the District boundaries are not subject to county taxes. It is estimated from assessor data filed with the 1974 rate increase application to the PUC (No. 55016), that at least 25% by assessed value of Kern Island Water Company assets are within the District. Taxes were estimated to be 75% of the 1974 tax. The estimated expenses for 1976 are as follows:

| | |
|-----------------------------|---------------|
| Source of Supply | \$ 77,000 |
| Transmission & Distribution | 294,000 |
| Customer Account | 10,000 |
| Administrative & General | 50,000 |
| County Taxes | <u>65,000</u> |
| 1976 Estimated Total | |
| O&M Expenses | \$496,000 |

C. Estimated Annual Revenue

The KIWC under District ownership will continue to receive revenue from water tolls and income from transportation of water owned by others. One source of the revenue for handling water of others is from the District for distribution of State Project Water which will continue. This agreement was entered into by the District and KIWC in 1973. Since most of the other water transported was Tenneco private water now being contracted by the City to other districts located northerly of the Kern River, revenue from this other water source in the future is not anticipated.

Deliveries for the past five years averaged over 113,000 acre-feet, a period with 88% long-term average flow on the Kern River. For purposes of estimating revenue, average deliveries are assumed to be 110,000 acre-feet. The estimated revenue for 1976 at the present PUC rates is as follows:

| | |
|--|---------------|
| Kern Island - 92,000 af @ 4.87 | \$448,040 |
| Buena Vista - 7,600 af @ 5.22 | 39,672 |
| Stine, Farmers & East Side 10,400 af @ 8.22 | 85,488 |
| Transportation Income | <u>52,800</u> |
| 1976 Estimated Total Revenue At Present PUC Rates | \$626,000 |

SECTION V - PROPOSED IMPROVEMENTS TO CANAL SYSTEM

A. General

There are a number of major capital improvements which will be needed in the near future to maintain reliable and efficient irrigation service. There are also several improvements that should be made to upgrade service and hold down future operation and maintenance costs. In both cases, it is the intent to operate the canal system under District ownership for a period of time of at least one year during which these improvements will be precisely determined and evaluated.

B. Description

Improvement or total reconstruction of the Rocky Point and Calloway Weir is desirable for continued reliable diversion from the Kern River. The structural soundness of both wooden weirs is questionable with the Calloway partially destroyed by fire. The Rocky Point Weir operates with overflow at every other bay. Vibrations to the structure was reported under heavy overflow. A permanent concrete structure which would be less susceptible to damage at each site is proposed.

The present high and low water alarm telemetry system at each weir should be upgraded to provide continuous readings and recordings of water levels. The telemetry should also include the flow recorders at both the Beardsley Canal Weir and the Carrier Canal. Data would be remoted to the operation and maintenance center for recording and continued monitoring. It is expected that the other First Point diverters will share in the weir and telemetry costs under a joint powers organization.

There appears to be a need for general canal system improvements such as replacement of wooden weirs, replacement of worn gates, erosion control, and channel clearing. Concrete lining in short sections of the restricted urban area could increase capacity on the critical Kern Island Canal. Both new and replacement turnout structures are expected to be installed.

The development of farmland on previous wild lands along the canal has created the need of regulating reservoirs. Previously, excess flow in the canals were diverted onto these wild lands which were owned by Tenneco. The general location and capacity of proposed reservoirs are shown on Plate 5. The reservoirs proposed at terminus of the Stine and Farmers Canal are at sites of existing private reservoirs that could be acquired and increased in size. The reservoirs on the East Side, Kern Island Main and Buena Vista would be at acquired sites.

Right-of-way fencing in the urban area needs expansion. Each location and priority will be determined during the initial operation period.

The remaining improvements that are included are desirable to efficiently and economically operate and maintain the system. If it is necessary for Kern Delta to take over operation and maintenance of the canal system, a maintenance and operation center would be required. As discussed in Section IV, the District is currently working with the City and NKWSD to set up an operating organization.

Continued development in the 125,000 acre District would require closer control of canal flows and prevention of overflows. An alarm and telemetry system monitoring flows and water levels at canal weirs would be necessary at that time to more closely monitor flows and reduce operation costs.

Estimated cost of these identified improvements is shown on Table 9.

KERN DELTA WATER DISTRICT

TABLE 9

ESTIMATED COST OF IMPROVEMENTS TO
THE KERN ISLAND WATER COMPANY CANAL SYSTEM

Improvements To Existing Facilities

| | | | |
|---|---------------|--|--------------------|
| Rocky Point Weir Reconstruction | | | |
| \$600,000 x 50% = | | | \$ 300,000 |
| Calloway Weir Reconstruction | | | |
| \$600,000 x 20% = | | | 120,000 |
| Kern River Weir Telemetry | | | |
| \$ 90,000 x 33% = | | | 30,000 |
| Canal weir, gate and channel improvements | | | 300,000 |
| Additional canal turnouts | | | 50,000 |
| Regulating Reservoirs | | | |
| Eastside - 50 af | 100,000 | | |
| Central Branch Control Structures | 25,000 | | |
| Kern Island Main - 200 af | 200,000 | | |
| Farmer - 20 af | 50,000 | | |
| Stine - add 20 af | 50,000 | | |
| Buena Vista - 50 af | <u>75,000</u> | | |
| | | | 500,000 |
| Right-of-way Fencing | | | 80,000 |
| Sub-total | | | <u>\$1,380,000</u> |
| Incidental Costs | | | 250,000 |
| Total | | | <u>\$1,630,000</u> |

New Improvements

| | | | |
|-----------------------------------|--|--|-------------------|
| Operations and Maintenance Center | | | \$ 400,000 |
| Canal Alarm and Telemetry System | | | 250,000 |
| Sub-total | | | <u>650,000</u> |
| Incidental Costs | | | 100,000 |
| Total | | | <u>\$ 750,000</u> |

SECTION VI - PROPOSED FINANCING OF ACQUISITION AND IMPROVEMENTS

A. Staged Financing

The District proposes to issue bonds in at least two series to finance the acquisition and improvements identified in this report. The first series amount of \$4,500,000 will be for only the acquisition cost, incidental costs related to the acquisition and a portion of the improvements incidental cost. Included in the incidental costs are the necessary appraisal, engineering, financial and legal services. Interest monies are included for a 30 day period between November 15, 1975, when the City is to acquire the KIWC and December 15, 1975, when the District's financing is concluded. See the project time schedule on Plate 6.

Monies will also be allocated from the initial bond sale for a bond reserve fund and an operating reserve contingency fund. Although these funds will remain on deposit with the District, they are required as security that bond principal and interest payments will be made. Table 10 is a summary of estimated project costs and the Series "A" bond sale amount.

B. Tentative Revenue Program

The estimated average annual cost for the Series "A" bond repayment is \$400,000 (8% at 30 years). As contained in Section IV, the estimated average revenue at present PUC water rates is insufficient to meet both the annual O&M expenses and bond repayment. The District Board of Directors has suggested that a \$2.25 per acre-foot water rate increase be considered to meet estimated costs. Based on such an increase in water rates, following is an estimated average annual summary of costs and revenue:

| | | |
|---|----------------|---------|
| Estimated Revenue From Present PUC Rates See page 36 | \$626,000 | |
| Estimated Revenue From Rate Increase 110,000 af @ 2.25 | 247,500 | |
| Interest From Reserve Funds 470,000 @ 8% | <u>37,500</u> | |
| Estimated Total Revenue | | 911,000 |
| Estimated O&M Expenses For 1976 See Page 37 | \$496,000 | |
| Estimated Bond Repayment | <u>400,000</u> | |
| Estimated Total Expenses | | 896,000 |

If and when bonds are sold for the remaining estimated project costs in the amount of \$2,500,000 the estimated increased annual bond repayment would be \$222,000. The necessary water rate increase would be about \$1.90 per acre-foot. However, before funds were committed for any improvements, it would first be determined that the system improvements were justified in terms of increased reliability of service or increased efficiency that would decrease operation and maintenance costs and offset increased capital costs.

