## **RECLAMATION DISTRICT 1000**

## **ASSESSMENT DISTRICT**

## **ANNUAL REPORT**

**JULY 2018** 

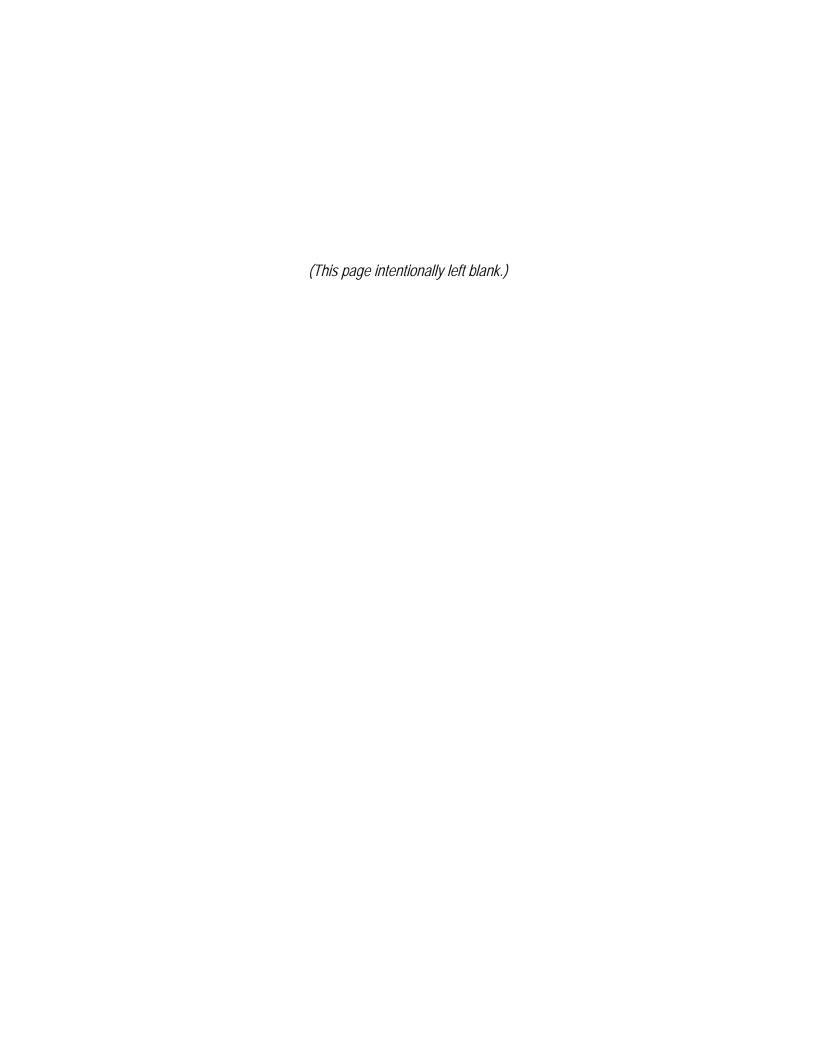
FISCAL YEAR 2018-19

PURSUANT TO THE CALIFORNIA WATER CODE AND ARTICLE XIIID OF THE CALIFORNIA CONSTITUTION

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#### **OVFRVIEW**

Reclamation District No. 1000 is an area within Sacramento and Sutter Counties, all of which is within the boundaries of the Sacramento-San Joaquin Drainage District. Reclamation District No. 1000 was created by a special act of the legislature of the State of California, approved April 8, 1911. The District has an area of approximately 55,000 acres of which about 69% is in Sacramento County and 31% in Sutter County as shown on the map located in Appendix A.

The District is protected from flooding by an extensive system of levees designed to protect against flooding from exterior sources and a system of drainage works including ditches, canals and pump stations designed to collect interior drainage and pump it over the levee and back into adjacent rivers and creeks. Most of the lands in the District are between 5 feet and 25 feet below the projected 100-year flood elevation should one of the perimeter levees fail during this flood event.

