

**FINAL  
MUNICIPAL SERVICE REVIEW AND SPHERE OF INFLUENCE PLAN  
FOR THE  
DURHAM IRRIGATION DISTRICT**



**PREPARED BY THE BUTTE LOCAL AGENCY FORMATION COMMISSION  
ADOPTED JUNE 6, 2019  
RESOLUTION No. 16 2018/19**

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## **DISTRICT DATA SHEET**

### **DURHAM IRRIGATION DISTRICT**

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### **GOVERNING BOARD**

Durham Irrigation District Board of Directors

Normal Board Meeting Date: Second Tuesday of each month at 6:00 p.m.

Board Meeting Location: District Office, 9418C Midway, Durham

### **FORMATION INFORMATION**

The Durham Irrigation District was formed in 1948.

#### **PURPOSE**

1. Enabling Legislation: California Water Code, Division 11, §20500 et seq.
2. Authorized Services: Domestic Water Service
3. Provided Services: Domestic Water Service

#### **AREA SERVED**

1. Supervisorial District: 4
2. No. of Parcels: 555
3. District Size: 506 acres
4. Estimated Population: 1,471
5. Location: Unincorporated community of Durham and the surrounding area.
6. Sphere of Influence: 506 acres (coterminous with District jurisdictional boundaries)

#### **FINANCIAL INFORMATION**

##### **Year End 2017**

Revenues: \$253,473

Expenditures: \$311,561

Capital Assets 12/31/2017: \$822,874

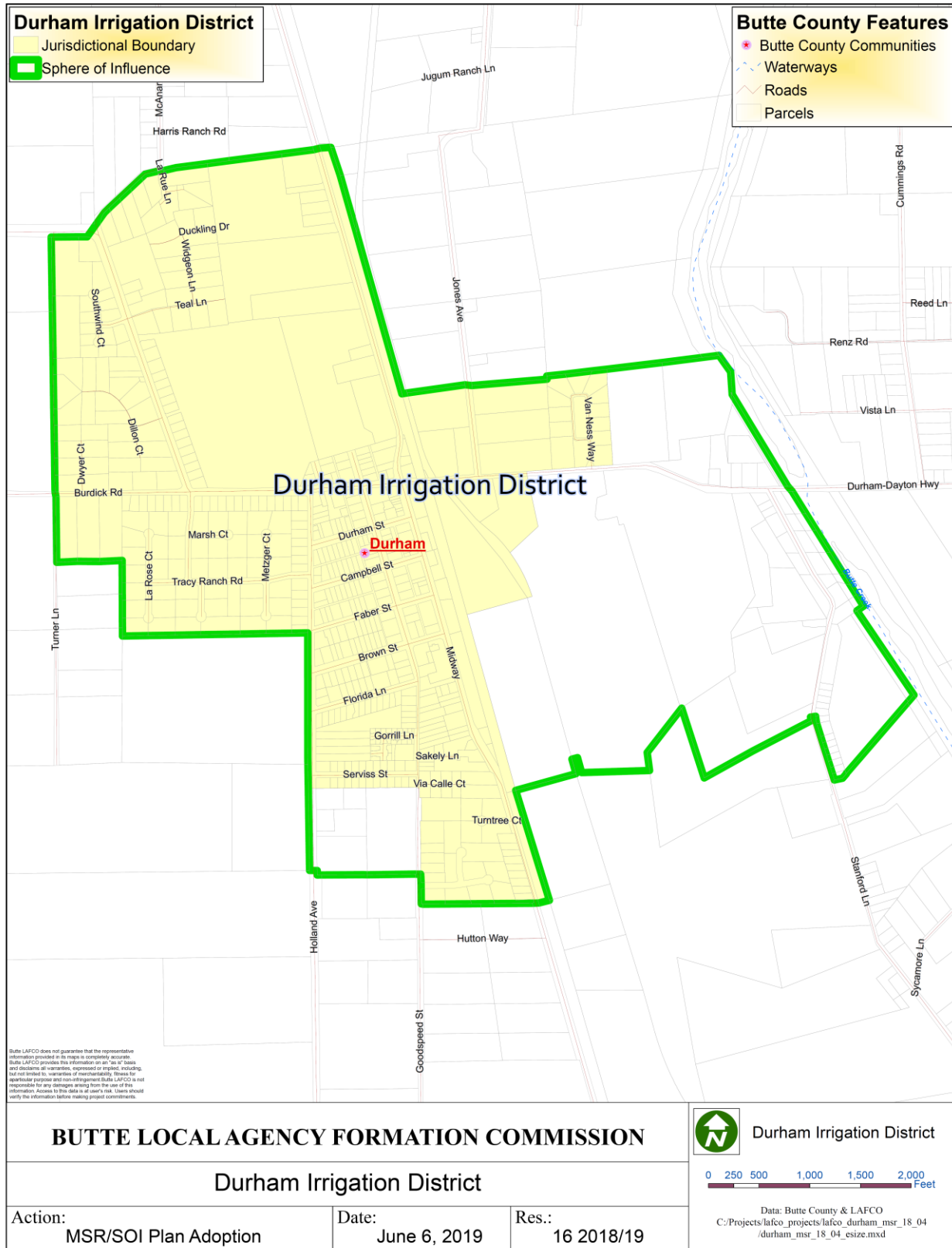
##### **Revenue Sources:**

- Water Sales
- Meter Connection Fees
- Interest

#### **NOTES**

1. Number of Customers: 459
2. Number of Employees: 3

Figure 1 - DID Jurisdictional Boundaries and Sphere of Influence



## District Summary

The Durham Irrigation District (DID) was established in 1948 to serve the unincorporated community of Durham and the surrounding area with domestic water service. The District's service area encompasses 506 acres (0.8 square miles) and approximately 555 parcels. The District's current Sphere of Influence (SOI) is coterminous with the District's jurisdictional boundaries. The District has an estimated population of 1,471 with 459 service connections.

The services provided by the District were last reviewed in the Durham Irrigation Municipal Service Review (MSR) adopted by the Butte Local Agency Formation Commission (LAFCo) in 2006. The 2006 MSR contained numerous determinations regarding DID's operations, most notably "As of FY ending 2004 (the most recent audit available at that time), revenues exceeded expenditures. Rates should continue to be re-evaluated as necessary to ensure that they cover the costs of providing related services."

As a result of the determinations contained in the 2006 MSR, the District underwent two Rate Studies – First in 2011 and then again in 2018. The studies initiated a rate increase that kept revenue above expenditures and allowed the District to create a fund for needed capital improvements. The second study was approved at a California Constitution Article XIII.D Section 6 hearing in November of 2018 with new rates going into effect in January of 2019.

## DID Services

The District is an independent special district (not part of any county or city) that provides domestic water service to parcels within its service area.

## Municipal Service Review Factors for The Durham Irrigation District

Pursuant to California Government Code §56430, in order to update a Sphere of Influence (SOI) for a city or special district, the associated MSR must include written determinations that address various factors regarding the ability of the subject agency to provide services. The following provides an analysis of the seven categories or components required by §56430 for the Municipal Service Review for the Durham Irrigation District:

### **MSR FACTOR NO. 1: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA.**

The District's jurisdictional boundaries consist of the unincorporated community of Durham and its surrounding area. There are no clear significant growth areas; the Butte County General Plan zoning ordinance greatly limits the growth in the area. The Durham-Dayton-Nelson Area Plan which is incorporated into the Butte County's General Plan 2030 establishes area-wide land use policies that provide less potential for future development than had been allowed under the former Durham-Dayton-Nelson Area Plan (D2N), which governed the area prior to the adoption of the new Durham Area Plan. Any future growth in the District will be dictated by requests for annexation submitted to, and approved by, LAFCo.

Smaller parcels comprising of approximately 456 acres within the District are used for urban uses within the community core of Durham. Land uses within the District include single-family residential uses, commercial uses, industrial uses, and public uses. There is very little potential for new development within the boundaries of the District. A large portion of the core community of Durham is zoned for medium and medium-high density residential uses. However, the lack of a public sanitary sewer system in the Durham area restricts the creation of smaller parcels or the construction of multiple dwellings on existing developed parcels. The area of the District outside of the community core of Durham is mostly zoned for agricultural uses on parcels with a minimum parcel size of 20 to 40 acres. The following table provides population data for the unincorporated area of Butte County, and for Butte County as a whole, for the years 2010 to 2018:<sup>1</sup>

	4/1/10	1/1/11	1/1/12	1/1/13	1/1/14	1/1/15	1/1/16	1/1/17	1/1/18	2010-2018 Growth Rate	Compound Annual Growth Rate 2010-2018
<b>Unincorporated</b>	83,758	84,232	84,035	83,912	84,009	84,020	81,854	81,874	81,706	-2.4%	-0.31%
<b>County Total</b>	220,000	221,288	221,916	222,905	223,606	224,811	224,964	226,746	227,896	3.6%	0.44%

**Table 1 - Population Butte County**

The above table shows that the population of the unincorporated area of Butte County has decreased by approximately 2.4 percent since 2010. Most, if not all, of this population decrease can be attributed to the annexations of a large number of developed parcels to the cities within the county, primarily to the City of Chico.

The growth rate of Butte County as a whole for 2010 to 2018 was 3.6 percent, which is a compound annual growth rate of approximately 0.35 percent. The population growth rate during this period was lower than previous years due to the slowdown in the economy and in the housing market that began in 2008.

In May 2019, the State of California Department of Finance released updated population growth projections for all the counties within the state<sup>2</sup>. The population projection for Butte County shows that by 2060 the county may have a population of 295,432. The 2060 projected population is approximately 22 percent above the county's current population, which represents an approximate compound annual growth rate of 1.03 percent.

Estimates		Projections								
2010	2019	2020	2025	2030	2035	2040	2045	2050	2055	2060
220,202	229,029	230,282	237,844	246,880	255,884	264,271	271,741	279,618	287,417	295,432

<sup>1</sup> State of California, Department of Finance, *E-4 Population Estimates for Cities, Counties, and the State, 2010-2019, with 2010 Census Benchmark*. Sacramento, California, May 2019.

<sup>2</sup> State of California, Department of Finance, *P-1: County Population Projections (2010-2060)*. Sacramento, California, March 8, 2017.



**Table 2 - California Department of Finance Population Projections for Butte County 2020-2060**

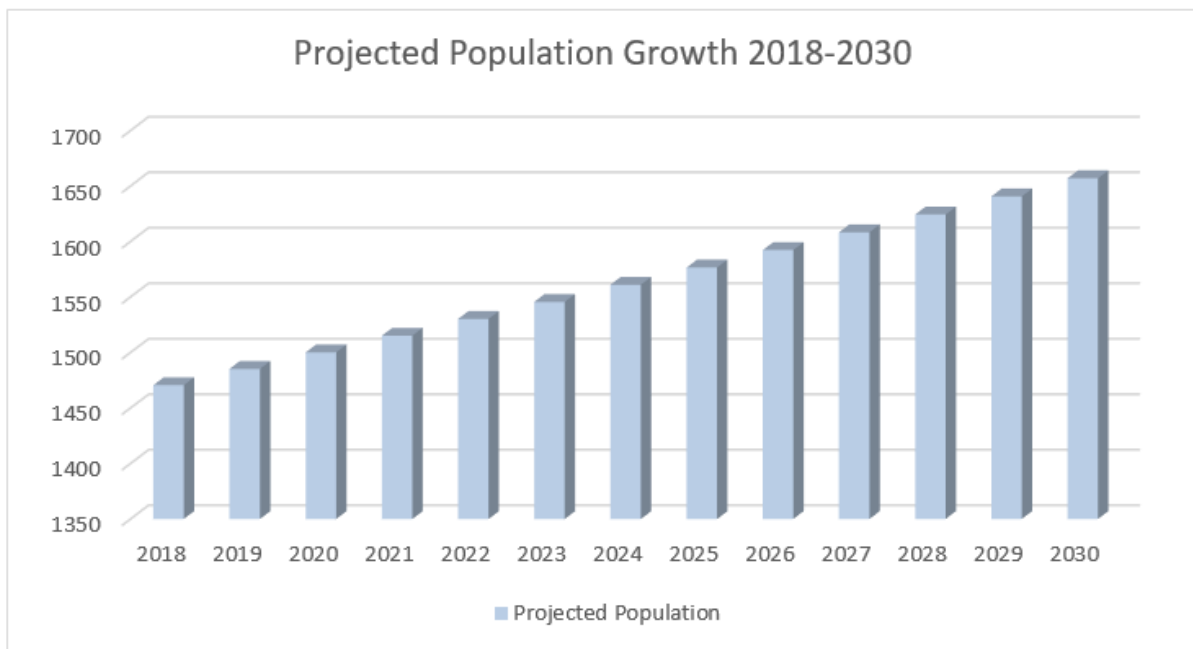
The California Department of Finance reported that there are an approximate 2.65 persons per household in the Durham area (zip code 95938). With this figure the 2018 District population is projected to be 1,471 persons. The population within the DID service area is expected to grow at a rate of approximately 1 percent a year, with most of that growth occurring within the unincorporated community of Durham.