6

KERN DELTA WATER DISTRICT

TABLE 10

ESTIMATED CAPITAL COST FOR ACQUISITION OF KERN ISLAND WATER COMPANY

Project Costs

| | | |
|---|----------------|-------------|
| Purchase Kern Island Water Company | \$3,500,000 | |
| Improve Existing Facilities | 1,380,000 | |
| New Improvements | <u>650,000</u> | |
| Subtotal | \$5,530,000 | |
| Interest 11-15 to 12-15 | 30,000 | |
| Incidental Costs - Legal, Financial & Engineering | 500,000 | |
| Bond Discount | <u>320,000</u> | |
| Subtotal | \$6,380,000 | |
| Contingencies | 270,000 | |
| Bond Reserve Fund | <u>350,000</u> | |
| Estimated Total Project Cost | | \$7,000,000 |

Series "A" Bond Amount

| | | |
|---|----------------|-------------|
| Purchase KIWC | \$3,500,000 | |
| Interest 11-15 to 12-15 | 30,000 | |
| Incidental Costs - Series "A" - 100,000 Series "B" - 200,000 | 300,000 | |
| Bond Discount | <u>200,000</u> | |
| Subtotal | \$4,030,000 | |
| Operating Reserve Contingency Fund | 270,000 | |
| Bond Reserve Fund | <u>200,000</u> | |
| Total Series "A" Bond Amount | | \$4,500,000 |

APPENDIX A

1967-1974 Monthly Entitlement - Diversion - Deliveries
For Kern Island Water Company

| | |
|-----------|-------------------------------------|
| Table A-1 | East Side Canal |
| Table A-2 | Kern Island Canal |
| Table A-3 | Old South Fork |
| Table A-4 | Farmers Canal |
| Table A-5 | Stine Canal |
| Table A-6 | Buena Vista Canal |
| Table A-7 | Total For Kern Island Water Company |

Source: Diversion and delivery data compiled from information furnished by Tenneco West, Inc. Entitlements computed from records of unregulated natural flow at First Point in accordance with Kern River agreements.

TABLE A-1
MONTHLY
ENTITLEMENT - DIVERSIONS - DELIVERIES
1967-1974
FOR
EAST SIDE CANAL (1)

| Year | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|--------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|--------|
| 1967 Entitlements | 0 | 0 | 2,551 | 4,938 | 5,603 | 5,512 | 5,132 | 2,551 | 0 | 0 | 0 | 0 | 26,287 |
| 1967 Diversions | 0 | 0 | 1,492 | 1,069 | 1,636 | 2,531 | 2,733 | 1,089 | 0 | 0 | 0 | 0 | 10,550 |
| 1967 Deliveries | 0 | 0 | 673 | 252 | 450 | 944 | 1,427 | 789 | 0 | 0 | 0 | 0 | 4,535 |
| 1968 Entitlements | 0 | 0 | 2,551 | 4,938 | 5,103 | 4,938 | 5,103 | 2,448 | 0 | 0 | 0 | 0 | 25,081 |
| 1968 Diversions | 0 | 139 | 1,573 | 2,951 | 3,213 | 3,176 | 2,400 | 1,065 | 0 | 0 | 0 | 0 | 14,527 |
| 1968 Deliveries | 0 | 0 | 517 | 870 | 915 | 1,312 | 1,360 | 596 | 0 | 0 | 0 | 0 | 5,570 |
| 1969 Entitlements | 0 | 0 | 2,563 | 5,748 | 5,690 | 4,961 | 5,103 | 2,551 | 0 | 0 | 0 | 0 | 26,616 |
| 1969 Diversions | 0 | 0 | 702 | 1,208 | 3,308 | 1,759 | 1,622 | 1,773 | 0 | 0 | 0 | 0 | 10,372 |
| 1969 Deliveries | 0 | 0 | 403 | 487 | 907 | 788 | 1,331 | 1,031 | 0 | 0 | 0 | 0 | 4,947 |
| 1970 Entitlement | 0 | 0 | 2,551 | 4,938 | 5,103 | 4,938 | 5,103 | 2,544 | 0 | 0 | 0 | 0 | 25,177 |
| 1970 Diversions | 0 | 0 | 2,085 | 2,590 | 2,216 | 3,029 | 3,409 | 1,718 | 0 | 0 | 0 | 0 | 15,047 |
| 1970 Deliveries | 0 | 0 | 819 | 1,003 | 585 | 1,340 | 1,756 | 1,073 | 0 | 0 | 0 | 0 | 6,576 |
| 1971 Entitlements | 0 | 0 | 2,551 | 4,938 | 5,103 | 4,938 | 5,103 | 2,366 | 0 | 0 | 0 | 0 | 24,999 |
| 1971 Diversions | 0 | 0 | 2,142 | 2,061 | 1,188 | 2,409 | 3,017 | 1,436 | 0 | 0 | 0 | 0 | 12,253 |
| 1971 Deliveries | 0 | 0 | 874 | 733 | 529 | 1,171 | 1,570 | 910 | 0 | 0 | 0 | 0 | 5,787 |
| 1972 Entitlement | 0 | 0 | 2,551 | 4,938 | 5,103 | 4,938 | 3,982 | 1,511 | 0 | 0 | 0 | 0 | 23,023 |
| 1972 Diversions | 0 | 0 | 1,563 | 1,973 | 2,007 | 1,347 | 1,165 | 713 | 0 | 0 | 0 | 0 | 8,768 |
| 1972 Deliveries | 0 | 0 | 728 | 815 | 885 | 620 | 544 | 394 | 0 | 0 | 0 | 0 | 3,986 |
| 1973 Entitlement | 0 | 0 | 2,551 | 5,004 | 5,717 | 5,287 | 5,103 | 2,551 | 0 | 0 | 0 | 0 | 26,213 |
| 1973 Diversions | 0 | 0 | 203 | 1,587 | 1,628 | 1,746 | 1,823 | 690 | 0 | 0 | 0 | 0 | 7,677 |
| 1973 Deliveries | 0 | 0 | 66 | 635 | 854 | 996 | 1,152 | 421 | 0 | 0 | 0 | 0 | 4,124 |
| 1974 Entitlement | 0 | 0 | 2,551 | 4,938 | 5,329 | 5,186 | 5,103 | 2,551 | 0 | 0 | 0 | 0 | 25,658 |
| 1974 Diversions | 0 | 0 | 448 | 1,077 | 1,462 | 1,773 | 1,678 | 764 | 0 | 0 | 0 | 0 | 7,202 |
| 1974 Deliveries | 0 | 0 | 161 | 505 | 792 | 1,064 | 1,030 | 433 | 0 | 0 | 0 | 0 | 3,995 |
| 8 Year Entitlement | 0 | 0 | 2,553 | 5,048 | 5,344 | 5,087 | 4,967 | 2,384 | 0 | 0 | 0 | 0 | 25,381 |
| 8 Year Diversions | 0 | 17 | 1,276 | 1,815 | 2,082 | 2,221 | 2,231 | 1,156 | 0 | 0 | 0 | 0 | 10,800 |
| 8 Year Deliveries | 0 | 0 | 530 | 663 | 740 | 1,029 | 1,271 | 706 | 0 | 0 | 0 | 0 | 4,940 |

(1) Eastside canal entitlement, consist of 83/300 Kern Island Canal Ent. from March 15 - August 15.