#### **Proposition 218**

These assessments were formed prior to the passage of Proposition 218, The Right to Vote on Taxes Act, which was approved by the voters of California on November 6, 1996, and is now Article XIIIC and XIIID of the California Constitution. (Proposition 218 provides for benefit assessments to be levied to fund the cost of providing services, improvements, as well as maintenance and operation expenses to a public improvement which benefits the assessed property.) Although these assessments are consistent with Proposition 218, the California judiciary has generally referred to pre-Proposition 218 assessments as "grandfathered assessments" and held them to a lower standard than post Proposition 218 assessments.



The work and improvements to be undertaken by the Reclamation District 1000 Assessment District and the cost thereof paid from the levy of the annual assessment provide special benefit to Assessor Parcels within the District as defined in the Method of Assessment herein. The said work and improvements are generally described below.

#### Levees

The Reclamation District No. 1000 levee system consists of approximately 46.5 miles of Project Levees (levees which are a part of the federal Sacramento River Flood Control Project) encircling the District which is also known as the Natomas basin. The original top levee elevations range from approximate elevation 31 feet NGVD near the confluence of the Sacramento and American Rivers to approximate elevation 45 feet NGVD near the Pleasant Grove Creek Canal at Sankey Road. The projected 100-year flood elevation ranged from less than three feet to over six feet below the original levee crown. However, recent levee improvements described below have significantly raised the levee crowns as compared to their original heights as both the critieria and projected design water surface elevations have changed. The levees are being designed to contain the 200-year water surface elevation based on new hydrologic and hydraulic modeling. The recent improvements have raised the levees along the Natomas Cross Canal to approximately elevation 46.7 NGVD and along the upper reaches of the Sacramento River to as high as 49.2 NGVD near the intersection of Sankey Road and Garden Highway to accommodate pipe crossings for the Natomas Mutual Water Company's Sankey Diversion and meet the Corps' standards. In addition to Project Levees, the District maintains approximately eight miles of non-project levees located in the Pleasant Grove area east of the Natomas Basin.

The District's operation and maintenance levee work program includes trimming vegetation that impairs visibility of the levees and adjacent area where boils, seepage or other signs of levee distress can be observed; spraying pre- and post-emergent herbicides to control weed growth and reduce fire risk; mowing vegetation to control growth and reduce fire hazard; rodent abatement; erosion repairs to levees from high river stages, wind and wave affects and runoff; resurface levee access roads for all weather access; flood season preparation; equipment maintenance and repair; stockpile flood emergency materials; routine levee inspections year round and 24-hour levee patrols during high river stages; and emergency flood response. The District also occasionally contracts for sheep and goats to control wild vegetative growth in some of the main perimeter canals and waterside of levees. The District also use a tree service to remove problem trees and trim other trees along the levee system to allow visibility of the levee slopes for inspection during floods and access for emergency response. As discussed in more detail below, the District's levee operations and maintenance responsibilities have expanded considerably as the new levee improvements are completed. The District now operates and maintains the new levee footprint along the Natomas Cross Canal and the Sacramento River East Levee south to Powerline Road. The improvements include a new adjacent levee and seepage/stability berm in some locations.



## **Interior Drainage**

The District's interior drainage system consists of 30 miles of main drainage canals, about 150 miles of drainage ditches and seven main pumping stations. The location of the main drainage canals and pumping plants are shown on the map in Appendix B. The drainage system collects storm water runoff, seepage waters, and agricultural drainage and delivers them to the pumping plants for disposal into the Sacramento River or other adjacent creeks. Existing works are expanded and additional facilities provided where necessary to accommodate increased or changed drainage conditions. Maintenance of ditches and canals consists of silt and debris removal as required to maintain capacity; removing trash and other debris dumped, repairing slips and other erosion; and treating vegetation that reduce canal capacity and limit flows with herbicides. In addition, the canals and interior levees must be mowed on a regular basis, particularly in the urban areas, to reduce fire hazards. With continued urbanization of Natomas, the canal maintenance costs have increased significantly.