The following table shows estimated population projections for the DID service area.

2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1,471	1,485	1,500	1,515	1,530	1,546	1,561	1,577	1,592	1,608	1,624	1,641	1,657

**Table 3 - Population Projections for Durham Irrigation District - 2018-2030**

Population growth within the Durham area could be significantly greater than 1 percent annually if a sanitary sewer system is constructed to serve the area. However, there are no known plans for a sanitary sewer system to be constructed in the Durham area.



**Figure 2 - Projected Population Growth 2018-2030**

As population increases, and growth occurs within the District, service demands will increase. Expansion of services is facilitated by increases in revenues due to rate increases and the collection of connection and service fees from new development.

**MSR DETERMINATION 1-1: POPULATION**

*The District has a current population of approximately 1,471 people.*

**MSR DETERMINATION 1-2: POPULATION GROWTH**

*The population served by DID is expected to grow at a rate of approximately 1 percent annually. Future population growth within the District is expected to occur primarily within the Durham area.*

**MSR DETERMINATION 1-3: POPULATION GROWTH AND NEW SERVICE DEMANDS**

*There is very little potential for new development within the boundaries of the District. However, as the population gradually increases, and growth occurs within DID, service demands will increase. Expansion of services by DID is facilitated by increases in revenues due to rate increases and connection and service fees from new development.*

**MSR FACTOR NO. 2: THE LOCATION AND CHARACTERISTICS OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN OR CONTIGUOUS TO THE SPHERE OF INFLUENCE.**

Disadvantaged unincorporated communities (DUCs) are defined by statute as inhabited territory (meaning 12 or more registered voters) or, as determined by commission policy, that constitute all or a portion of a community with an annual median household income (MHI) that is less than 80 percent of the statewide annual MHI (Water Code Section 79505.5). The statewide MHI data is obtained from the US Census American Community Survey (ACS) 5-Year Data: 2011 - 2015. California's MHI for this period was \$61,818, and 80 percent of that is \$49,454.

Median household income data is available at the U.S. Census block group mapping level. Based upon the MHI data for the U.S. Census block groups within the boundaries of the District, there are no identified communities within the District that qualify as being a DUC. However, there are areas within the District, specifically islands of multi-family housing and smaller single-family residences, which if analyzed separately from the tract data, may potentially qualify as a DUC.

**MSR DETERMINATION 2-1: DISADVANTAGED UNINCORPORATED COMMUNITIES**

*Per the Census tract data, the Durham community would not be considered a DUC. There are areas within the Durham Irrigation District service area, specifically islands of multi-family housing and smaller single-family residences, which if analyzed separately from the tract data, may potentially qualify as a DUC.*

**MSR FACTOR NO. 3: PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES, ADEQUACY OF PUBLIC SERVICES, AND INFRASTRUCTURE NEEDS OR DEFICIENCIES INCLUDING NEEDS OR DEFICIENCIES RELATED TO SEWERS, MUNICIPAL AND INDUSTRIAL WATER, AND STRUCTURAL FIRE PROTECTION IN ANY DISADVANTAGED, UNINCORPORATED COMMUNITIES WITHIN OR CONTIGUOUS TO THE SPHERE OF INFLUENCE.**

## Adequacy of Public Services

As previously noted, DID provides the following services:

- Domestic Water Services

DID provides water to customers utilizing three wells and an underground pipe system. They currently have 459 customers. All service laterals beyond the water meter within the District are maintained by private landowners.

## Facilities

The District's office is located at 9418C Midway, Durham. The District leases a suite for \$450.00 a month. The suite houses a small office and meeting space. The District has no plans to make any significant improvements to their office.

The District Office is open on Thursdays from 8:00 am to 12:00 noon. However, the office may be closed at times during these hours because the District staff may be out of the office or in the field providing services. Most communications to the District come in the form of phone calls to the main office and emails to the District email address (durhamwater@att.net).



Figure 3 - Durham Irrigation District Office

The District owns three parcels of land on which the existing wells are located. It maintains easements for facilities not within the public road system. The following pictures shows the three Durham Irrigation District well facilities.



Figure 4 - Durham Irrigation District – Well #3



Figure 5 - Durham Irrigation District – Well #4



Figure 6 - Durham Irrigation District – Well #5

## District Equipment

Due to budgetary constraints, the District operates with little overhead capital. The office does have a computer, fixtures and supplies related to a small office operation. Until recently, the District contracted with a Certified Drinking Water System Distribution Operator who provided his own vehicle and tools used on the job. For this reason, the District does not have or maintain all the necessary equipment or personnel to provide all services required for continual operations, especially those requiring heavy equipment, and therefore many projects must be contracted out to licensed providers. Some examples of contracted work include repairs of existing infrastructure, installation of new meters or valves, and well pump maintenance. The District Operator also oversaw and inspected any work outside of his contractual scope of work performed by contractors for improvements to District infrastructure. The District recently expanded the scope of services that NorthStar Engineering currently provides to the District to include management and operations of District facilities. NorthStar Engineering employees now fill the position of District General Manager and District Water System Operator.

The District has three groundwater wells that supply the water required by District users. Two wells have back up power to maintain full operations during outages. One well lacks back up power, but this does not affect system capability as the other wells have capacity to meet demands.

Portions of the water delivery conveyance system are aging and should be replaced in the near future. However, the District has made and continues to make many improvements to the well pumps and in the timing of deliveries, thus avoiding pressure surges and line breaks. These improvements have extended the life of the existing piping conveyance system, and typical pipeline breaks are now only caused by tree damage. Limited portions of the District's domestic water infrastructure lack shut off valves and service in those areas must be interrupted to make repairs or new service connections.

The District is currently considering the purchase and use of a Supervisory Control and Data Acquisition (SCADA) system to allow the remote monitoring and control of District infrastructure.

### Capacity

The District *relies solely on groundwater for its supplies*, which is pumped from its three wells into a conveyance system owned by the District. The District has instituted many upgrades and improvements over the last seven years to include installation of flow meters, and now actual pumping data is readily available for each of the three wells.

In March 2008 the California Waterworks Standards were revised to include new methodology for determining minimum required source capacity and proof that water systems with fewer than 1,000 service connections had either storage capacity equal to maximum daily demand, or additional source supply that could meet the demand. Source capacity from any two of the District wells combined exceeds the maximum daily demand, so the third well is considered an additional source of supply. Therefore, distribution storage is not required at this time. The maximum pumping capacity of the three wells is approximately 3.456 MGD (million gallons per day) while the average daily use is 0.51 MGD or 15% of capacity. In 2018, an estimated 187 MG (million gallons) was delivered.

- Well pump #3 can deliver 800 gallons per minute (1.152 MGD)
- Well pump #4 can deliver 500 gallons per minute (0.72 MGD)
- Well pump #5 can deliver 1,100 gallons per minute (1.584 MGD)

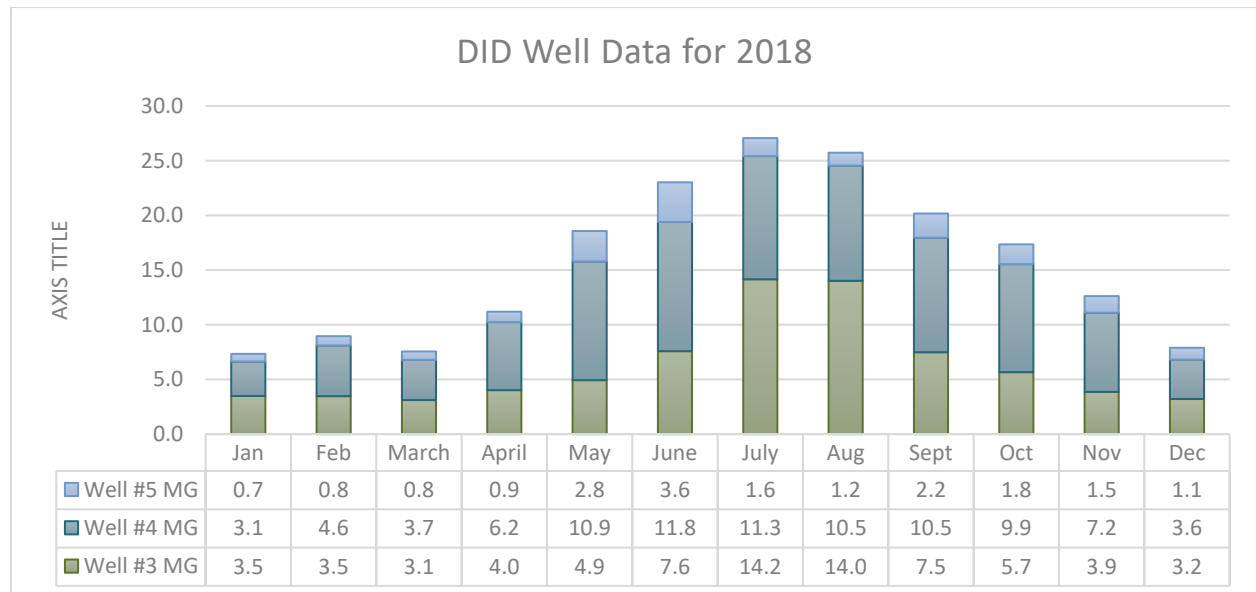
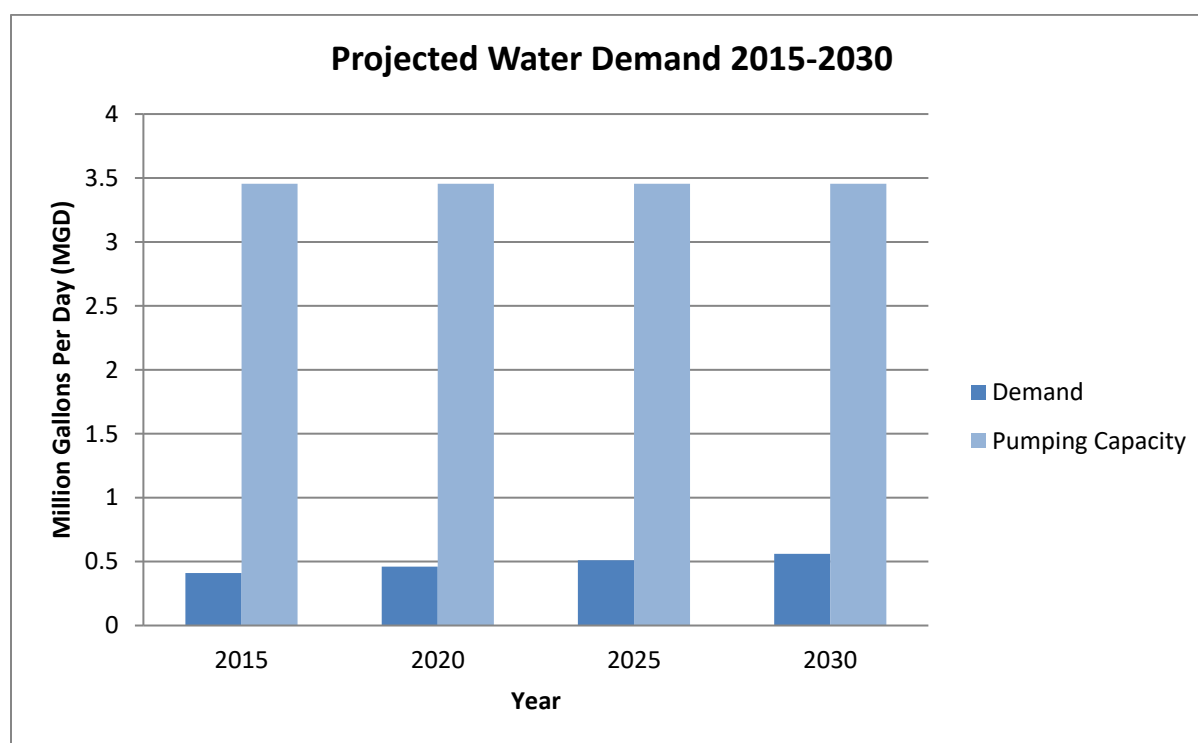


Figure 7 - Well Data 2018

The district uses three active wells throughout the year - designated #3, #4, and #5.<sup>3</sup> The three wells are actuated by pressure settings. Generally, Well #4 is lead/primary with Well #5 coming on as the pressure drops in the south side of town. Well #3 then only comes on during high demand occurrences. When a fire was threatening structures near Well #3 it was actuated to improve fire flow. Typical water pressure in the district is around 45 pounds per square inch to 60 pounds per square inch depending on location and demand. At times the operator will switch the lead/primary well to make sure all three main wells get used equally.