TABLE A-2

MONTHLY
ENTITLEMENT - DIVERSIONS - DELIVERIES
1967-1974
FOR

KERN ISLAND CANAL 1

(Acre Feet)

| Year | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|-------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| 1967 | Entitlement | 18,446 | 16,661 | 15,894 | 12,912 | 14,650 | 13,418 | 15,894 | 17,851 | 18,446 | 17,851 | 18,446 | 194,881 |
| | Diversions | 3,937 | 9,670 | 13,303 | 3,741 | 12,787 | 15,700 | 21,277 | 11,853 | 8,029 | 4,108 | 7,317 | 125,124 |
| | Deliveries | 2,057 | 8,412 | 12,059 | 2,597 | 9,737 | 15,044 | 20,010 | 18,320 | 10,320 | 6,142 | 4,042 | 310 |
| 1968 | Entitlement | 18,446 | 17,256 | 15,894 | 12,912 | 13,342 | 13,342 | 15,253 | 11,466 | 13,598 | 16,159 | 17,377 | 177,958 |
| | Diversions | 4,544 | 9,752 | 12,750 | 11,959 | 13,862 | 19,775 | 18,121 | 8,475 | 6,028 | 3,709 | 321 | 130,710 |
| | Deliveries | 3,108 | 7,766 | 10,088 | 10,574 | 10,619 | 15,942 | 17,009 | 13,502 | 5,349 | 3,190 | 2,198 | 276 |
| 1969 | Entitlement | 19,427 | 16,661 | 15,970 | 15,024 | 14,879 | 12,970 | 13,342 | 17,851 | 18,446 | 17,851 | 18,446 | 196,761 |
| | Diversions | 3,513 | 4,008 | 8,440 | 13,255 | 12,702 | 20,612 | 22,021 | 11,470 | 5,907 | 3,088 | 2,912 | 129,148 |
| | Deliveries | 2,327 | 2,795 | 5,693 | 10,109 | 10,178 | 19,150 | 20,872 | 18,995 | 9,602 | 3,884 | 1,881 | 1,652 |
| 1970 | Entitlement | 18,656 | 16,661 | 15,894 | 12,912 | 13,342 | 12,912 | 13,342 | 14,211 | 13,301 | 16,514 | 18,446 | 182,041 |
| | Diversions | 9,167 | 5,587 | 14,650 | 16,670 | 11,732 | 20,357 | 19,702 | 12,596 | 7,684 | 1,442 | 2,912 | 140,881 |
| | Deliveries | 6,730 | 4,028 | 11,949 | 14,025 | 9,183 | 16,713 | 16,378 | 16,844 | 10,068 | 6,024 | 1,209 | 0 |
| 1971 | Entitlement | 18,446 | 16,661 | 15,894 | 12,912 | 13,342 | 12,912 | 13,342 | 11,371 | 11,539 | 14,102 | 16,290 | 171,553 |
| | Diversions | 3,622 | 10,287 | 15,423 | 9,762 | 10,846 | 16,782 | 21,997 | 10,312 | 5,638 | 2,670 | 379 | 127,889 |
| | Deliveries | 1,286 | 7,139 | 11,591 | 7,165 | 7,864 | 12,853 | 17,503 | 8,600 | 3,946 | 1,803 | 298 | 88,939 |
| 1972 | Entitlement | 18,442 | 17,216 | 15,894 | 12,912 | 13,342 | 12,912 | 10,413 | 11,213 | 11,145 | 14,555 | 18,073 | 165,532 |
| | Diversions | 3,849 | 11,864 | 15,080 | 11,898 | 10,662 | 15,174 | 15,009 | 6,602 | 3,812 | 1,738 | 1,356 | 108,546 |
| | Deliveries | 2,446 | 9,064 | 11,508 | 8,853 | 8,325 | 11,337 | 11,512 | 5,195 | 2,408 | 887 | 197 | 81,690 |
| 1973 | Entitlement | 17,845 | 16,661 | 15,894 | 13,085 | 14,948 | 13,825 | 13,342 | 17,734 | 17,912 | 17,297 | 18,446 | 192,882 |
| | Diversions | 2,312 | 6,941 | 9,881 | 10,690 | 13,568 | 21,740 | 24,258 | 12,044 | 6,563 | 2,650 | 18,248 | 133,475 |
| | Deliveries | 1,481 | 5,090 | 6,943 | 6,767 | 7,952 | 15,561 | 17,275 | 7,560 | 2,811 | 1,078 | 0 | 89,372 |
| 1974 | Entitlement | 18,446 | 16,661 | 15,894 | 12,912 | 13,932 | 13,558 | 15,894 | 17,786 | 18,399 | 17,387 | 18,446 | 192,657 |
| | Diversions | 5,170 | 10,920 | 13,736 | 10,636 | 10,953 | 19,565 | 22,823 | 10,999 | 6,030 | 3,176 | 490 | 135,646 |
| | Deliveries | 2,661 | 8,129 | 10,570 | 8,000 | 6,707 | 14,497 | 17,550 | 6,618 | 2,790 | 856 | 112 | 93,473 |
| 8 Year Avg. | Entitlement | 18,519 | 16,804 | 15,903 | 13,197 | 13,972 | 13,301 | 12,985 | 14,935 | 15,347 | 16,465 | 17,996 | 184,283 |
| | Diversions | 4,514 | 8,629 | 12,908 | 11,076 | 12,139 | 18,713 | 21,063 | 10,544 | 6,211 | 2,823 | 629 | 128,930 |
| | Deliveries | 2,687 | 6,553 | 10,050 | 8,511 | 8,821 | 15,137 | 17,264 | 7,914 | 3,899 | 1,744 | 356 | 97,795 |

(1) Priority 1 & 28

TABLE A-3

MONTHLY
ENTITLEMENT - DIVERSIONS - DELIVERIES
1967-1974

FOR
OLD SOUTH FORK CANAL ¹

(Acre Feet)

| Year | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|---------------------------------------|------|------|------|-------|-----|------|------|------|-------|------|------|------|-------|
| 1967 Entitlement Diversion Deliveries | 116 | 105 | 30 | 47 | 78 | 70 | 24 | 46 | 113 | 116 | 113 | 116 | 974 |
| 1968 Entitlement Diversion Deliveries | 116 | 109 | 3 | 32 | 43 | 27 | 0 | 0 | 0 | 0 | 19 | 49 | 398 |
| 1969 Entitlement Diversion Deliveries | 113 | 97 | 31 | 99 | 71 | 3 | 0 | 49 | 113 | 116 | 113 | 116 | 918 |
| 1970 Entitlement Diversion Deliveries | 116 | 105 | 16 | 30 | 46 | 43 | 15 | 0 | 9 | 0 | 26 | 116 | 522 |
| 1971 Entitlement Diversion Deliveries | 116 | 105 | 6 | 17 | 30 | 40 | 7 | 0 | 0 | 0 | 0 | 30 | 351 |
| 1972 Entitlement Diversion Deliveries | 53 | 50 | 0 | 0 | 8 | 6 | 0 | 0 | 4 | 4 | 2 | 56 | 183 |
| 1973 Entitlement Diversion Deliveries | 90 | 105 | 9 | 43 | 79 | 62 | 9 | 7 | 96 | 34 | 79 | 116 | 729 |
| 1974 Entitlement Diversion Deliveries | 116 | 105 | 27 | 49 | 57 | 55 | 32 | 7 | 97 | 84 | 83 | 100 | 812 |
| 8 Year Diversion Avg. Deliveries | 105 | 98 | 22 | 40 | 52 | 38 | 11 | 14 | 54 | 44 | 54 | 87 | 619 |