Maintenance and operation of the pumping plants consists of normal mechanical up-keep such as lubrication, checking and replacing worn or broken parts, maintenance of supporting structures, electrical components, monitoring during a flood and furnishing power. The total power costs fluctuate with the amount of rainfall and runoff in any given year, but overall this is the largest single cost in the District's annual operations and maintenance budget other than personnel costs. In addition to the routine operation and maintenance costs, the District has undertaken capital improvements to the pump stations including repairs to trash racks, pump motors, and other mechanical/electrical parts. As the pumping facilities age, more capital improvements are anticipated to keep them operational. Also, the District will need to replace these pump stations when they exceed their useful life. The current discharge capacity of the pumping plants and their original dates of construction (and major modifications) are as follows:

- **PLANT 1A.** 1916 Four pumps with a total capacity of 621 cfs.
- PLANT 1B. 2003 Six pumps with a total capacity of 834 cfs.
- PLANT 2. 1920 (reconstructed in 1976 and again in 2013) Two pumps for a total capacity of 120 cfs.
- PLANT 3. 1939 (reconstructed in 2001) Four pumps with a total capacity of 276 cfs.
- PLANT 4. 1964 (reconstructed in 1985) Three pumps with a total capacity of 306 cfs.
- PLANT 5. 1965 Three pumps with a total capacity of 57 cfs



**PLANT 6.** 1974 - Four pumps with a total capacity of 230 cfs. Plant designed to accommodate one additional pump.

PLANT 8. 1984 - (modifications in 2001) Nine pumps with a total capacity of 779 cfs.

In addition to the main perimeter pump stations, the District operates and maintains two small pump stations along its West Drain to lift stormwater and agricultural runoff from adjacent ditches into the West Drain near San Juan Road. These pump stations were constructed in 1997 with a combined capacity of 7 acre feet per hour.

## **Small Capital Projects and Equipment Purchases**

In addition to routine maintenance activities, the District undertakes small capital improvements as necessary to address levee, canal and pump station deficiencies and / or repairs which are funded by the proposed benefit assessment. In recent years, the District initiated a long term effort to address on-going erosion of its interior canals due to groundwater pressure, seepage from rice fields and surface runoff. The work consists of placing rock slope protection at the waterline and toe of the eroding canal slopes to stabilize the bank. As this is a chronic problem, the District anticipates it will systematically rock all of its canal slopes over a 20 to 30 year period. In addition, the District routinely repairs pumps, trashracks and replaced electrical equipment at pump stations as necessary. It also replaces equipment as needed when it can no longer function without significant repairs and to meet air quality standards as set by the State. Other Capital projects anticipated in the next fiscal year include site improvements at the District Corporation Yard, implementation of SCADA improvements at pump plants and Corporation Yard, repaving areas at various facilities, and completion of repairs from the 2017 flood emergency disaster.

#### Natomas Levee Improvement Project

Recent national flood disasters have raised concerns about the standards and levels of protection provided by flood control infrastructure and in particular levees. In addition, previous levee failures in California raised concerns about how levee underseepage during sustained high river stages affects the structural integrity of the levee system. As a result of these, the Corps of Engineers has modified the standards used to analyze underseepage risks. When these new standards were applied to the Natomas levees, they did not meet the required factors of safety. In addition, revised hydrologic and hydraulic analysis has resulted in a higher water surface elevation for the projected 100 and 200 year flood events. As a result of these revised risk factors, the Army Corps of Engineers no longer supported certification of the District's levees for 100-year flood protection and the Federal Emergency Management Agency (FEMA) issued new flood risk maps in 2008 placing Natomas in a special flood hazard zone (i.e. 100-year floodplain). In addition, the State of California, through legislation, has determined that urban areas protected by levees must have at least 200-year flood protection. A long term capital project to address these issues as part of a comprehensive levee improvement project has been formulated by the Sacramento Area Flood Control Agency (SAFCA) and the U.S. Army Corps of Engineers. This project has



now been authorized by Congress as part of the 2014 Water Resources and Reform Development Act.