Figure 8 below illustrates the potential future demand of the District supply. The California Department of Finance Population Projections for Butte County do not exceed a compound annual growth rate of 1.03 percent. Based on the California Waterworks Standards for calculating adequate maximum daily demand, the District *has adequate supplies to accommodate these growth projections.*



**Figure 8 - Capacity vs. Demand**

During historical periods of drought, the overall water table in the vicinity has dropped, but the District continued to provide uninterrupted service to all of its customers. In a typical water year, demand for water from the District peaks in the months of May through October during the height of the irrigation season. There are no proposed or planned changes in system capacity, and water supplies are determined to be adequate to serve projected demand within the District boundaries. To ensure that the District continues to meet the projected water demand, upgrade and improvement of the District's aging infrastructure will be required, but which is not adequately funded

<sup>3</sup> Wells #1 and #2 have been abandoned.

under the current rate structure. As noted above, the new rate structure was approved by the district's board of directors in November 2018.

## Quality

In California, drinking water quality standards are defined and regulated under the California State Drinking Water Act. The District is classified as a Community Water System, and therefore is required to utilize a State Certified Operator for the operation of the water system. The District Water System Operator engaged by the District is certified and monitors the delivery system functionality and water quality on a daily basis. The District Water System Operator performs all of the water quality sampling and compiles the data results for required reporting to the State Water Resources Control Board, and generates the required Consumer Confidence Reports, which provide consumers with current water quality data. Consumer Confidence Reports (CCR) are available for review through the District office. The following table outlines the list of constituents included in the CCR.

Constituent	Typical Source of Contaminant
Total Coliform Bacteria	Naturally present in the environment.
Fecal Coliform or <i>E. coli</i>	Human and animal fecal waste.
<i>E. coli</i>	Human and animal fecal waste.
Lead	Internal corrosion of household water plumbing
Copper	Internal corrosion of household plumbing.
Sodium	Salt naturally present in the water.
Hardness	Sum of polyvalent cations present in the water.
Hexavalent Chromium	Discharge from manufacturing facilities.
2, 4, 5-T	Residue of banned herbicide.
Fluoride	Erosion of natural deposits; water additive which promotes strong teeth.
Uranium	Erosion of natural deposits.
Nitrate as N03	Runoff & leaching from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Gross Alpha	Erosion of natural deposits.
Radium 226 and 228	Erosion of natural deposits.
Chloride	Runoff/leaching from natural deposits.
Color	Naturally occurring organic material.
Foaming Agents	Municipal and industrial waste discharges.
Specific Conductance	Substances that form ions when in water.
Sulfate	Runoff/leaching from natural deposits.
Total dissolved solids	Runoff/leaching from natural deposits.
Turbidity	Soil runoff.

**Table 4 - Consumer Confidence Reports Constituents**

District water is treated with chlorine by injection at the wells prior to delivery. The District remains focused on detecting and reporting lead levels as it works to complete an inventory of lead user service lines. With the passage of Assembly Bill 746 the state of California has required that by July 2019, community water systems conduct lead sampling of drinking water in all public K-12 schools constructed before 2010. The community water systems are responsible for the costs associated with collecting drinking water samples, analyzing them and reporting results through this new program. In August



2018, Durham Irrigation District provided services for sampling of drinking water at 10 locations throughout Durham Unified School District campuses. The laboratory returned test results with “non-detectable levels” from all ten sampling locations. According to the U.S. Environmental Protection Agency, there are no safe levels of lead, and long-term exposure to lead causes a number of health problems, especially for pregnant women and young children. California rarely has any occurrences of naturally occurring lead in drinking water sources, but it may become present when water passes through older plumbing fixtures or components associated with service lines and home plumbing containing lead. Durham Irrigation District is committed to the health of the school children and community at-large that it serves and will continue providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

DID’s facilities were last inspected by the State Water Resources Control Board, Drinking Water Field Operations Branch, on May 16, 2017, and no deficiencies were found.<sup>4</sup> DID has not had any water quality violations since 2002, when methyl tert-butyl ether (MTBE) were detected (Violation No. 2003-221005).<sup>5</sup> This violation appears to have been cleared by the State Water Resources Control Board in February 2018 (Enforcement Action No. 2018-9621011).

## Capital Improvements

The DID Board of Directors in conjunction with the District Operator and the District engineer have developed and maintain and update as necessary a list of capital improvement projects. These proposed projects focus on eliminating existing deficiencies within the system and increasing the reliability of the system for the current users. The proposed capital improvement projects are included in a Capital Improvement Plan (CIP) that will be adopted by the District in conjunction with this MSR/SOI document. The following is a brief summary of proposed capital improvement projects.

### Lead Service Pipe Study:

Section 116885 of the California Health and Safety Code (H&S Code, Lead Service Lines in Public Water Systems – Senate Bill 1398) requires all public water systems to compile an inventory of known partial or total lead user service lines in use in its distribution system. The deadline to compile the inventory was July 1, 2018. Although the District has completed the required survey questionnaire and submitted the information to the RWQCB as required, it has not completed the inventory.

Based on age, the District has identified existing pipelines within the system that have the potential of containing lead. The District currently has several remaining flat rate service connections within the oldest part of the system. After applying for and receiving grant funds to install 42 meters on these services in the fall of 2019, the District intends to examine

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<sup>4</sup> Information on the site visit was obtained from:

[https://sdwis.waterboards.ca.gov/PDWW/JSP/SiteVisits.jsp?tinwsys\\_is\\_number=95&tinwsys\\_st\\_code=CA&begin\\_date=&end\\_date=&counter=0](https://sdwis.waterboards.ca.gov/PDWW/JSP/SiteVisits.jsp?tinwsys_is_number=95&tinwsys_st_code=CA&begin_date=&end_date=&counter=0)

<sup>5</sup> Information on the violation was obtained from:

[https://sdwis.waterboards.ca.gov/PDWW/JSP/Violation.jsp?tinwsys\\_is\\_number=95&tinwsys\\_st\\_code=CA&tmnviol\\_is\\_number=4329&tmnviol\\_st\\_code=CA](https://sdwis.waterboards.ca.gov/PDWW/JSP/Violation.jsp?tinwsys_is_number=95&tinwsys_st_code=CA&tmnviol_is_number=4329&tmnviol_st_code=CA)

service line types exposed during the installation process. Once the metering project is complete, an inventory will be prepared and submitted to the Division of Drinking Water. If it is determined that any service lines contain lead, the District will prepare a schedule to replace those.

#### Wharf Hydrant Replacement:

The existing hydrants located in the central service area are primarily wharf hydrants that were installed during the installation of the original water system and are approximately 50-75 years old. A total of 27 wharf hydrants have been identified for replacement or abandonment. A majority of these hydrants do not include isolation valves and are constructed with old steel pipe. The replacement of these hydrants causes a significant impact on the surrounding users as the entire service line has to be shut down.

#### Valve Replacement:

There are approximately 70 valves located throughout the existing water system. The valves installed in the central service area are approximately 50-75 years old and the types of valves are unknown. These valves will allow for isolation of service areas that currently cannot be isolated if a repair needs to be made. It is proposed that the remaining valves within the central service area should be replaced in conjunction with adjacent pipeline replacement projects, as discussed below.

#### Meters:

State law requires all water providers to convert flat-rate water customers to metered services by 2025. The District currently has 141 flat rate water customers that need to be converted to a metered service to comply with the State law. The District is considering incentives to induce these customers to install meters prior to 2025.

The reading of meters is a significant operational cost for the District that is then passed on to the consumer in their water rates. The conversion of the standard meters to an automatic meter reading system is a way to reduce the operational cost for the District and a way to provide better customer service to their users. The District is currently seeking grant funding to begin a meter replacement program. Installations of automatic meters on parcels not currently metered may begin as soon as spring of 2019.

#### Pipeline Improvements:

Pipelines in the original central service area are approximately 50-75 years old. These pipelines range from 1 to 6 inches in diameter and are comprised of steel, asbestos cement, galvanized steel, and cast iron. Many of these pipelines have reached the end of their useful life and need to be replaced as age results in increasing numbers of leaks, water loss and service disruption. The District has prioritized replacement of these lines according to the need and age for many of these pipelines but reserves the right to adjust the priority in the case of an emergency or failure. Upon replacement, the District intends to increase the size of each line to increase the available flow and pressure for the users. It intends to replace approximately 11,350 lineal feet of pipeline and 256 service connections from the water main to the meter in the near future.

There have been three locations within the existing system that have been identified as having a gap or missing section of water main. Infilling these gaps will provide redundant

water supply to all users south of Durham-Dayton Highway and will increase the available flow and pressure for the users.

Most customers located along Durham-Dayton Highway have service connections located in their backyard served off of water mains that run in the adjacent easements. It is difficult to maintain the water lines located in the easements as access is limited. It is recommended that the water mains that are located in these easements be abandoned and the services be connected to the water main located in Durham Dayton Highway.

Well Improvements:

The priority well infrastructure improvements are all for Station #3. The building housing the well pump needs to be replaced. The existing pressure tank is approaching the end of its useful life and should be significantly rehabilitated or replaced. Lastly, a new 6" sand filter should be installed in order to maximize the operational capacity of the well, pump and conveyance system.

<b>MSR DETERMINATION 3-1: ADEQUACY OF PUBLIC SERVICES</b>	
	<i>The District has sufficient facilities and resources to provide domestic water services to its existing service area and in its current sphere of influence and any contemplated expansion thereof. The District should continue to provide facility maintenance and upgrades and consider a public outreach effort promoting water conservation.</i>

<b>MSR DETERMINATION 3-2: ADEQUACY OF PUBLIC SERVICES – CAPACITY</b>	
	<i>The District has provided adequate supplies of water to its service area for day to day needs during years of normal precipitation as well as through the recent prolonged drought extending from 2014 to 2016. The District's water supply is sufficient to accommodate the projected growth within the current district boundaries. Expansion of the District boundaries may require the drilling of an additional well to be able to provide adequate water supply to the expanded area.</i>

<b>MSR DETERMINATION 3-3: ADEQUACY OF PUBLIC SERVICES - WATER QUALITY</b>	
	<i>The District's water meets all required state and federal water quality standards.</i>

**MSR DETERMINATION 3-4: ADEQUACY OF PUBLIC SERVICES - INFRASTRUCTURE NEEDS OR DEFICIENCIES**

	<i>The District has aging water supply infrastructure that must be repaired or replaced as necessary. The approved Capital Improvement Program provides guidance to the needs of the District.</i>
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**MSR DETERMINATION 3-5: ADEQUACY OF PUBLIC SERVICES - INFRASTRUCTURE NEEDS OR DEFICIENCIES**

	<i>The District has not met the July 1, 2018 to complete an inventory of lead service lines as required by law. Given the health danger of lead, the District should prioritize the inventory and replacement of lead service line infrastructure.</i>
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**MSR FACTOR NO. 4: FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES.**

This section analyzes the financial structure and fiscal viability of the District. Included in this analysis is the consideration of revenue sources, amount of revenue, stability of revenues, and expenditure sources.

**Revenues**

The District receives revenue from two main sources:

- **Water Sales**

At Year End 2017, approximately 99 percent (\$253,473) of DID's revenues were received from water sales. Currently, the District has 141 flat rate services and 318 metered services. The current rates, which were adopted by DID in November 2018 and became effective on January 1, 2019, are as follows:



## 2019 RATES

### 4 biggest operating costs for Durham Irrigation District:

1. **System Operation** – Costs that cover everything associated with getting your water delivered to you.
2. **Capital Improvements** – Costs associated with replacement of aging system infrastructure.
3. **Increasing Energy Costs** – Energy costs associated with running the well pumps are significant.
4. **Regulatory Compliance** – Costs for testing, reporting and participating in groundwater management to ensure our customers have adequate quality water.