(1) Priority 5 - 9/50 of Entitlement

RD 023866

TABLE A-4

MONTHLY
ENTITLEMENT - DIVERSIONS - DELIVERIES
1967-1974
FOR
FARMERS CANAL¹

(Acre Feet)

| Year | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|--------|
| 1967 Entitlement | 8,113 | 8,324 | 2,364 | 3,698 | 6,174 | 5,557 | 1,872 | 3,670 | 7,589 | 184 | 713 | 0 | 48,260 |
| 1967 Diversions | 1,744 | 22 | 365 | 877 | 1,747 | 898 | 2,335 | 1,583 | 496 | 83 | 42 | 0 | 10,198 |
| 1967 Deliveries | 1,153 | 10 | 228 | 601 | 1,357 | 700 | 844 | 403 | 212 | 58 | 17 | 0 | 5,583 |
| 1968 Entitlement | 0 | 3,179 | 162 | 2,513 | 3,464 | 2,109 | 0 | 0 | 0 | 0 | 0 | 0 | 11,427 |
| 1968 Diversions | 20 | 258 | 266 | 192 | 177 | 357 | 424 | 286 | 113 | 0 | 0 | 0 | 2,093 |
| 1968 Deliveries | 14 | 124 | 91 | 47 | 49 | 247 | 138 | 110 | 56 | 0 | 0 | 0 | 876 |
| 1969 Entitlement | 3,646 | 7,672 | 2,485 | 7,837 | 5,686 | 217 | 0 | 3,943 | 3,597 | 0 | 0 | 108 | 35,191 |
| 1969 Diversions | 165 | 49 | 535 | 208 | 854 | 476 | 693 | 542 | 175 | 0 | 24 | 0 | 3,721 |
| 1969 Deliveries | 45 | 41 | 145 | 157 | 155 | 352 | 568 | 420 | 40 | 0 | 24 | 0 | 1,947 |
| 1970 Entitlement | 4,835 | 1,844 | 1,244 | 2,361 | 3,667 | 3,437 | 1,076 | 0 | 0 | 0 | 17 | 0 | 18,481 |
| 1970 Diversions | 282 | 200 | 444 | 340 | 366 | 435 | 756 | 720 | 163 | 0 | 0 | 59 | 3,765 |
| 1970 Deliveries | 76 | 114 | 238 | 218 | 175 | 212 | 441 | 328 | 79 | 0 | 0 | 23 | 1,904 |
| 1971 Entitlement | 492 | 0 | 482 | 1,240 | 2,332 | 3,158 | 435 | 0 | 0 | 0 | 0 | 0 | 8,140 |
| 1971 Diversions | 0 | 0 | 1,362 | 74 | 81 | 334 | 691 | 416 | 105 | 0 | 0 | 0 | 3,063 |
| 1971 Deliveries | 0 | 0 | 526 | 36 | 34 | 152 | 298 | 190 | 54 | 0 | 0 | 0 | 1,290 |
| 1972 Entitlement | 0 | 0 | 0 | 0 | 389 | 318 | 0 | 0 | 0 | 0 | 0 | 0 | 706 |
| 1972 Diversions | 179 | 334 | 991 | 519 | 556 | 284 | 258 | 278 | 0 | 0 | 0 | 0 | 3,399 |
| 1972 Deliveries | 179 | 268 | 655 | 476 | 520 | 139 | 119 | 142 | 0 | 0 | 0 | 0 | 2,498 |
| 1973 Entitlement | 1,342 | 1,620 | 685 | 3,425 | 6,261 | 4,950 | 752 | 469 | 0 | 0 | 0 | 0 | 19,504 |
| 1973 Diversions | 0 | 328 | 407 | 641 | 943 | 1,221 | 1,657 | 1,006 | 715 | 325 | 214 | 0 | 7,457 |
| 1973 Deliveries | 0 | 238 | 195 | 422 | 613 | 757 | 980 | 602 | 676 | 325 | 214 | 0 | 5,022 |
| 1974 Entitlement | 2,940 | 0 | 2,119 | 3,876 | 4,537 | 4,558 | 2,577 | 488 | 0 | 0 | 0 | 0 | 20,896 |
| 1974 Diversions | 567 | 579 | 567 | 817 | 1,380 | 1,587 | 2,021 | 1,537 | 1,025 | 71 | 109 | 0 | 10,280 |
| 1974 Deliveries | 0 | 282 | 567 | 348 | 641 | 1,048 | 1,208 | 1,016 | 745 | 71 | 109 | 0 | 6,035 |
| 8 Year Avg. Entitlement | 2,671 | 2,829 | 1,238 | 3,119 | 4,063 | 3,038 | 839 | 1,071 | 1,398 | 23 | 91 | 13 | 20,325 |
| 8 Year Avg. Diversions | 372 | 222 | 617 | 459 | 763 | 699 | 1,104 | 796 | 349 | 60 | 49 | 7 | 5,497 |
| 8 Year Avg. Deliveries | 183 | 135 | 331 | 288 | 443 | 451 | 575 | 401 | 233 | 51 | 46 | 3 | 3,144 |

(1) Priority 11

KD 022222

TABLE A-5

MONTHLY
ENTITLEMENT - DIVERSIONS - DELIVERIES
1967-1974
FOR
STINE CANAL¹
(Acre Feet)

| Year | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|-------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1967 | Entitlement | 9,187 | 8,325 | 2,364 | 3,698 | 6,174 | 1,873 | 3,670 | 8,926 | 3,745 | 3,129 | 2,539 | 59,185 |
| | Diversions | 1,744 | 218 | 1,234 | 1,851 | 3,608 | 2,170 | 1,496 | 885 | 0 | 127 | 409 | 16,083 |
| | Deliveries | 357 | 46 | 190 | 1,268 | 2,533 | 1,149 | 1,354 | 337 | 0 | 0 | 0 | 8,365 |
| 1968 | Entitlement | 695 | 4,461 | 202 | 2,513 | 3,464 | 0 | 0 | 0 | 0 | 0 | 0 | 13,486 |
| | Diversions | 121 | 851 | 708 | 0 | 0 | 764 | 60 | 0 | 0 | 0 | 0 | 3,430 |
| | Deliveries | 0 | 194 | 222 | 0 | 0 | 335 | 13 | 0 | 0 | 0 | 0 | 955 |
| 1969 | Entitlement | 4,284 | 7,672 | 2,485 | 7,837 | 5,686 | 0 | 3,943 | 7,973 | 2,745 | 2,616 | 2,169 | 47,627 |
| | Diversions | 0 | 48 | 780 | 1,280 | 357 | 1,836 | 1,325 | 495 | 20 | 0 | 0 | 8,006 |
| | Deliveries | 0 | 24 | 414 | 419 | 204 | 643 | 527 | 187 | 11 | 0 | 0 | 2,992 |
| 1970 | Entitlement | 6,180 | 7,881 | 1,247 | 2,362 | 3,667 | 1,152 | 0 | 0 | 0 | 1,560 | 157 | 27,644 |
| | Diversions | 0 | 0 | 452 | 480 | 135 | 1,521 | 1,206 | 210 | 0 | 0 | 0 | 5,029 |
| | Deliveries | 0 | 0 | 269 | 251 | 85 | 723 | 599 | 108 | 0 | 0 | 0 | 2,613 |
| 1971 | Entitlement | 2,917 | 1,472 | 485 | 1,328 | 2,423 | 542 | 0 | 0 | 0 | 0 | 113 | 12,438 |
| | Diversions | 0 | 0 | 576 | 203 | 93 | 1,538 | 1,321 | 71 | 0 | 0 | 0 | 4,380 |
| | Deliveries | 0 | 0 | 237 | 107 | 47 | 815 | 750 | 39 | 0 | 0 | 0 | 2,304 |
| 1972 | Entitlement | 0 | 0 | 0 | 0 | 653 | 0 | 0 | 0 | 0 | 0 | 0 | 1,094 |
| | Diversions | 0 | 264 | 754 | 0 | 457 | 656 | 211 | 0 | 0 | 0 | 0 | 2,768 |
| | Deliveries | 122 | 388 | 0 | 189 | 222 | 94 | 0 | 0 | 0 | 0 | 0 | 1,410 |
| 1973 | Entitlement | 2,233 | 4,471 | 695 | 3,443 | 6,261 | 753 | 538 | 0 | 0 | 57 | 497 | 23,896 |
| | Diversions | 0 | 159 | 1,698 | 1,448 | 2,272 | 3,440 | 2,114 | 128 | 0 | 0 | 0 | 14,372 |
| | Deliveries | 0 | 46 | 445 | 404 | 470 | 1,414 | 968 | 70 | 0 | 0 | 0 | 4,751 |
| 1974 | Entitlement | 6,551 | 876 | 2,119 | 3,876 | 4,537 | 2,577 | 553 | 0 | 0 | 0 | 89 | 25,536 |
| | Diversions | 0 | 0 | 0 | 990 | 1,611 | 3,148 | 3,158 | 1,480 | 0 | 0 | 0 | 13,364 |
| | Deliveries | 0 | 0 | 0 | 291 | 338 | 1,322 | 1,283 | 344 | 0 | 0 | 0 | 4,672 |
| 8 Year Avg. | Entitlement | 4,006 | 4,395 | 1,197 | 3,132 | 4,108 | 862 | 1,088 | 2,112 | 811 | 920 | 711 | 26,363 |
| | Diversions | 233 | 193 | 775 | 781 | 1,066 | 1,884 | 1,361 | 408 | 3 | 15 | 51 | 8,429 |
| | Deliveries | 60 | 87 | 222 | 366 | 487 | 812 | 687 | 136 | 1 | 0 | 0 | 3,508 |