Construction of SAFCA's Natomas Levee Improvement Project (NLIP) began in 2007 and work has continued annually since then until 2013. Improvements have been completed on approximately 18 miles of levee along the Natomas Cross Canal (NCC) and the Sacramento River East Levee (SREL) from the confluence with the NCC to just south of Powerline Road. Work consisted of placing a seepage cutoff wall varying in depth between 80 and 110 feet; raising the existing levee in place along the NCC; construction of a new adjacent levee along the SREL; construction of a seepage and stability berm along portions of the SREL between 100 feet and 300 feet in width; associated flood control facilities including access roads and access control gates. In addition, the new and modified levees were planted with native grasses for stability and erosion protection. Based on the work to date, the Natomas Area floodplain designation has been revised to an A99 Zone reflective of the reduced flood risk and the authorized improvements which would remove the area from the FEMA floodplain.

The overall goal of the project is to provide at least 200-year flood protection for the District's entire levee system. The remaining work downstream of Powerline Road along the SREL as well as improvements to the American River, Natomas East Main Drain Canal and Pleasant Grove Creek Canal are to be completed by the Army Corps of Engineers pursuant to the 2014 Congressional authorization. Completion is dependent on annual federal appropriations and the Corps capability and schedule. The Corps has completed design for levee reaches along the American River (Reach I); Natomas East Main Drain Canal (Reach H) and Natomas Cross Canal (Reach D). It is anticipated construction will commence on Reach I and Reach D in 2018 with the remaining work along with Reach H in 2019. Design has also commenced along the Sacramento River Levee south of Powerline Road (Reaches A and B).

Upon completion of the improvements, the District will be responsible for the continued operations and maintenance of the improved levees, berms and canals. Because of the significant increased acreage to be maintained, the District anticipates its operation and maintenance costs will increase accordingly in the future. As portions of the project have been completed, the District has assumed responsibility for their operations and maintenance including now the levee and berm vegetation following the three-year establishment period.



This section of the Annual Report includes an explanation of the benefits to be derived by the construction and maintenance of improvements, and the methodology used to apportion the total assessment to properties within the Assessment District.

The Assessment District consists of all Assessor Parcels within the boundaries of the Reclamation District 1000. The method used for apportioning the assessment is based upon the proportional special benefits to be derived by the properties in the assessment district over and above general benefits conferred on real property or to the public at large. The assessment is apportioned to lots and parcels in proportion to the relative special benefit from the improvements.

### BASIS FOR DETERMINATION OF BENEFITS

The purpose of the Commission is to establish the benefit to each parcel of land within the District to be derived by the continued operation of the District's Reclamation works and to prepare an Operation and Maintenance Roll as required by sections 51230 thru 51563 of the Water Code. To obtain this desired goal, the lands of the District were viewed by the Commissioners, with consideration given to the following factors:

- 1. Relation of the various areas of the District to the height of the levees.
- Potential damage that would result to the respective areas due to levee breaks and lack of adequate drainage and disposal, considering the nature and use of the land. This includes consideration of the purpose for which the land can be used, the value of the land and the damage that could be experienced if adequate flood protection and drainage were not provided.
- Cost of providing drainage considering the fact that parts of the District are urban and industrial and require a substantial amount of District services to maintain the drainage facilities.
- 3. Cost of providing pumping capacity to dispose of the large volume of runoff from industrial and residential areas.
- 5. Special benefits accruing to all lands within an organized Reclamation District. these include:
  - a. Protection against flooding through the operation and maintenance of the levee system.
  - b. Financial assistance from State and Federal agencies in case of major disaster.
  - c. Assistance by State and Federal agencies in financing capital improvements.
  - d. Organized effort for the protection and drainage of the area contained within the District.



- e. General administrative costs of the District that are not properly attributable to any particular zone or zones.
- f. All residential parcels of less than one acre pay a minimum assessment of \$25.00 as provided by the Water Code.