### SERVICE FEES

SERVICE SIZE	PREVIOUS RATES	RATE SCHEDULE			
		JAN 2019	JAN 2020	JAN 2021	JAN 2022
<b>FLAT RATE SERVICES</b>					
3/4" Service	\$39.93	\$47.92	\$52.71	\$57.98	\$63.78
1" Service	\$49.91	\$60.91	\$67.94	\$75.66	\$84.16
1-1/2" Service	\$74.87	\$93.32	\$105.83	\$119.60	\$134.74
2" Service	\$99.83	\$127.76	\$147.84	\$169.92	\$194.21
Development	\$678.81	\$814.57	\$896.03	\$985.63	\$1,084.20
<b>METERED RATE SERVICES - BASE FEE</b>					
3/4" Service	\$21.96	\$26.35	\$28.99	\$31.89	\$35.07
1" Service	\$27.95	\$33.95	\$37.72	\$41.87	\$46.43
1-1/2" Service	\$33.94	\$44.81	\$53.03	\$62.07	\$72.02
2" Service	\$39.93	\$56.79	\$70.60	\$85.79	\$102.50
3" Service	---	\$144.94	\$159.43	\$175.37	\$192.91
4" Service	---	\$232.82	\$256.10	\$281.71	\$309.88
6" Service	---	\$452.33	\$497.57	\$547.32	\$602.05
Misc. Service	\$415.27	\$527.04	\$579.74	\$637.72	\$701.49
<b>METERED RATE SERVICES - QUANTITY FEE</b>					
PER CCF	\$0.50	\$0.60	\$0.72	\$0.86	\$1.00

### CONNECTION FEES

#### 3 components your fees for connecting to Durham Irrigation District cover:

1. **Reimbursable expenses** - Cost for installation of a new meter during new construction or property transfer.
2. **System Assets Buy-In** - Cost of buying your proportional share of the system
3. **System Capacity Buy-In** – the cost of expanding system capacity to ensure adequate service to all

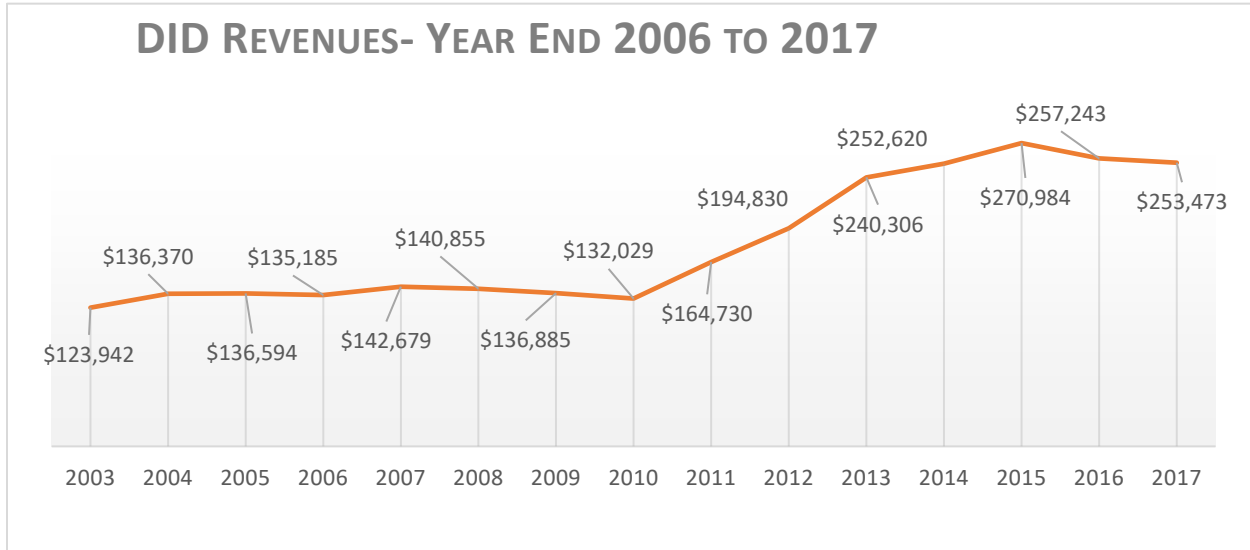
METER SIZE	PREVIOUS FEE	CURRENT FEE
3/4"	\$6,723	\$5,810
1"	\$8,840	\$9,617
1-1/2"	\$13,857	\$19,181
2"	\$32,720	\$30,800
3"	---	\$53,846
4"	---	\$90,011
6"		\$179,469
Meter installation during sale of a home:		\$650

Figure 9 - DID Service Rates 2019

- **Meter Installations**

At year-end 2017, approximately 1 percent (\$1,980) of DID's revenues were received from meter installations. The number of meters installed within the District varies from year to year. The District has little to no growth, so revenue projections have little to do with this revenue stream.

Revenues for the District steadily increased from 2011 to 2016. Revenue for the District at year end 2017 was \$253,273. District revenues rose dramatically after the District implemented the Rate Study of 2011 in order to bring water sales in-line with current expenses and are expected to increase again with the recently approved rate structure.



**Figure 10 - DID Revenues**

## Expenditures

Total operating and capital expenditures for the District for Year 2017 were \$311,561. Expenditures for DID generally consist of repairs and maintenance, power, water treatment, transmission and distribution, and administration. In Year 2017, administration accounted for 48 percent (\$149,772) of the District's expenditures and power accounted for 17 percent (\$53,979) of the District's expenditures.

As shown in the table below the District's expenditures rose dramatically in 2016 and 2017 due to the expense of updating one of the system wells.

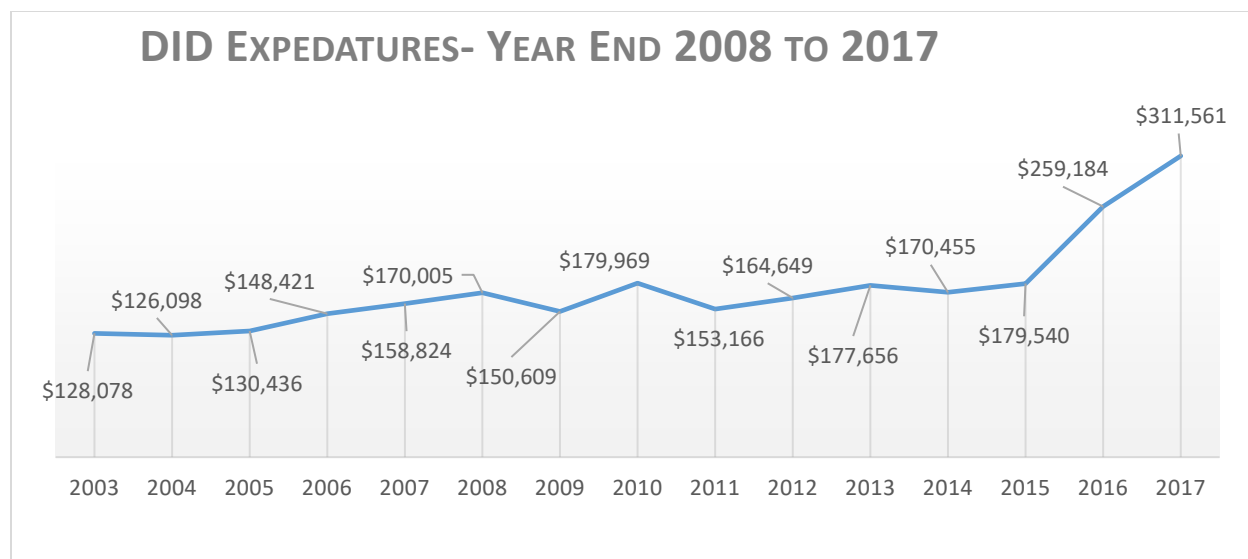


Figure 11 - DID Expenditures

### DID Annual Budgets

The District operates on a calendar year for its fiscal reporting. The District is considering changing its fiscal year to one ending June 30<sup>th</sup> to be consistent with State and County fiscal years.

DID maintains a fund balance, and as of December 31, 2016, the District had \$317,384 in available (unappropriated) funds. The following table shows the District's available fund balance from Years 2008 through 2016.

DURHAM IRRIGATION DISTRICT UNAPPROPRIATED FUND BALANCES	
As of 12-31-17	\$228,436
As of 12-31-16	\$317,384
As of 12-31-15	\$350,299
As of 12-31-14	\$252,440
As of 12-31-13	\$173,558
As of 12-31-12	\$141,235
As of 12-31-11	\$101,481
As of 12-31-10	\$94,024
As of 12-31-09	\$122,829
As of 12-31-08	\$117,400

Table 5 - DID Unappropriated Fund Balances

For public agencies like DID, unappropriated fund balances are not just money in the bank; they are fundamental resources for ensuring reliable core services and community security.<sup>6</sup> Public agencies designate money toward savings to balance their budgets,

<sup>6</sup>Special District Reserve Guidelines - A Guide to Developing a Prudent Reserve. Second edition. California Special Districts Association. 2013.

respond to emergencies, keep rates affordable, maintain current infrastructure, and plan for future needed capital improvements. The following are the benefits of a public agency maintaining an adequate level of unappropriated fund balance:

- **Balancing Budgets** – Over the course of the fiscal year, fund balances help balance the ebb and flow of revenues versus expenditures.
- **Emergency Expenditures** – In the event of a disaster, districts cannot afford not to have savings readily available to quickly repair critical local infrastructure and bring core services back online.
- **Affordable Rates** – With appropriate savings, special districts are able to use resources wisely and smooth out the highs and the lows of volatile economic conditions, rather than spend their entire surplus and then seek new revenue or jeopardize services.
- **Infrastructure Maintenance** – Reserves mean pipes are fixed and worn equipment is replaced when necessary without going back to ratepayers for funds to pay for such routine upkeep and maintenance.
- **Planning for the Future** – A long-term, thoughtful approach to public infrastructure requires the foresight to plan and save for future needs.

The District's unappropriated fund balance has varied significantly over the years in response to unanticipated expenses, budget deficits, and reduced revenues. The District should endeavor to increase the unappropriated fund balance every fiscal year to ensure that there is adequate funding available for any unforeseen circumstances.

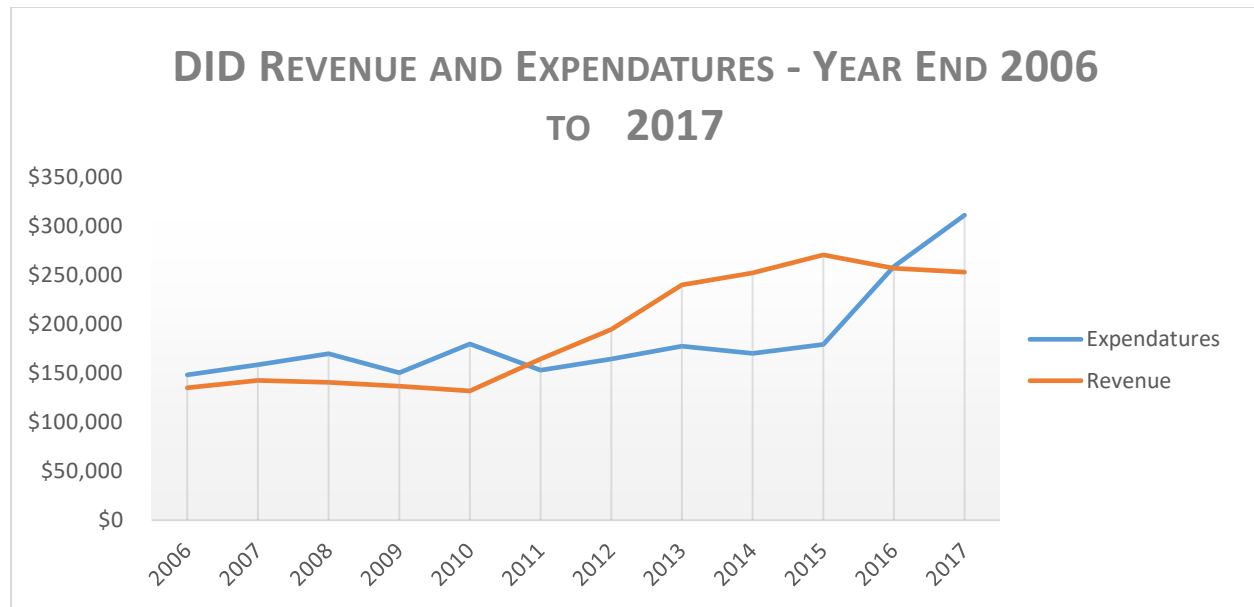
## Budget Deficits

As shown in the following table and graph, DID experienced budget deficits (where expenditures exceeded revenues) from 2006 to 2010. The following table and chart show the revenue and expenditures for these fiscal years and the revenue/expenditure variances.

<b>Fiscal Year</b>	<b>Revenues</b>	<b>Expenditures</b>	<b>Variance Favorable (Unfavorable)</b>
2006	\$135,185	\$148,421	(\$13,236)
2007	\$142,679	\$158,824	(\$16,145)
2008	\$140,855	\$170,005	(\$29,150)
2009	\$136,885	\$150,609	(\$13,724)
2010	\$132,029	\$179,969	(\$47,940)
2011	\$164,730	\$153,166	\$11,564
2012	\$194,830	\$164,649	\$30,181
2013	\$240,306	\$177,656	\$62,650
2014	\$252,620	\$170,455	\$82,165
2015	\$270,984	\$179,540	\$91,444
2016	\$257,243	\$259,184	(\$1,941)
2017	\$253,473	\$311,561	(\$58,088)

**Table 6 - DID Budget Deficits**





**Figure 12 - Revenue and Expenditure Comparison**

Budgets are meant to balance revenues and expenditures so that a special district can provide needed services with the resources available. However, the reality is that budgets will rarely work out precisely as planned, leading to operating deficits (when expenditures exceed revenues) or operating surpluses (when revenues exceed expenditures.) As long as these deficits or surpluses are minor or intermittent, they do not constitute a material problem for a local government and should not be cause for concern. It is when there is a *persistent pattern of larger surpluses or deficits that there should be concern about the budgeting practices of the agency.*<sup>7</sup>

An agency experiencing a budget deficit can use fund balance or other reserves, if available, to balance the budget. However, using the fund balance is a one-time course of action that cannot fix a structural imbalance. A district experiencing continuous budget deficits may be having financial difficulties that need to be identified and corrected. If budget deficits cannot be correct, a district may have to reduce service levels if new sources of funding cannot be obtained.