(1) Priority 9

KD C233071

TABLE A-6
MONTHLY
ENTITLEMENT - DIVERSIONS - DELIVERIES
1967-1974
FOR
BUENA VISTA CANAL ¹
(Acre Feet)

| Year | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1967 | 4,900 | 4,440 | 1,261 | 1,972 | 6,450 | 6,238 | 1,267 | 1,957 | 4,760 | 4,914 | 4,760 | 4,919 | 47,898 |
| Diversion | 1,494 | 10 | 718 | 2,225 | 6,227 | 3,382 | 3,757 | 3,229 | 2,214 | 510 | 206 | 607 | 24,878 |
| Deliveries | 1,279 | 10 | 639 | 1,935 | 6,361 | 2,800 | 1,230 | 2,846 | 1,920 | 211 | 77 | 487 | 19,795 |
| 1968 | 4,919 | 4,602 | 108 | 1,340 | 1,848 | 1,147 | 0 | 0 | 0 | 0 | 407 | 1,241 | 15,612 |
| Diversion | 180 | 254 | 480 | 474 | 587 | 801 | 885 | 664 | 0 | 752 | 274 | 423 | 5,774 |
| Deliveries | 165 | 235 | 422 | 385 | 429 | 607 | 611 | 489 | 0 | 431 | 125 | 295 | 4,194 |
| 1969 | 5,856 | 4,216 | 1,643 | 8,882 | 6,445 | 246 | 0 | 2,402 | 4,760 | 4,919 | 4,760 | 4,919 | 49,048 |
| Diversion | 38 | 99 | 968 | 2,059 | 1,831 | 2,768 | 2,640 | 1,900 | 1,051 | 859 | 1,333 | 1,299 | 16,845 |
| Deliveries | 30 | 99 | 830 | 1,295 | 1,428 | 1,655 | 1,816 | 1,590 | 734 | 226 | 449 | 520 | 10,672 |
| 1970 | 5,240 | 4,443 | 665 | 1,260 | 2,275 | 2,084 | 615 | 0 | 8 | 0 | 1,111 | 4,480 | 22,181 |
| Diversion | 841 | 399 | 805 | 1,609 | 1,430 | 1,367 | 1,757 | 1,596 | 1,150 | 926 | 273 | 32 | 12,185 |
| Deliveries | 274 | 217 | 616 | 1,138 | 952 | 1,115 | 1,378 | 1,224 | 900 | 593 | 193 | 15 | 8,615 |
| 1971 | 4,577 | 4,443 | 259 | 708 | 1,292 | 1,684 | 289 | 0 | 0 | 0 | 0 | 1,066 | 14,318 |
| Diversion | 73 | 242 | 927 | 418 | 898 | 914 | 1,434 | 1,732 | 1,233 | 781 | 228 | 110 | 8,990 |
| Deliveries | 55 | 176 | 546 | 320 | 641 | 675 | 1,047 | 1,356 | 920 | 556 | 117 | 79 | 6,488 |
| 1972 | 116 | 500 | 0 | 0 | 348 | 235 | 0 | 0 | 0 | 159 | 0 | 1,246 | 2,629 |
| Diversion | 194 | 208 | 208 | 826 | 931 | 1,386 | 1,396 | 0 | 0 | 0 | 0 | 0 | 5,149 |
| Deliveries | 180 | 150 | 159 | 614 | 718 | 1,068 | 1,042 | 0 | 0 | 0 | 0 | 0 | 3,931 |
| 1973 | 3,741 | 4,443 | 371 | 2,387 | 7,096 | 4,977 | 401 | 287 | 2,863 | 286 | 2,753 | 4,756 | 34,661 |
| Diversion | 140 | 212 | 389 | 1,110 | 2,503 | 3,170 | 2,352 | 2,052 | 1,127 | 456 | 168 | 0 | 13,679 |
| Deliveries | 97 | 121 | 0 | 458 | 989 | 1,502 | 1,629 | 1,334 | 762 | 190 | 0 | 0 | 7,082 |
| 1974 | 4,915 | 4,443 | 1,130 | 2,314 | 4,473 | 3,844 | 1,375 | 295 | 3,449 | 1,743 | 1,066 | 2,245 | 31,292 |
| Diversion | 149 | 407 | 3,346 | 1,410 | 1,460 | 3,191 | 4,509 | 4,070 | 660 | 0 | 177 | 188 | 19,567 |
| Deliveries | 0 | 70 | 2,088 | 650 | 612 | 1,905 | 3,633 | 2,791 | 233 | 0 | 15 | 0 | 11,997 |
| 8 Year Avg. Deliveries | 4,238 | 3,941 | 680 | 2,358 | 3,778 | 2,564 | 493 | 618 | 1,983 | 1,503 | 1,857 | 3,109 | 27,205 |
| | 389 | 229 | 980 | 1,265 | 1,983 | 2,122 | 2,341 | 1,905 | 929 | 536 | 332 | 332 | 13,346 |
| | 260 | 135 | 663 | 849 | 1,516 | 1,416 | 1,548 | 1,454 | 683 | 275 | 122 | 175 | 9,096 |