### **ASSESSMENT PROCEDURES**

In carrying out the purpose of the Commission to fix upon the District lands an assessment which is in proportion to the benefits derived from the continuous operation of District reclamation works for the purpose of flood control and drainage, the Commission adopted the following procedures:

#### STEP 1. DETERMINATION OF BENEFITS

The Commission viewed the entire District for the purpose of reviewing zones of benefit established in 1980 to determine whether the lands within each zone have a common degree of benefit as distinguished from the other zones. Considered in this review were factors such as relation of various areas to the height of levees, damage that would result due to levee breaks, pumping required to dispose of surface water, and operation and maintenance required to implement drainage, and runoff rates of storm water.

Upon completion of this review the Commissioners agreed that the 1980 determination of 5 zones and benefit factors correctly defined the different zones of benefit within the District. The zones are shown on the map located in Appendix A and described as follows:

#### ZONE A. FACTOR 100%

This zone includes land within the District boundaries that receives the most benefits from District facilities. Parts of this area are situated at the lowest elevation of the District. Also, portions of the urban area were included in this zone due to the fact that such areas create instant drainage into the District drains which in turn require the District to provide more facilities to remove the drain waters from the District than would agricultural lands. Urban areas take the ponding capabilities of other District facilities from such lands. Flooding of a developed urban area creates a much more severe problem than flooding of agricultural lands. Commercial areas were also included due to the instant drainage factor. All of the waters from such areas are released in District facilities, and damage to this type of property would be enormous if the property were not properly drained and protected from flooding. The Commissioners have taken into consideration the fact that urban areas have installed storm drains and provided the District with funds to enlarge facilities to accommodate such waters. With these types of facilities, open ditches within the urban areas are eliminated and thus more building sites can be obtained for development, thus increasing the near instant runoff to District drains. The District must provide facilities to dispose of these waters to areas outside the District levees.

#### ZONE B. FACTOR 80%

Lands within Zone B are of higher elevations than Zone A. Sacramento International Airport lands were included in this Zone of benefit due to the fact that the Airport has installed drainage facilities within its boundaries, drain laterals and pumping facilities to remove drain



waters from the District directly into the river. The District has an agreement with the Airport for ponding of drainage waters on areas of the Airport. Areas of the Airport that are developed commercial and paved runways provide an instant runoff factor, but facilities constructed by the Airport provide the Airport and areas surrounding its property with drainage. Lands within Zone B receive benefits of pumping plants located in this Zone. This area's drainage waters will flow onto Zone A property. Flooding within this area would be severe, but not to the extent of Zone A.

#### ZONE C. FACTOR 60%

Lands within Zone C are of higher elevation than Zones A or B. Benefits received from District facilities are of lesser amount than Zones A or B due to the fact that waters from this area would flow onto lands of Zone A or B, causing flooding. Flooding of this area would not be as severe as Zone A or B.

#### ZONE D. FACTOR 10%

Land within this Zone is located on the waterside of District levees along the Sacramento River. Benefits received from District facilities would relate only to the levee as the District does not provide flood control or drainage facilities for this area. The levee system provides access to landowners' property, and due to the residential development, the cost of levee maintenance to the District increases. However, the levee system provides no protection to landowners.

#### ZONE E. FACTOR 50%

Lands within this area are located in an urban area of the District. Drainage waters within this area are collected in a storm drainage system and diverted directly into the Natomas East Main Drainage Canal and Bannon Slough. Pumps and storm drains were installed and are maintained by property owners of this area through a taxing authority other than the District. This area does not contribute any storm waters into District facilities. Benefits received from this area relate only to the levee system.

#### STEP 2. BASIS OF ASSESSMENT

Having determined the benefit factors for the zones of the District, the next step in the assessment evaluation was to provide a base land value against which the factors can be applied. A valuation assessment roll must be provided showing a base value per acre for each parcel of land in the District according to the land use category and benefits received.

The establishment of the value of individual parcels of land without improvements, as required by the Water Code, entails consideration of many factors. County land values as shown on the Assessor rolls were considered, but the Commission decided not to use them because of lack of uniformity due to the implications of Proposition 13, to differences in the Sacramento and Sutter County rolls and to the inclusion of the Williamson Act land values in the Sacramento County rolls. The Commission determined that the base land values to be adopted for each land use category would be as follows:

Agricultural and Recreational - \$ 2,300.00 per acre.