From 2006 to 2009 the District contracted with California Water Service Co. – Chico for water distribution, testing, and maintenance services. During this time period the District had an unfavorable variance between revenues and expenditures. In 2010, the District commissioned a fee study to analyze its water rates and connection fees in light of these variances. The District had not raised rates in 11 years. As a result, the District implemented a rate and fee increase at that time effective April 1, 2011. As shown in Table 6 and Figure 12 above, the increase brought the District out of its budget deficits. (In 2016 and 2017 the budget deficit can be attributed to the upgrading of facilities at a system well.)

<sup>7</sup> *Citizens' Guild to Local Budgets*, Office of the New York State Comptroller-Division of Local Government and School Accountability. 2010.

## Annual Financial Audit/Financial Reports

State law requires that every public agency retain the services of a certified public accountant to prepare that agency's annual financial audit. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in an agency's financial statements.

The District's financial statements include all transactions for which the District is financially accountable. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

The District performs the annual audits in compliance with the discussion above. The audits performed from 2010 to 2017 did not identify any deficiencies. However, the District's Annual Financial Report for 2009 found one deficiency in internal control and one significant deficiency in the internal control of financial reporting. A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than material weakness, yet important enough to merit attention by those charged with governance. As identified in the District's comprehensive financial report for 2009, the weaknesses found in the District's internal control of their finances were:

### ❖ **Significant Deficiency 2009-1** **Internal Control- Segregation of Duties**

#### **Condition**

Currently the District only has one individual who maintains the accounting and reporting records.

#### **Criteria**

Sufficient segregation of duties is needed to be in place by the District in order to have good internal controls over financial accounting and reporting.

#### **Cause**

Due to the small size of the District, there is not enough need to have more than one individual in the accounting department. As a result, this individual is responsible for maintaining and handling all of the accounting transactions.

#### **Effect**

Failure to have sufficient segregation of duties could result in greater risk of fraud and errors in financial accounting and reporting.

**Recommendation**

We recommend that the District review areas that need additional segregation of duties and consider involving a member of the board to oversee and be responsible for those areas to strengthen internal controls.

**Management's Response**

The District is unable to implement full segregation of duties due to the small size of the organization but will consider implementing additional internal controls to help compensate for this deficiency.

**Current Status**

The District is now reviewing the manner in which the District is administering and managing its business and operations with an eye towards improving such through new and enhanced equipment and computer technology, including software better tailored for its needs, new and updated policies and procedures resulting in more efficient management and reporting of business and financial transactions, and obtaining third party preparation of monthly and annual financial statement.

**❖ Deficiency 2009-2****Internal Control- Financial Statement Preparation****Condition**

Financial statements are not being prepared in accordance with GAAP.

**Criteria**

The controller lacks the knowledge and skills necessary to apply Generally Accepted Accounting Principles (GAAP) in preparing the District's financial statements.

**Cause**

The District's bookkeeper has not been sufficiently trained in financial reporting under GAAP.

**Effect**

The financial statements are not properly presented to be audited and have to be adjusted during the audit.

**Recommendation**

We recommend additional training be provided to the bookkeeper in the area of financial accounting and reporting under GAAP.

**Management's Response**

The District's bookkeeper works only part-time and it would not be cost effective to provide additional training, but consideration will be made to use an outside consultant to assist with the financial reporting.

**Current Status**

Assistance was provided and the financial statements have met the auditor's needs in years since. The steps now being considered by the District as discussed above should remedy this concern.

## Future Challenges and Issues Related to Finances

The Capital Improvement Program for DID creates a future financial challenge for the District. The proposed projects focus on eliminating existing deficiencies within the system and increasing the reliability of the system for the current users. *The cost associated with the proposed capital improvements totals over \$3.9 million dollars. The District's current rates cannot support these improvements and the District is currently searching for grant funding and/or alternative funding sources.*

### **MSR DETERMINATION 4-1: FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES - REVENUE**

*The rate increase that went into effect April 1, 2011, brought the District out of its budget deficits and it now operates with a balanced budget. The District adopted new rates in November 2018, which became effective on January 1, 2019. The new fees will increase the District's revenue flow, helping to prevent revenue shortfalls.*

### **MSR DETERMINATION 4-2: FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES - EXPENDITURES**

*Normal expenditures for the District include contracting services provided by NorthStar Engineering, office expenses, and occasional purchases of new equipment. The District's expenditures do not appear to be excessive and are necessary to provide efficient and effective water services.*

### **MSR DETERMINATION 4-3: FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES – FUND BALANCE**

*As of December 31, 2016, the District's General Fund had an unappropriated fund balance of \$317,384 which is available for District operations. The District should endeavor to increase the unappropriated fund balance every fiscal year to ensure that there is adequate funding available for any unforeseen circumstances.*

### **MSR DETERMINATION 4-4: FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES – FINANCIAL AUDIT**

*The District's Annual Financial Report for 2009 found one deficiency in internal control and one significant deficiency in the internal control of financial reporting. Measures taken by the District have resulted in no additional deficiencies being noted. The District should continue to ensure that all future financial audits are prepared for each fiscal year in a timely manner consistent with State law and with general accounting and financial practices.*

<b>MSR DETERMINATION 4-5: FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES – FUTURE FINANCIAL CHALLENGES</b>	
	<i>The Districts proposed Capital Improvement Projects exceed \$3.9 million dollars and cannot be financed under the existing rate structure. The District should be very transparent to the community about this critical need and consider rate increases and actively seek grant funding or other sources of funding to help facilitate these improvements.</i>

**MSR FACTOR NO. 5: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES.**

The Division of Drinking Water (now under the State Water Resources Control Board) has for years encouraged voluntary consolidations of public water systems in order to provide high quality water supply. The District has worked with both the Durham Recreation and Park District and the Durham Unified School District to consolidate the provision of water services and provide consistent high-quality service delivery to both Districts. The District is willing to work with any other public water system located within its service area to consolidate in the future.

Aside from cooperative water service opportunities, the District may also benefit from considering other shared resources opportunities with all other special districts in the Durham area, such as Durham Recreation and Park District, County Service Area No. 37 (Street Lighting), Durham Mosquito Abatement District and Durham Mutual Water Company. As Durham is a small, close knit community and the above districts all have very small staff and limited resources, there is likely some benefit to the consideration of shared administrative functions and other logistical benefits such as common public facilities to improve public access.

<b>MSR DETERMINATION 5-1: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES</b>	
	<i>The District is now the service provider for both DPRD and DUSD, having taken over and modified their existing water systems. The District has entered into consolidation agreements with both DPRD and DUSD in order to provide improved delivery of high-quality supply.</i>

<b>MSR DETERMINATION 5-2: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES</b>	
	<i>The District may benefit from shared resources with other local water districts and is encouraged to consult with other local districts to improve overall service delivery efficiencies in the Durham community.</i>

**MSR FACTOR NO. 6: ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENTAL STRUCTURE AND OPERATIONAL EFFICIENCIES.**

**DID Board of Directors**

Pursuant to Division 11 (Section 20848) of the California Water Code, and with the original petition to the Butte County Board of Supervisors, a three-member Board of Directors is responsible for overseeing the operations of the District. The Board of Directors is responsible for appointing the District Operator.

Each director must be a voter and landowner in the District. Directors are elected by voters who are residents of the District and serve four-year terms.

Each Board member receives \$100 per month. Regular meetings of the Board are held at 6:00 pm on the second Tuesday of each month at the District's office at 9418C Midway, Durham. The Board is responsible for compliance with the provisions of the Brown Act and obtains legal services from the John Jeffery Carter Law Office. Meeting announcements are posted at the District office. Generally, very few members of the public attend Board meetings.

Public notices by the District are published in the *Chico Enterprise-Record* and/or included with monthly bills. Past minutes are available at the District office. When the Board does not have a quorum, action items are carried over to the next meeting, with the exception of authorizing payment of reoccurring bills. The president of the Board is responsible for compliance with the Brown Act. District officials noted that the current sphere of influence should be expanded so development in areas immediately adjacent or near the District's current service boundaries is occurring, including the Black Diamond Holdings, LLC, Keeney, and Birchord projects.

The current DID Board of Directors are:

<b>Position</b>	<b>Trustee Name</b>	<b>Term Ends</b>
President/General Manager	Raymond Cooper	2020
Director	Matt Doyle	2020
Director	Kevin Phillips	2022

**DID Staffing**

Until recently, the District day-to-day business was managed by the District Operator, who was a private consultant hired by the DID Board of Directors. The District Operator had been with the District for over 7 years but retired at the beginning of April 2019. Instead of hiring a new District Operator, the District Board of Directors expanded the scope of services already being provided to the District by NorthStar Engineering to now include operation and maintenance of District facilities. NorthStar Engineering personnel now fill the following District positions:

- General Manager
- Water System Operator
- Meter Reader

The management structure of DID is very simple and reasonable for the type of operations undertaken by the District. No alternative structures or reorganizations of staff would result in more efficient operations, and the existing structure is considered appropriate.

### **District Transparency**

Governmental transparency promotes accountability and provides information for citizens about what their government is doing. A public agency's transparency is necessary to provide the residents of the agency a thorough knowledge of the services the agency provides, how it operates, how and by who the agency is governed, and the financial status of the agency. Information on an agency should be easily accessible.

The District's transparency is very limited, which makes it difficult for the residents of the District to obtain information on the District. As required by State law, the District does provide notice of upcoming Board meetings by posting a notice at the District office. Board meeting minutes, and other information, can be obtained through the District General Manager. All of these measures do require residents to make an effort to either attend District Board meetings or visit the District office.

To provide for greater transparency, many special districts within California have websites that allow for easy access to district services, information and documents. Approximately 50 percent of the special districts within California have a website and the primary reasons that districts do not have a website include money, personnel, legal requirements, and no penalties for not having a website.

DID recently created a website (<https://www.didwater.org>) that provides information about the District, including Board of Directors information, staff information, meeting agendas, water rates, and water quality reports. The District should consider adding additional information to their website, including:

- Board of Directors meeting minutes
- Adopted annual budget
- Financial audits/reports
- Map of the District
- District policies and regulations
- List of enterprise systems (SB 272)
- Financial Transaction Reports
- Compensation Reports

## Operational Efficiencies

The District is exposed to various risks of losses related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The District transfers risks that may arise from these and other events through the purchase of property and liability insurance through the Special District Risk Management Authority (SDRMA), an intergovernmental risk sharing Joint Powers Authority. The District carries general and auto liability coverage, employee dishonesty coverage, property loss, and boiler and machinery coverage. The District also maintains worker's compensation insurance through the State Compensation Insurance Fund.

## Future Challenges and Issues to Operational Efficiencies

State law requires all water providers to convert flat-rate water customers to metered services by 2025. The District currently has 141 flat rate water customers that need to be converted to a metered service to comply with the State law.

The reading of meters is a significant operational cost for the District that is then passed on to the consumer in their water rates. The conversion of the standard meters to an automatic meter reading system is a way to reduce the operational cost for the District and a way to provide better customer service to their users.

### MSR DETERMINATION 6-1: OPERATIONAL EFFICIENCIES

*The District is a member of the SDRMA to efficiently cover the Districts insurance needs.*

### MSR Determination 6-2: Cost Avoidance Measures

*The District utilizes appropriate cost avoidance measures in its operations, including contracting out services which would be too costly for the District to provide. Currently, revenues exceed expenditures; thus, no other forms of cost avoidance are warranted.*

### MSR DETERMINATION 6-3: TRANSPARENCY - WEBSITE

*The District is to be commended for recently creating a website, which will greatly increase the District's transparency. The District should consider adding additional information about the district to their website, including, financial information such as budgets and financial audits, a map of the District, District policies and regulations, list of enterprise systems (SB 272), and compensation reports.*



**MSR DETERMINATION 6-4: TRANSPARENCY - IDENTIFICATION OF DISTRICT OFFICE**

	<i>The Durham Irrigation District maintains an office at 9418C Midway, Durham, California 95938. Its office hours are Thursdays from 8:00 am to 12:00 noon.</i>
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**MSR DETERMINATION 6-5: OPERATIONAL EFFICIENCIES**

	<i>The District has one part-time General manager, one part-time Water System Operator, and one part-time Meter Reader. The District currently contracts with NorthStar Engineering to staff these positions. The overall management structure of DID is sufficient to perform basic services to the District.</i>
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**MSR DETERMINATION 6-6: FUTURE CHALLENGES TO OPERATIONAL EFFICIENCIES**

	<i>The District has 141 flat rate water customers that will need to be converted to metered services prior to 2025. This conversion is State mandated. At the time of this conversion it is recommended to convert the District from standard meters that require monthly readings by District staff to automatic meters that can be read with limited staffing. The District is now considering providing incentives to induce flat rate customers to install meters prior to 2025.</i>
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**MSR FACTOR NO. 7: ANY OTHER MATTER RELATED TO EFFECTIVE OR EFFICIENT SERVICE DELIVERY, AS REQUIRED BY COMMISSION POLICY.****Potential Boundary Changes**

Over the last ten years there have been several proposed subdivisions within the Durham area but outside of the Durham Irrigation District boundary and Sphere of Influence (SOI). These proposed subdivisions have mostly proposed the use of on-site community water systems or private wells but are within a distance that DID could provide service. In these cases, DID has reviewed service options with the applicants and the projects have not moved forward. In the future DID would like to be able to provide service and orderly development within the community of Durham.