(1) Priority 6 & 24

KD 023372

TABLE A-7

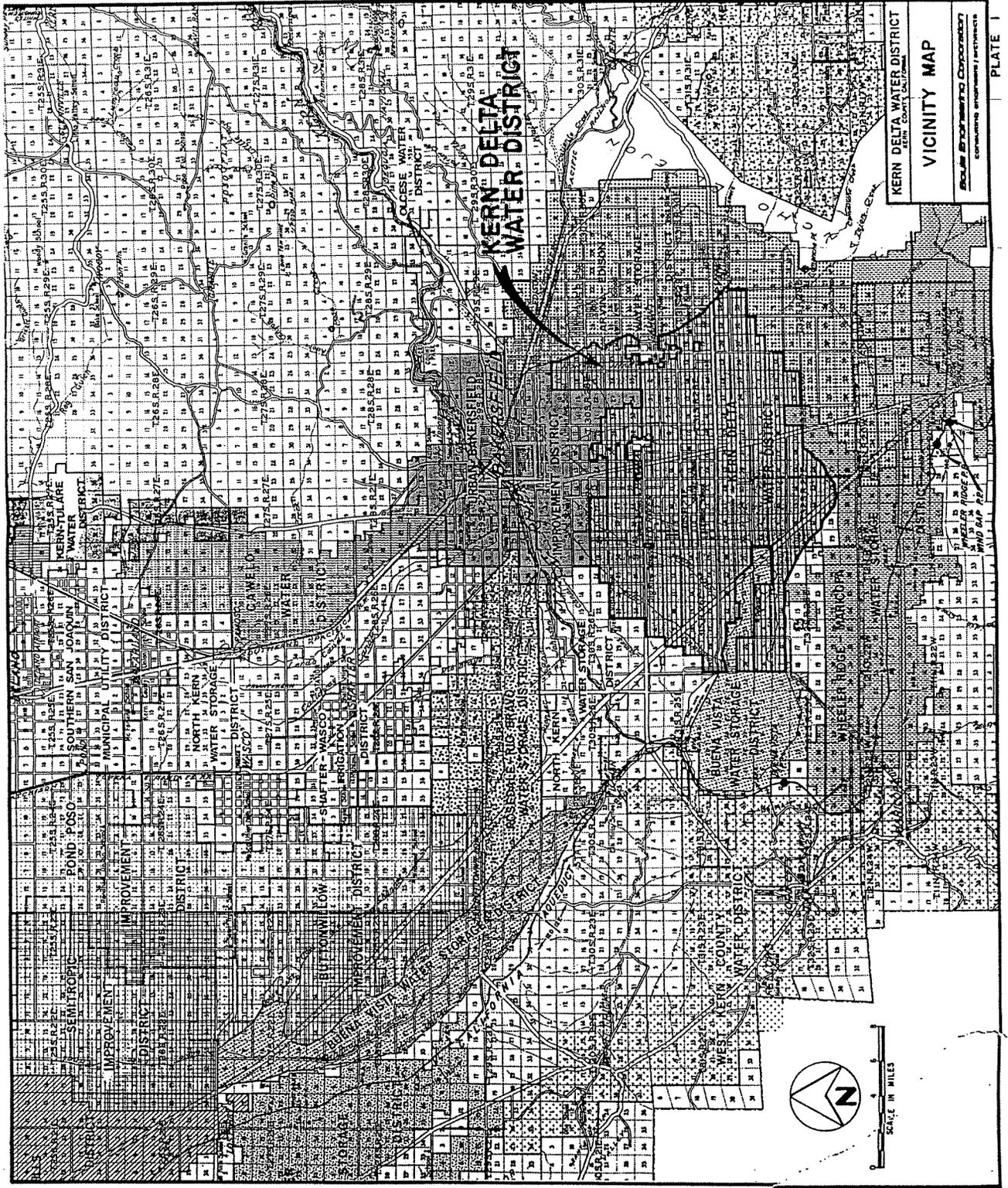
MONTHLY
ENTITLEMENT - DIVERSIONS - DELIVERIES
1967-1974
FOR

TOTAL FOR KERN ISLAND WATER COMPANY

(Acre Feet)

| Year | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|-------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| 1967 | Entitlement | 40,763 | 37,856 | 24,466 | 27,265 | 37,409 | 23,587 | 27,788 | 39,238 | 27,410 | 26,566 | 26,020 | 377,499 |
| | Diversions | 8,928 | 9,926 | 17,112 | 9,763 | 24,843 | 32,417 | 27,674 | 15,448 | 8,622 | 4,483 | 1,333 | 186,554 |
| | Deliveries | 4,846 | 8,478 | 13,789 | 6,653 | 20,438 | 24,660 | 23,635 | 12,789 | 12,789 | 6,411 | 4,136 | 797 |
| 1968 | Entitlement | 24,176 | 29,606 | 18,921 | 24,250 | 23,283 | 18,446 | 17,702 | 11,466 | 13,598 | 16,585 | 18,667 | 243,966 |
| | Diversions | 4,865 | 11,254 | 15,777 | 15,586 | 25,035 | 25,887 | 20,196 | 8,588 | 6,780 | 3,983 | 744 | 156,534 |
| | Deliveries | 3,287 | 8,319 | 11,340 | 11,876 | 18,299 | 19,453 | 14,710 | 5,405 | 3,621 | 2,323 | 571 | 111,216 |
| 1969 | Entitlement | 33,326 | 36,317 | 25,179 | 45,433 | 18,614 | 18,446 | 28,784 | 34,293 | 26,227 | 25,340 | 25,758 | 356,175 |
| | Diversions | 3,716 | 4,204 | 11,425 | 18,010 | 27,480 | 28,812 | 26,760 | 13,191 | 6,786 | 4,445 | 4,211 | 168,092 |
| | Deliveries | 2,402 | 2,959 | 7,485 | 12,467 | 12,872 | 25,230 | 22,563 | 10,563 | 4,121 | 2,354 | 2,172 | 127,696 |
| 1970 | Entitlement | 35,028 | 30,934 | 21,617 | 23,863 | 26,854 | 21,303 | 18,395 | 14,228 | 13,301 | 19,228 | 23,198 | 276,051 |
| | Diversions | 10,290 | 6,186 | 18,436 | 21,689 | 26,213 | 27,145 | 25,534 | 14,119 | 8,610 | 1,715 | 91 | 176,907 |
| | Deliveries | 7,080 | 4,359 | 13,891 | 16,635 | 19,958 | 20,676 | 20,068 | 11,155 | 6,617 | 1,402 | 38 | 132,859 |
| 1971 | Entitlement | 26,548 | 22,681 | 19,678 | 21,144 | 25,891 | 19,719 | 17,107 | 11,371 | 11,540 | 14,102 | 17,499 | 231,804 |
| | Diversions | 3,695 | 10,529 | 20,430 | 12,518 | 21,017 | 28,677 | 25,076 | 11,721 | 6,419 | 2,898 | 489 | 156,575 |
| | Deliveries | 1,341 | 7,315 | 13,774 | 8,361 | 9,115 | 15,160 | 18,526 | 9,613 | 4,502 | 1,920 | 377 | 111,237 |
| 1972 | Entitlement | 18,611 | 17,766 | 18,446 | 17,851 | 19,845 | 14,396 | 10,927 | 11,241 | 11,308 | 14,547 | 19,375 | 193,164 |
| | Diversions | 4,222 | 12,670 | 18,596 | 15,216 | 14,613 | 18,484 | 13,704 | 6,602 | 3,812 | 1,738 | 356 | 128,630 |
| | Deliveries | 2,927 | 9,870 | 13,050 | 10,947 | 10,670 | 13,554 | 10,494 | 5,195 | 2,408 | 887 | 197 | 93,515 |
| 1973 | Entitlement | 25,251 | 27,300 | 20,205 | 27,389 | 34,352 | 20,362 | 19,747 | 20,693 | 18,232 | 20,186 | 23,815 | 297,896 |
| | Diversions | 2,452 | 7,640 | 12,578 | 15,476 | 20,914 | 33,530 | 28,442 | 14,014 | 7,344 | 3,032 | 248 | 176,660 |
| | Deliveries | 1,578 | 5,495 | 7,649 | 8,686 | 10,878 | 19,750 | 20,279 | 9,068 | 3,226 | 1,292 | 0 | 110,351 |
| 1974 | Entitlement | 32,969 | 22,085 | 23,842 | 27,966 | 31,361 | 25,008 | 19,790 | 21,332 | 20,226 | 18,536 | 20,881 | 296,863 |
| | Diversions | 5,906 | 11,906 | 18,097 | 14,930 | 29,093 | 34,179 | 30,677 | 14,164 | 6,101 | 3,462 | 678 | 186,059 |
| | Deliveries | 2,061 | 8,481 | 13,386 | 9,794 | 9,090 | 24,743 | 21,116 | 7,940 | 2,861 | 980 | 112 | 120,172 |
| 8 Year Avg. | Entitlement | 29,584 | 28,068 | 21,544 | 26,895 | 27,077 | 20,158 | 20,030 | 20,483 | 17,730 | 19,386 | 21,902 | 284,177 |
| | Diversions | 5,509 | 9,289 | 16,556 | 15,399 | 18,034 | 25,411 | 24,882 | 12,520 | 6,809 | 3,220 | 1,019 | 167,014 |
| | Deliveries | 3,190 | 6,909 | 11,796 | 10,677 | 12,007 | 18,682 | 18,923 | 8,966 | 4,217 | 1,911 | 533 | 119,287 |