- Industrial, Commercial & Office \$23,000.00 per acre.
- Residential \$22,500.00 per acre.
- River front property \$25,000.00 per acre.
- Airport property\*

The remaining approximately 3,500 acres of Airport land will be treated as agricultural land and will carry the base rate of \$2,300 per acre.

#### STEP 3. DETERMINATION OF VALUATION ASSESSMENT FOR EACH PARCEL.

The Commission then proceeded to establish an assessment valuation roll by identifying the land valuation criterion of each parcel and modifying such valuation by the benefit factor established for the zone in which each parcel lies.

The results are summarized in the following tabulation:

Zone of	Benefit	Assessment
<u>Benefit</u>	<u>Factor</u>	<u>Valuation</u>
Α	100%	\$187,903,921.00
В	80%	\$69,739,172.80
С	60%	\$12,619,344.60
D	10%	\$1,003,175.00
E	50%	\$6,207,405.00

### LAND USE PERCENTAGE

		Percent of
	<u>Acres</u>	<u>Total Land Use</u>
Total Acres	48,617	
Total Acres Used For Agricultural	28,729	58%
Total Acres Used For Residential	8,458	18%
Total Acres Used For Commercial and Industrial	5,166	10%

Note: The land use percentages presented above are based on Sacramento County use code designations. They also do not include miscellaneous or other unassessable parcels for which acreage data is not available.

## PREPARATION OF ASSESSMENT ROLL

The California Water Code requires the assessment roll to be prepared in seven columns. For the purpose of meeting the requirements of Reclamation District 1000, we have slightly modified the order of such columns but have included all of the information as called for in the Water Code pertaining to the benefit valuation roll. On the final roll the following information is given:



<sup>\*</sup>The Commission determined that approximately 600 acres of the Metropolitan Airport devoted to paved runways and buildings will be treated as commercial land and will carry the base land rate of \$23,000.00 per acre.

- Column 1 contains the parcel number assigned by the County that identifies the legal description.
- Column 2 sets forth the names and address of the owners of each parcel, if known, and if not known, so states.
- Columns 3 and 4 set forth the zone of benefit for each parcel.
- Columns 5 and 6 set forth the number of acres in each zone of benefit for each parcel.
- Column 7 sets forth the total assessment valuation of each parcel.
- Column 8 sets forth the rate as fixed by the District.
- Column 9 sets forth the amount of the assessment of each parcel.

The roll contains the information required by the Water Code. The Commission believes it provides a fair and equitable means of distribution of the costs for maintenance and operation of Reclamation District 1000.

## **APPEALS AND INTERPRETATION**

Any property owner who feels that the assessment levied on the subject property is in error as a result of incorrect information being used to apply the foregoing method of assessment, may file a written appeal with the District Secretary of Reclamation District 1000 or his or her designee. Any such appeal is limited to correction of an assessment during the then current or, if before July 1, the upcoming fiscal year. The District Secretary or his or her designee will promptly review the appeal and any information provided by the property owner. If the District Secretary or his or her designee finds that the assessment should be modified, the appropriate changes shall be made to the assessment roll. If any such changes are approved after the assessment roll has been filed with the Counties for collection, the District Secretary or his or her designee is authorized to refund to the property owner the amount of any approved reduction. Any dispute over the decision of the District Secretary or his or her designee, shall be referred to the Board of Trustees of the Reclamation District 1000 and the decision of the Board of Trustees of the Reclamation District 1000 shall be final.

**FISCAL YEAR 2018-19** 

Following are several tables that summarize the assessment levies for fiscal year 2018-19.