As a part this MSR/SOI Update the District proposes that 63 parcels, totaling approximately 280.1 acres be added to the District. There are two separate areas proposed to be added to the District's SOI:

1. A 21.5-acre area, consisting of six parcels (one of which is owned by DID) generally located on the southwest border of the District, between Holland Avenue and Goodspeed Street, south of Serviss Street; and,
2. A 258.5-acre area, consisting of 57 parcels, located on the east border of the District, generally between the Union Pacific Railroad tracks to the west and Butte Creek to the east.

The area proposed to be added to DID's Sphere of Influence is shown on Figure 13, located on the following page.

<b>MSR DETERMINATION 7-1: POTENTIAL BOUNDARY CHANGES</b>	
	<i>An increase in the SOI will provide DID the ability to provide water services to new developments in an orderly and efficient manner and demonstrate a public policy preference for public water systems to serve new development within the community of Durham.</i>

### Sphere of Influence Plan Review Factors for the Durham Irrigation District

The Durham Irrigation District currently encompasses approximately 506 acres of land in the unincorporated area of Butte County. The 506 acres includes 555 parcels and the adjacent road right-of-way. The District's existing Sphere of Influence is coterminous with the District's jurisdictional boundaries

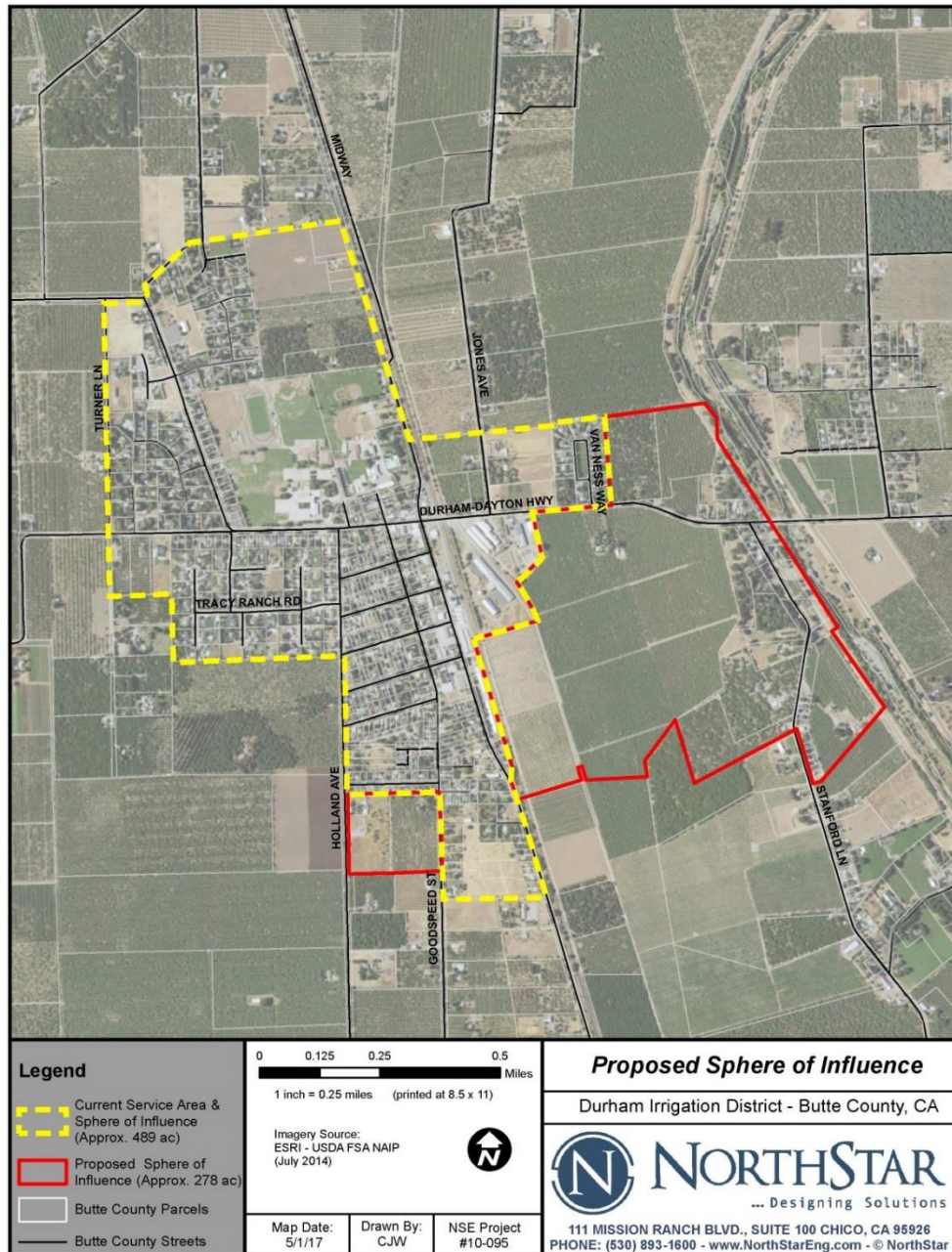


Figure 13 - Proposed DID Sphere of Influence

The District is also located within the Durham-Dayton-Nelson Area Plan boundaries, which was adopted in 1992 and incorporated into Section I of the Area and Neighborhood Plans Element of the Butte County General Plan 2030. The General Plan establishes area-wide land use policies for this area and designates it as the “Durham Urban Reserve” area. The District is proposing to add some of this area to its SOI. If such expansion of the SOI is approved, 60 parcels and adjacent road right of ways, totaling 280 acres will be added to its SOI. Therefore, all parcels proposed to be added to the District's SOI as well as the existing District boundaries would be located within the Durham Urban Reserve Area.

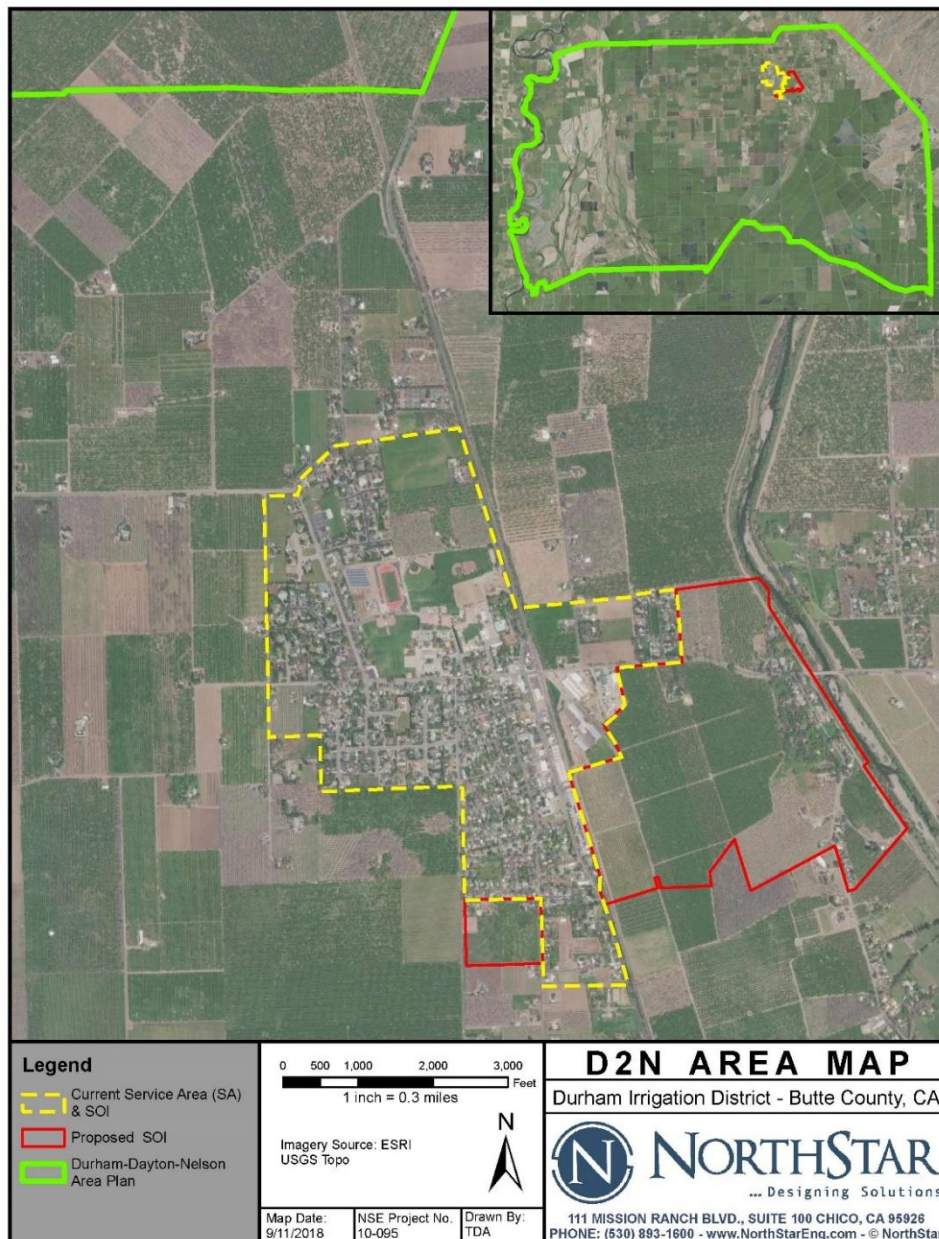


Figure 14 - D2N Area Map

There are numerous factors to consider in reviewing a SOI Plan, including current and anticipated land uses, facilities, and services, as well as any relevant communities of interest. Updates generally involve a comprehensive review of the entire SOI Plan, including boundary and SOI maps and the District's MSR. In reviewing an agency's sphere, the Commission is required to consider and prepare written statements addressing five factors enumerated under California Government Code Section 56425(e), as listed below.

1. The present and planned land uses in the area, including agricultural and open space lands;
2. The present and probable need for public facilities and services in the area;
3. The present capacity of public facilities and adequacy of public services which the agency provides, or is authorized to provide;
4. The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency; and,
5. For an update of an SOI of a city or special district that provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, the present and probable need for those public facilities and services of any disadvantaged unincorporated communities within the existing sphere of influence.

**SOI FACTOR NO. 1: THE PRESENT AND PLANNED LAND USES IN THE AREA, INCLUDING AGRICULTURAL AND OPEN-SPACE LANDS.**

As was noted previously, the Durham Irrigation District (DID) was established in 1948 to serve the unincorporated community of Durham and the surrounding area. DID's jurisdictional boundaries consist of the unincorporated community of Durham and the surrounding area. There are no clear significant growth areas; zoning restrictions limit the growth in the area. The Durham-Dayton-Nelson Area Plan established area-wide land use policies that provide less potential for future development than had been allowed under the former Durham Area Plan, which governed the area prior to the adoption of the Durham-Dayton-Nelson Area Plan. Any future growth is dictated by requests for annexation submitted to Butte LAFCo.

Most of the 506 acres within the District consist of urban uses on smaller parcels, most of which are located within the community of Durham. Land uses within the District include single-family residential uses, commercial uses, industrial uses, and public uses.

There is very little potential for new development within the boundaries of the District. A large portion of the community of Durham is zoned for medium and medium-high density residential uses. However, the lack of a public sanitary sewer system in the Durham area precludes the creation of small parcels or the construction of additional dwellings on existing developed parcels. The area of the District outside of the Durham community and urban reserve area is mostly zoned for agricultural uses on parcels with a minimum parcel size of 20 to 40 acres. One potential development within the District is located on a 40-acre parcel located on the east side of Durham, which is proposed to be developed with 40 1-acre single-family residential parcels.