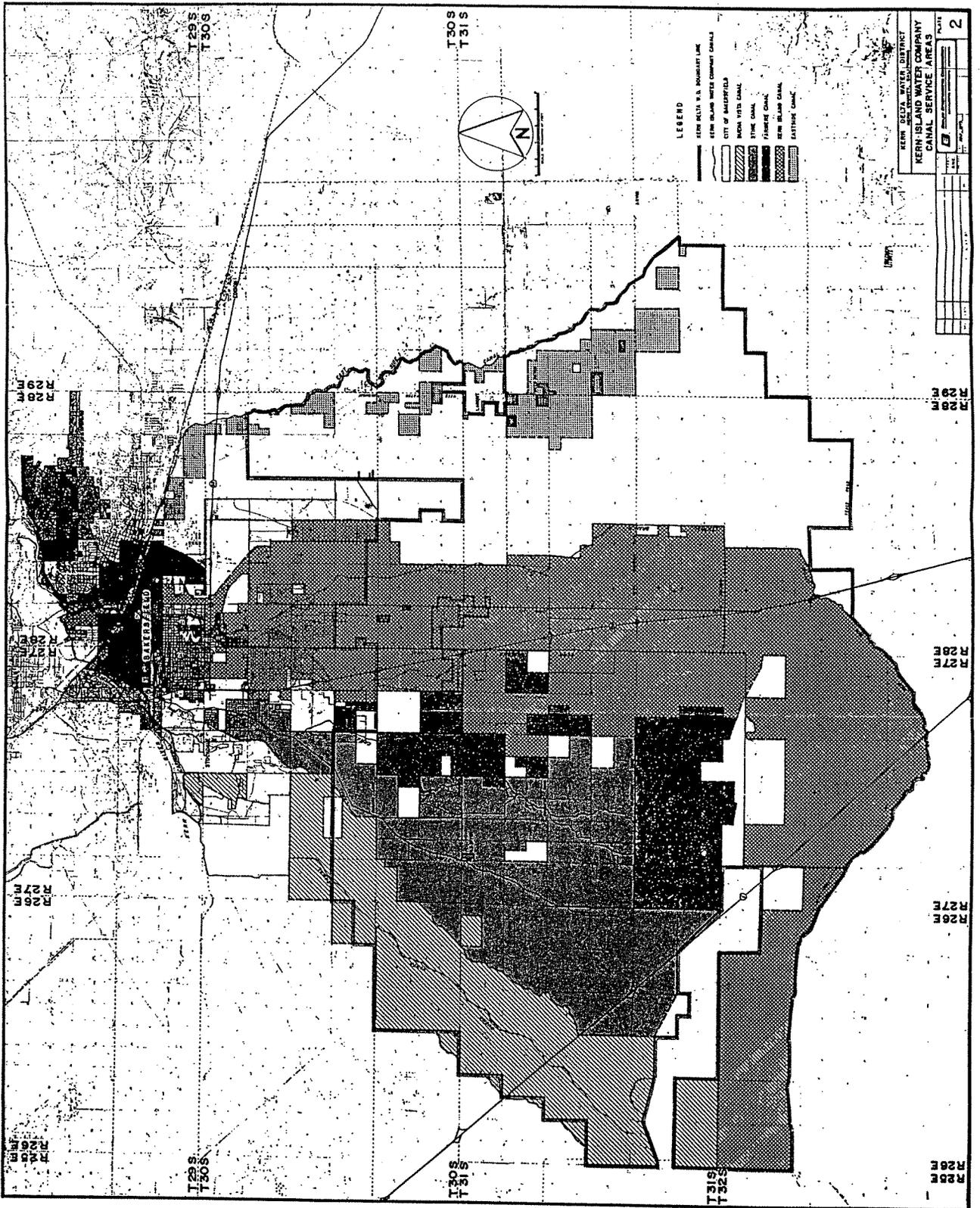
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VICINITY MAP