TABLE 1 - FISCAL YEAR 2018-19 ASSESSMENT LEVIES BY COUNTY

County	Total	Assessed	Total	Percent
	Parcels	Parcels	Assessment	of Total
Sacramento	33,450	32,448	\$2,051,350.84	90.16%
Sutter	382	368	\$223,804.98	9.84%
Totals	33,832	32,816	\$2,275,155.82	100.00%

TABLE 2 - ASSESSMENT LEVIES BY YEAR

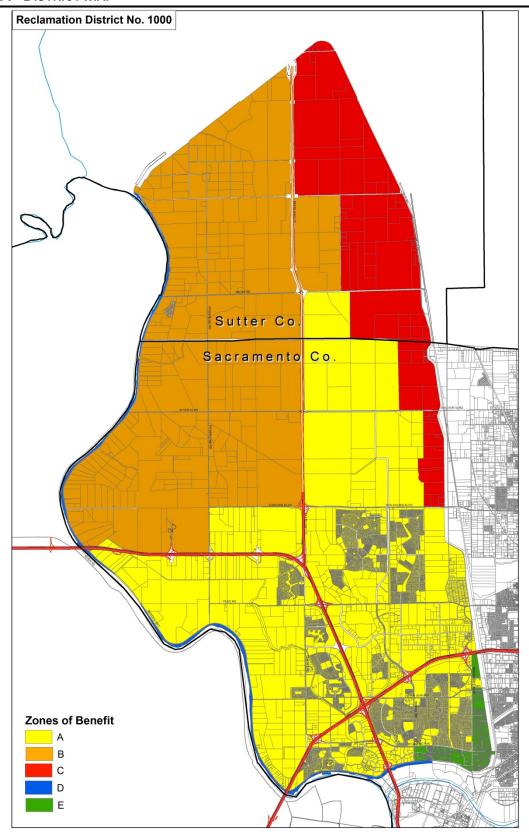
		Total			
	5 /	Assessment	Assessment	Total	Annual Change
Fiscal Year	Parcels	Valuation	Rate	Assessment	Total Assessment
2000-01	15,016	234,739,074.00	\$0.0075	\$1,816,700.10	\$29,503.22
2001-02	16,431	236,945,410.50	\$0.0075	\$1,835,741.16	\$19,041.06
2002-03	19,045	263,946,766.20	\$0.0075	\$2,043,021.08	\$207,279.92
2003-04	21,759	262,482,077.00	\$0.0075	\$2,040,060.42	(\$2,960.66)
2004-05	23,605	261,684,668.40	\$0.0075	\$2,044,938.20	\$4,877.78
2005-06	24,352	264,586,614.10	\$0.0075	\$2,071,167.46	\$26,229.26
2006-07	26,896	263,850,280.40	\$0.0075	\$2,096,072.70	\$24,905.24
2007-08	29,768	266,781,508.30	\$0.0075	\$2,150,885.66	\$54,812.96
2008-09	32,410	273,055,875.80	\$0.0075	\$2,228,657.08	\$77,771.42
2009-10	32,766	273,572,115.30	\$0.0075	\$2,236,066.88	\$7,409.80
2010-11	32,809	273,832,875.80	\$0.0075	\$2,238,610.10	\$2,543.22
2011-12	32,815	274,739,707.20	\$0.0075	\$2,245,325.32	\$6,715.22
2012-13	32,822	274,855,010.50	\$0.0075	\$2,246,197.28	\$871.96
2013-14	32,840	274,859,449.10	\$0.0075	\$2,246,306.34	\$109.06
2014-15	32,840	275,029,651.10	\$0.0075	\$2,247,589.02	\$1,282.68
2015-16	32,842	275,115,259.40	\$0.0075	\$2,248,329.90	\$740.88
2016-17	32,841	275,171,815.40	\$0.0075	\$2,259,004.00	\$10,674.10
2017-18	33,493	276,977,644.70	\$0.0075	\$2,267,939.38	\$20,350.36
2018-19	33,832	277,473,018.40	\$0.0075	\$2,275,155.82	\$16,151.82

## **ASSESSMENT ROLL**

## **FISCAL YEAR 2018-19**

Reference is hereby made to the Assessment Roll in and for said assessment proceedings on file in the office of the District Secretary, as said Assessment Roll is by reference, made part of this report and is available for public inspection during normal office hours.

## APPENDIX A - DISTRICT MAP



# APPENDIX B – MAP OF DISTRICT PUMP PLANTS