Butte County General Plan Land Use Designations and Zoning Classifications within existing SOI					
General Plan Designation		Zoning Classification		Parcels	Acreage
Very Low Density Residential	VLDR	Very Low Density Residential	VLDR	178	256.60
Very Low Density Residential	VLDR	Planned Development	PD	14	11.80
Medium Density Residential	MDR	Medium Density Residential	MDR	200	48.07
Medium High Density Residential	MHDR	Medium High Density Residential	MHDR	69	22.33
Medium High Density Residential	MHDR	Planned Development	PD	21	2.45
Retail	RTL	General Commercial	GC	34	9.33
Industrial	I	General Industrial	GI	16	21.85
General Industrial	GI	General Industrial	GI	1	11.03
Public	P	Public	P	11	72.88
<b>TOTAL</b>				<b>544</b>	<b>456.34</b>

Table 7 - General Plan Land Use Designations and Zoning Classifications within existing SOI

General Plan Land Use Designations and Zoning Classifications within Proposed Additions to the SOI					
General Plan Designation		Zoning Classification		Parcels	Acreage
Very Low Density Residential	VLDR	Very Low Density Residential	VLDR	59	271.63
<b>TOTAL</b>				<b>59</b>	<b>271.63</b>

Table 8 - General Plan Land Use Designations and Zoning Classifications within Proposed Additions to the SOI

Figure 15, below, shows the distribution of zoning within the current and proposed DID Sphere of Influence.

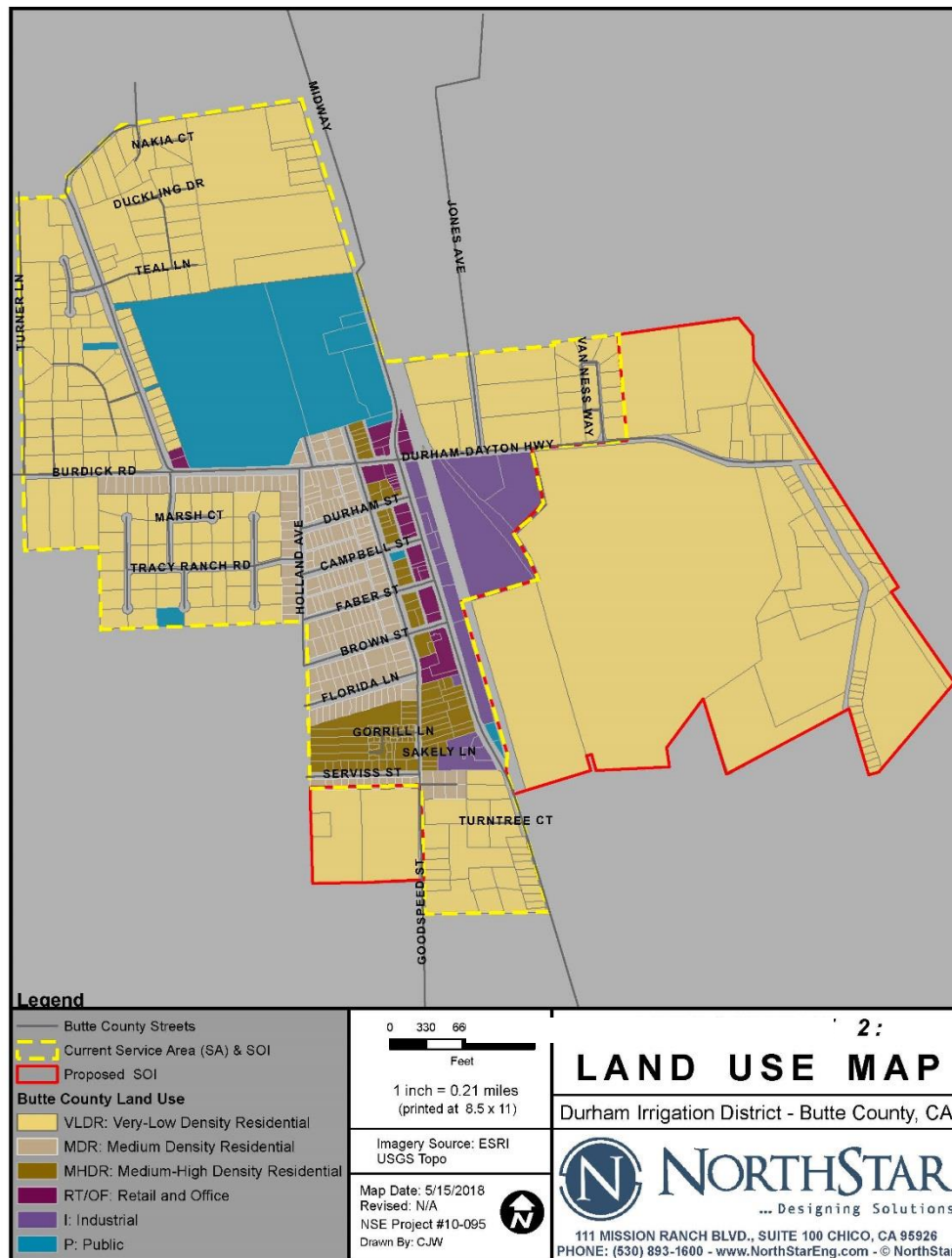


Figure 15 - DID SOI with Land Use

**SOI DETERMINATION 1-1: PRESENT AND PLANNED LAND USES**

Land uses within the boundaries of the Durham Irrigation District include residential, commercial, industrial, public, and agricultural uses. Future growth within the boundaries of the District is expected to occur primarily within the Durham urban reserve area.

**SOI FACTOR NO. 2: THE PRESENT AND PROBABLE NEED FOR PUBLIC FACILITIES AND SERVICES IN THE AREA.**

Over the last ten years there have been several proposed subdivisions within the Durham area but outside of the Durham Irrigation District boundary and existing SOI. These proposed developments have mostly considered the use of other private wells on a community water system rather than connecting to the DID system. However, the Butte County General Plan 2030 Policy D2N-P6.8 "Require subdivisions adjacent to existing water systems to connect to them" (Area and Neighborhood Plans Element). In these cases, DID has reviewed service options with the applicants, although the proposed subdivision projects have not moved forward. In the future DID would like to be able to provide service to them for the orderly development of the community of Durham.

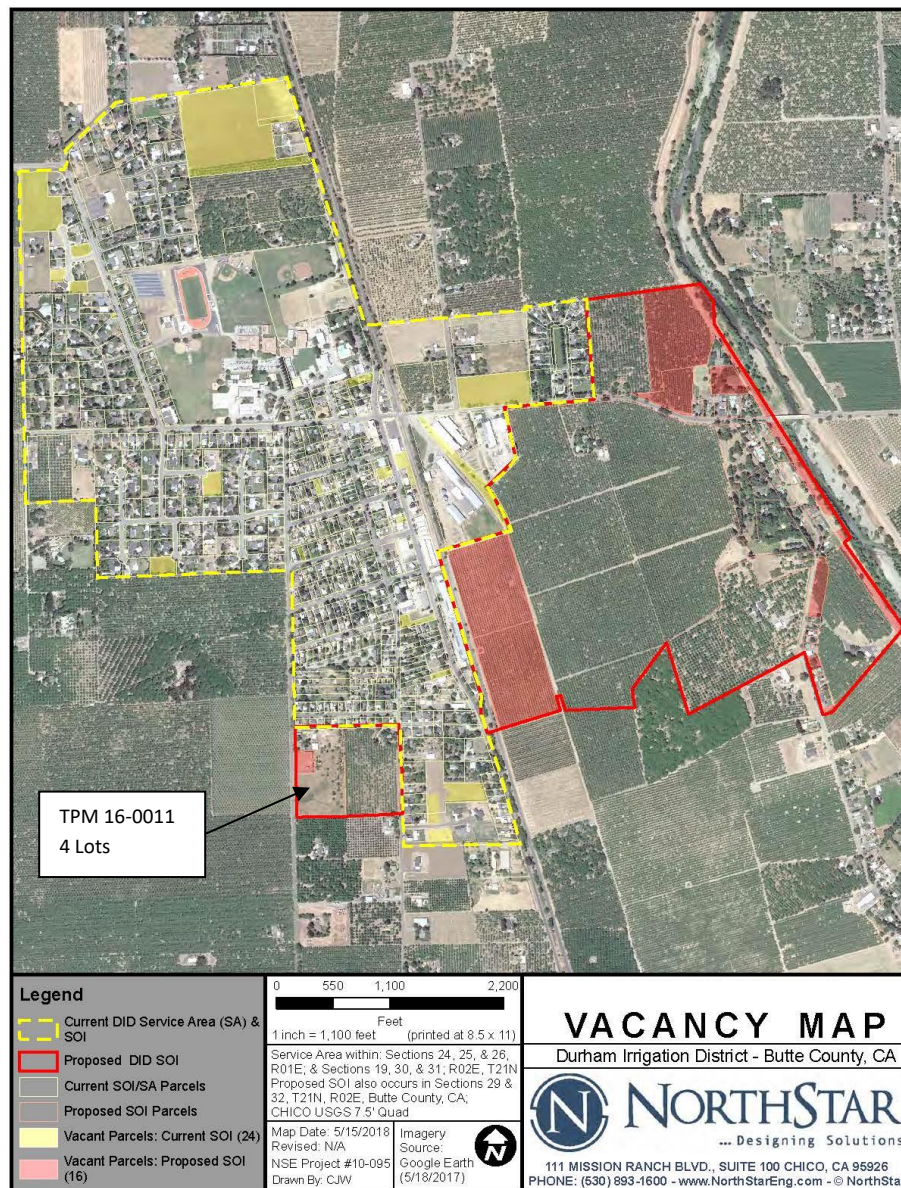


Figure 16 - SOI Vacancy Map



Figure 16 shows the locations of vacant parcels in the DID current and proposed Sphere of Influence. Currently there are 24 vacant parcels in the District and the proposed SOI will add an additional 16 parcels. The vacancy count does not take into account the parcels that do not meet the maximum density per the Butte County Land Use code.

As presented in MSR Factor No. 3 (Present and planned capacity of public facilities, adequacy of public services, and infrastructure needs or deficiencies), the District has adequate water supplies and conveyance infrastructure to provide service to existing customers. However, by expanding the SOI, especially in the eastern part of the District, it is likely that an additional well would need to be installed to meet the Title 22 requirements to provide adequate capacity for both pressure and use demands and ensure the required redundancy to serve additional parcels to be added to the District's SOI. Additional water line infrastructure would also be necessary to serve future development.

<b>SOI DETERMINATION 2-1: THE PRESENT AND PROBABLE NEED FOR PUBLIC FACILITIES AND SERVICES IN THE AREA</b>	
	<i>The District has adequate water supplies and conveyance infrastructure to provide service to existing customers. However, by expanding the SOI it is likely that an additional well would need to be installed to provide adequate water and required redundancy to serve additional parcels proposed to be added to the District's SOI. Additional water line infrastructure would also be necessary to serve future development.</i>

<b>SOI DETERMINATION 2-2: THE PRESENT AND PROBABLE NEED FOR PUBLIC FACILITIES AND SERVICES IN THE AREA</b>	
	<i>With demonstrated capabilities and adequate water supplies, the District is the logical choice to provide domestic water services to new development within the Durham community and the Commission encourages such consideration by affected local agencies with land use approval.</i>

**SOI FACTOR NO. 3: THE PRESENT CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES THAT THE AGENCY PROVIDES OR IS AUTHORIZED TO PROVIDE.**

As presented in MSR Factor No. 3 (Present and planned capacity of public facilities, adequacy of public services, and infrastructure needs or deficiencies), the District has been providing adequate supplies of water to its service area for day to day needs during years of normal precipitation. The District's water supply is sufficient to accommodate the projected growth within the current district limits. Expansion of the District limits may require the drilling of an additional well to be able to provide adequate water supply to the expanded area.

**SOI DETERMINATION 3-1: PRESENT CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES**

	<i>The District has been providing adequate supplies of water to its service area for day to day needs during years of normal precipitation. The District's water supply is sufficient to accommodate the projected growth within the current district limits. Expansion of the District limits may require the drilling of an additional well to be able to provide adequate water supply to the expanded area.</i>
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**SOI FACTOR NO. 4: THE EXISTENCE OF ANY SOCIAL OR ECONOMIC COMMUNITIES OF INTEREST IN THE AREA IF THE COMMISSION DETERMINES THAT THEY ARE RELEVANT TO THE AGENCY.**

DID's jurisdictional boundaries consist of the greater Durham area, which includes the unincorporated urban community of Durham.

**SOI DETERMINATION 4-1: EXISTENCE OF ANY SOCIAL OR ECONOMIC COMMUNITIES OF INTEREST IN THE AREA**

	<i>The jurisdictional boundaries of the Durham Irrigation District include the unincorporated community of Durham.</i>
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**SOI FACTOR NO. 5: FOR AN UPDATE OF A SPHERE OF INFLUENCE OF A CITY OR SPECIAL DISTRICT THAT PROVIDES PUBLIC FACILITIES OR SERVICES RELATED TO SEWERS, MUNICIPAL AND INDUSTRIAL WATER, OR STRUCTURAL FIRE PROTECTION, THAT OCCURS PURSUANT TO SUBDIVISION (G) ON OR AFTER JULY 1, 2012, THE PRESENT AND PROBABLE NEED FOR THOSE PUBLIC FACILITIES AND SERVICES OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN THE EXISTING SPHERE OF INFLUENCE.**

The Durham Irrigation District provides public facilities or services related to municipal water. However, per the Census tract data, the Durham community would not be considered a disadvantaged unincorporated community (DUC). However, there are areas within the Durham Irrigation District service area, specifically islands of multifamily housing and smaller single-family residences that, if analyzed separately from the tract data, may potentially qualify as a DUC. The District provides water services to the parcels within the District regardless of DUC status.