KERN DELTA WATER DISTRICT
KERN COUNTY, CALIFORNIA

SCALE: ENGINEERING CONVENTION
CONFORMS TO STANDARD PRACTICES



KERN ISLAND WATER COMPANY
 KERN ISLAND WATER COMPANY
 CANAL SERVICE AREAS

| | | |
|------|----|-------|
| DATE | BY | SCALE |
| | | |

SHEET NO. 2
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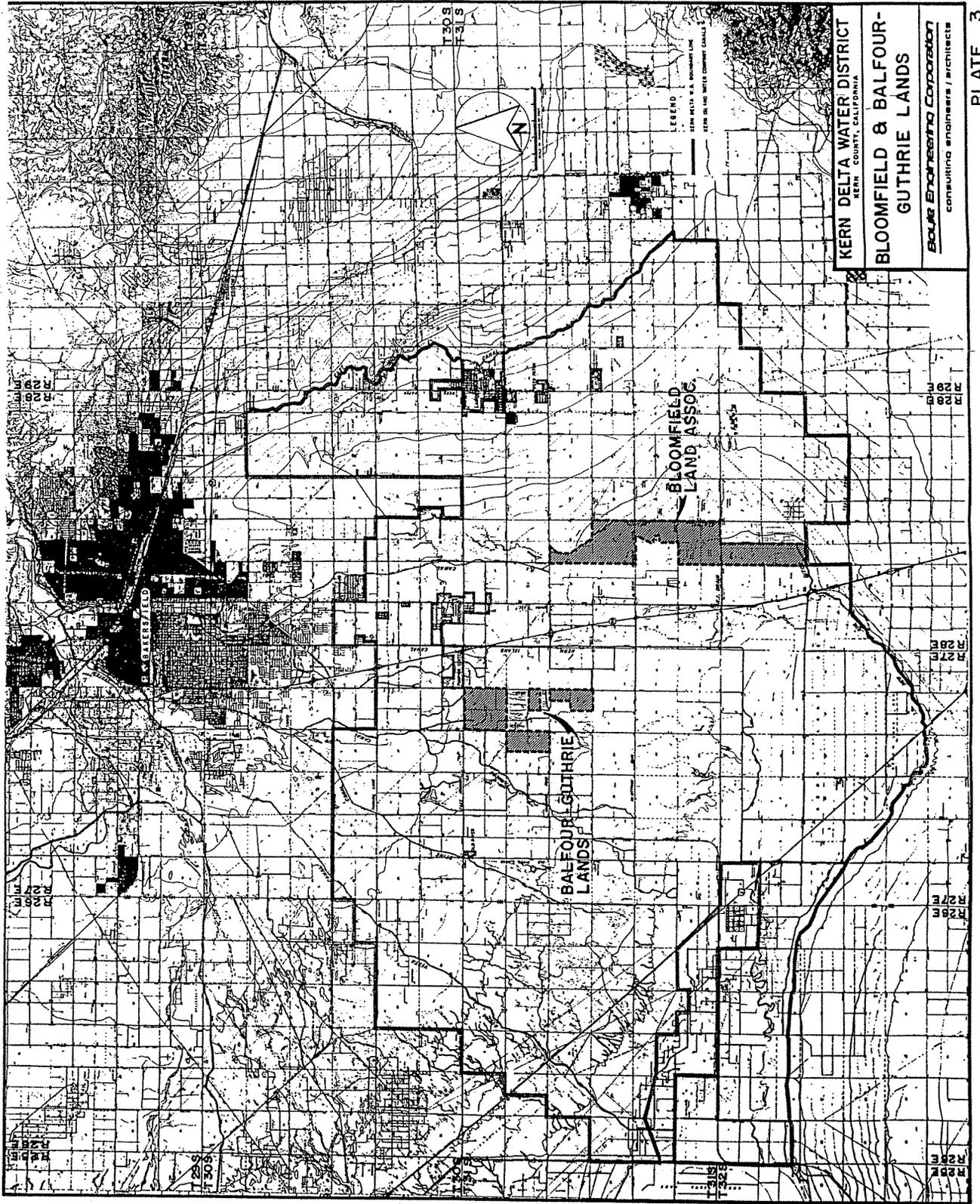
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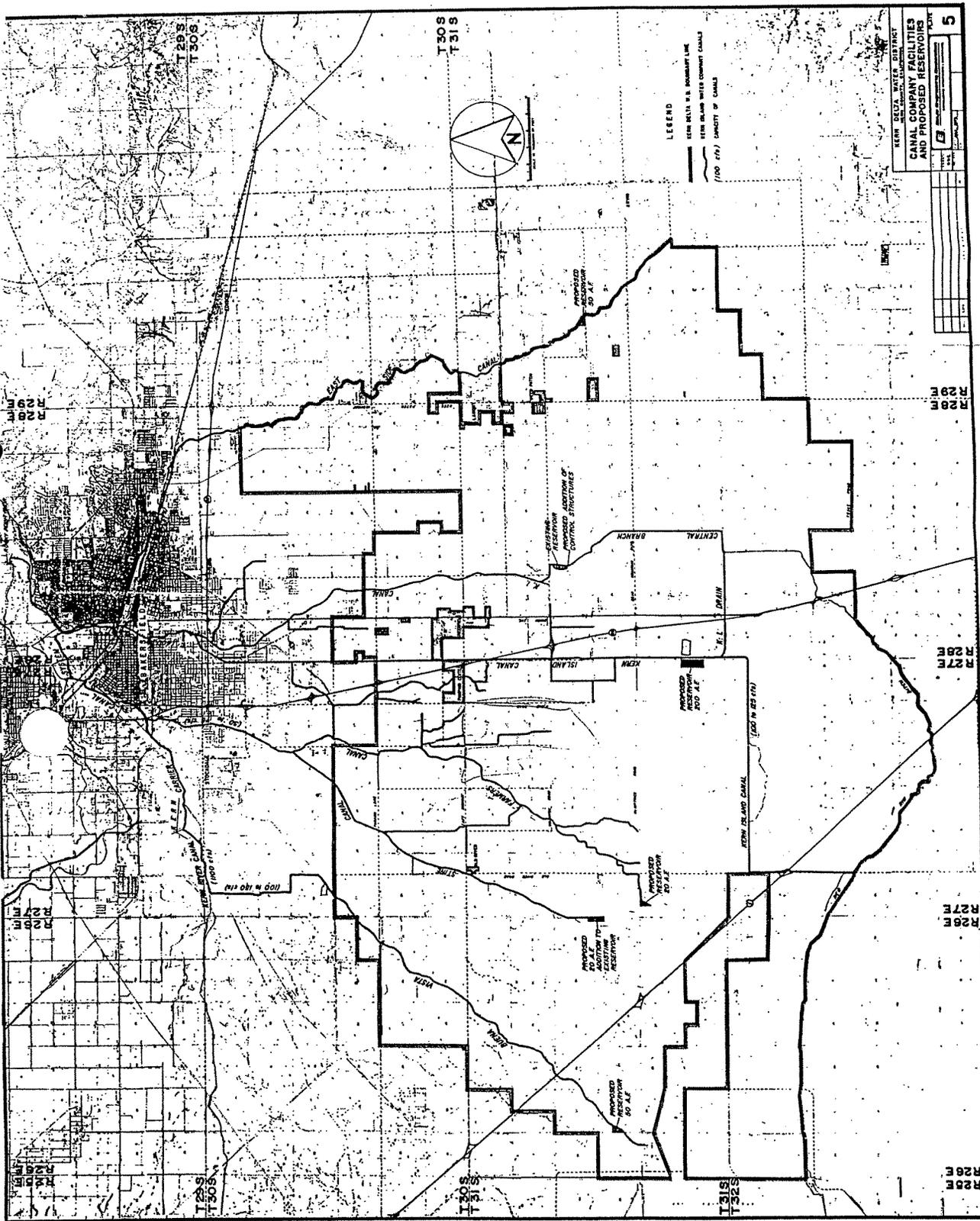
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KD 023872



KERN DELTA WATER DISTRICT
 KERN COUNTY, CALIFORNIA
**BLOOMFIELD & BALFOUR-
 GUTHRIE LANDS**
 BOJAB ENGINEERING CORPORATION
 CONSULTING ENGINEERS / ARCHITECTS

KD 023876



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KERN DELTA WATER DISTRICT
PROJECT TIME SCHEDULE FOR
ACQUISITION OF KERN ISLAND WATER COMPANY

1975

PLAN OF WORKS

- Preparation of Plan of Works Report _____
- Adopt resolution calling for hearing on Plan of Works - Sept. 4 _____
- Publication of hearing notice - Sept. 5 (first date) _____
- District hearing - Sept. 19 _____
- Publication and posting of bond election - Sept. 20 (first date) _____
- Preparation of Economic Feasibility Report _____
- Formal submittal of Plan of Works and Economic Feasibility Reports to DSD - Oct. 10 _____
- DSD Commission informational meeting on project - Oct. 17 _____
- * Bond election - Nov. 4 _____
- Board of Supervisors certify bond election - Nov. 11 _____
- Adopt resolution for Series "A" bond sale - Nov. 11 _____
- Publication of notice of Series "A" bond sale - Nov. 12 (first date) _____
- DSD Commission hearing on Plan of Works and bond certification - Nov. 21 _____
- Series "A" bond sale opening and sale - Dec. 4 _____
- * Delivery of bond funds - Dec. 15 _____

ENVIRONMENTAL IMPACT REPORT

- Preparation of Draft EIR _____
- File Notice of Completion and distribute Draft EIR - Sept. 14 _____
- Notice of public hearing on DEIR - Sept. 15 _____
- DEIR public hearing - Oct. 2 _____
- Receive written comments on DEIR - to Oct. 15 _____
- Prepare Final EIR and response to comments _____
- Certify and distribute Final EIR - Nov. 6 _____
- File Notice of Determination on project - Nov. 11 _____

KD 023875