**SOI DETERMINATION 5-1: DISADVANTAGED UNINCORPORATED COMMUNITIES**

	<i>Per the Census tract data, as a whole, the Durham community would not be considered a disadvantaged unincorporated community (DUC). The District provides water services to the parcels within the District regardless of DUC status.</i>
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**Sphere of Influence Findings and Recommendations**

Based on the MSR and SOI determinations contained in this document, the Commission:

1. Finds that the Durham Irrigation District effectively provides domestic water service to the parcels within the District.
2. Finds that residential development in Durham Irrigation District's SOI can be efficiently served by connection to the District's domestic water system.
3. Finds that the District has demonstrated capabilities and adequate water supplies, the District is the logical choice to provide domestic water services to new development within the Durham community and the Commission encourages such consideration by affected local agencies with land use approval.
4. Adds 63 parcels, totaling approximately 280.1 acres, to the DID's Sphere of Influence, as shown on Figure 13 of the MSR/SOI Plan.

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**Adopted LAFCo Resolution****RESOLUTION NO. 16 2018/19****ADOPTION OF A MUNICIPAL SERVICE REVIEW UPDATE  
FOR THE DURHAM IRRIGATION DISTRICT AND  
ADOPTION OF A SPHERE OF INFLUENCE PLAN  
FOR THE DURHAM IRRIGATION DISTRICT**

**RESOLVED**, by the Butte Local Agency Formation Commission of the County of Butte, State of California, that

**WHEREAS**, a proposal for an update to the Durham Irrigation District's Sphere of Influence was heretofore requested by the Durham Irrigation District and accepted by the Executive Officer of this Local Agency Formation Commission pursuant to Title 5, Division 3, commencing with Section 56000 of the Government Code; and

**WHEREAS**, the Durham Irrigation District identified a need to update and amend the District's Sphere of Influence to accommodate the anticipated growth of the unincorporated community of Durham as projected in the Butte County 2030 General Plan; and

**WHEREAS**, a service review mandated by Government Code Section 56430 was conducted by the Local Agency Formation Commission of the County of Butte (hereinafter referred to as "the Commission") for the Durham Irrigation District on November 6, 2008, in accordance with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code Sections 56000 et seq.) and due to recent changes in Durham Irrigation District management, operations, and finances it was determined that the 2008 MSR needed to be updated to reflect current District service capabilities; and

**WHEREAS**, a sphere of influence update mandated by Government Code Section 56425 has been prepared by the Commission for the Durham Irrigation District in accordance with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code Sections 56000 et seq.); and

**WHEREAS**, at the times and in the form and manner provided by law, the Executive Officer has given notice of the public hearing by the Commission on this matter; and

**WHEREAS**, the Executive Officer, pursuant to Government Code Section 56428, has reviewed this proposal and prepared a report, including his recommendations thereon, and has furnished a copy of this report to each person entitled to a copy; and

**WHEREAS**, a public hearing by this Commission was called for June 6, 2019, and at the time and place specified in the notice of public hearing; and

**WHEREAS**, at the hearing, this Commission heard and received all oral and written protests; the Commission considered all plans and proposed changes, objections and evidence which were made, presented, or filed; and all persons present were given an opportunity to hear and be heard in respect to any matter relating to the proposal, in evidence presented at the hearing; and

**NOW, THEREFORE**, the Local Agency Formation Commission of the County of Butte

**RESOLUTION NO. 16 2018/19**

**DOES HEREBY RESOLVE, DETERMINE AND ORDER** as follows:

**Section 1. Environmental Findings**

- A. Acting as Lead Agency pursuant to the California Environmental Quality Act Guidelines, the Commission finds that the Municipal Service Review Update for the Durham Irrigation District is Categorically Exempt from the provisions of CEQA under Section 15306, "Information Collection."
- B. Finds that on January 29, 2019, the Durham Irrigation District Board of Directors, acting as Lead Agency, prepared and adopted an initial Study/Negative Declaration (SCH # 2018122044) for the District's proposed SOI expansion, which determined that the SOI expansion would not create any significant environmental impacts.

**Section 2. Findings for Adoption of the Sphere of Influence Amendment**

- A. The Commission has considered the factors determined by the Commission to be relevant to this proposal, including, but not limited to, Sphere of Influence and General Plan consistency, and other factors specified in Government Code Sections 56425 and 56428 and as described in the Public Review Draft MSR Update and SOI Plan for the Durham Irrigation District and in the staff report dated May 30, 2019, for the meeting of June 6, 2019, in that:
  - (1) The Commission has considered the present and planned land uses in the area, including agricultural and open space lands as described in the Butte County General Plan Land Use and Agricultural Elements.
  - (2) The Commission has considered the present and probable need for public facilities and services in the Durham Irrigation District's existing and proposed Sphere of Influence as described in the Durham Irrigation District's MSR/SOI Plan and the Butte County 2030 General Plan.
  - (3) The Commission has considered the present capacity of public facilities and adequacy of public services which the agency provides or is authorized to provide as described in the updated Durham Irrigation District Municipal Service Review, the SOI Plan, and the Butte County 2030 General Plan.
  - (4) The Commission has considered the existence of any social or economic communities of interest in the area and received as testimony in public hearings.
  - (5) The Commission has considered the present and probable need for those public facilities and services of any disadvantaged unincorporated communities within the existing sphere of influence.

**RESOLUTION NO. 16 2018/19****Section 3. Terms and Conditions adopted by LAFCo**

Pursuant to its authority under Part 2, Chapter 4 of the Cortese-Knox Local Government Reorganization Act of 2000, Butte LAFCo incorporates the following terms and conditions into the Sphere Plan for the Durham Irrigation District:

1. All Commission fees must be paid in full prior to the new sphere of influence becoming effective.

**WHEREAS**, the Sphere of Influence Plan determinations for the Durham Irrigation District are made in conformance with Government Code Section 56425 and local Commission policy; and,

**WHEREAS**, based on presently existing evidence, facts, and circumstances considered by this Commission, including the findings as outlined above, the Commission adopts written determinations as set forth. The Commission adopts the SOI Plan for the Durham Irrigation District and updates the sphere of influence for the Durham Irrigation District by adding 63 parcels totaling approximately 280 acres, to the District's SOI as depicted in Figure 13 of the SOI Plan, adopted by the Commission on June 6, 2019; and,

**NOW, THEREFORE, BE IT RESOLVED**, that pursuant to powers provided in §56430 of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, the Local Agency Formation Commission of the County of Butte adopts the Municipal Service Review Update for the Durham Irrigation District, dated June 6, 2019. Furthermore, pursuant to powers provided in §56425, the Commission adopts the SOI Plan for the Durham Irrigation District and updates the existing sphere of influence for the Durham Irrigation District, as depicted on Figure 13 of the Durham Irrigation District SOI Plan, adopted by the Commission on June 6, 2019.

**PASSED AND ADOPTED** by this Local Agency Formation Commission of the County of Butte, on the 6<sup>th</sup> day of June 2019, by the following vote:

**AYES:** Commissioners Bolin, Kiely, Steel, McGreehan, Wilkinson, Lambert and Vice-Chair Connelly

**NOES:** None

**ABSENT:** None

**ABSTAINS:** None

**ATTEST:**

  
Clerk of the Commission

  
**Bill Connelly**, Vice-Chair  
Butte Local Agency Formation Commission

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## **Public Comments Received**

No written comments were received regarding the Public Review Draft MSR/SOI Plan for the Durham Irrigation District

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## GLOSSARY

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<b>ADOPTED BUDGET</b>	The spending plan approved by resolution of the Board of Supervisors after the required public hearing and deliberations on the Recommended Budget. The Adopted Budget must be balanced with Total Financing Sources equal to Total Financing Uses.
<b>ANNEXATION</b>	The inclusion, attachment, or addition of a territory to a city of district.
<b>BOARD OF SUPERVISORS</b>	The elected board of supervisors of a county.
<b>BUDGET</b>	The planning and controlling document for financial operation with appropriations and revenues for a given period of time, usually one year.
<b>CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)</b>	The California Environmental Quality Act (CEQA) is intended to inform governmental decision-makers and the public about potential environmental effects of a project, identify ways to reduce adverse impacts, offer alternatives to the project, and disclose to the public why a project was approved. CEQA applied to projects undertaken, funded, or requiring issuance of a permit by a public agency.
<b>CONTINGENCY</b>	An amount appropriated for unforeseen expenditure requirements. Transfers from this budget unit to any other budget unit for specific use require a four-fifths vote of the Board of Supervisors.
<b>DISTRICT OR SPECIAL DISTRICT</b>	An agency of the state, formed pursuant to general law or special act, for the local performance of government or proprietary functions within limited boundaries. "District" or "special district" includes a county service area.
<b>EXPENDITURES</b>	Expenditures occur when the County buys goods and services and pays its employees. Expenditures can be categorized into three types: operating expenditures, capital expenditures, and debt service expenditures. Operating expenditures are the day-to-day spending on salaries, supplies, utilities, services, and contracts. Capital expenditures are generally for acquisition of major assets such as land and buildings or for the construction of buildings or other improvements. Debt expenditures repay

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	borrowed money and interest on that borrowed money.
<b>FISCAL YEAR</b>	Twelve-month period for which a budget is prepared. Butte County's fiscal year is July 1 through June 30 of each year.
<b>FUND BALANCE</b>	The difference between assets and liabilities reported in a governmental fund.
<b>GENERAL PLAN</b>	A document containing a statement of development policies, including a diagram and text setting forth the objectives of the plan. The general plan must include certain state mandated elements related to land use, circulation, housing, conservation, open-space, noise, and safety.
<b>INTERFUND TRANSFER</b>	A transfer made between budget units in different funds for services rendered and received. The service rendering budget unit shows these transfers as revenue, as opposed to expenditure reduction.
<b>LAFCO</b>	A state mandated local agency that oversees boundary changes to cities and special districts, the formation of new agencies including incorporation of new cities, and the consolidation of existing agencies. The broad goals of the agency are to ensure the orderly formation of local government agencies, to preserve agricultural and open space lands, and to discourage urban sprawl.
<b>LOCAL ACCOUNTABILITY AND GOVERNANCE</b>	The term "local accountability and governance," refers to public agency decision making, operational and management styles that include an accessible staff, elected or appointed decision-making body and decision making process, advertisement of, and public participation in, elections, publicly disclosed budgets, programs, and plans, solicited public participation in the consideration of work and infrastructure plans, programs or operations and disclosure of results to the public.
<b>MANAGEMENT EFFICIENCY</b>	The term "management efficiency," refers to the organized provision of the highest quality public services with the lowest necessary expenditure of public funds. An efficiently managed entity (1) promotes and demonstrates implementation of continuous improvement plans and strategies for budgeting, managing costs, training and utilizing personnel, and customer service and involvement,

(2) has the ability to provide service over the short and long term, (3) has the resources (fiscal, manpower, equipment, adopted service or work plans) to provide adequate service, (4) meets or exceeds environmental and industry service standards, as feasible considering local conditions or circumstances, (5) and maintains adequate contingency reserves.

**MUNICIPAL SERVICE REVIEW (MSR)**

A study designed to determine the adequacy of governmental services being provided in the region or sub-region. Performing service reviews for each city and special district within the county may be used by LAFCO, other governmental agencies, and the public to better understand and improve service conditions.

**PUBLIC AGENCY**

The state or any state agency, board, or commission, any city, county, city and county, special district, or other political subdivision.

**RESERVE**

(1) For governmental type funds, an account used to earmark a portion of the fund balance, which is legally or contractually restricted for a specific use or not appropriate for expenditure. (2) For proprietary type/enterprise funds, the portion of retained earnings set aside for specific purposes. Unnecessary reserves are those set aside for purposes that are not well defined or adopted or retained earnings that are not reasonably proportional to annual gross revenues.

**REVENUE**

Funds received to finance governmental services from various sources and treated as income to the County. Examples: property taxes, sales taxes, and per parcel service charges.

**SPHERE OF INFLUENCE (SOI)**

A plan for the probable physical boundaries and service area of a local agency, as determined by the LAFCO

**SPHERE OF INFLUENCE DETERMINATIONS**

In establishing a sphere of influence the Commission must consider and prepare written determinations related to present and planned land uses, need and capacity of public facilities, and existence of social and economic communities of interest.

**ZONE OF BENEFIT**

A geographic area within a county service area that provides a particular service or services to the parcels within that area.

**ZONING**

The primary instrument for implementing the general plan. Zoning divides a community into districts or "zones" that specify the permitted/prohibited land uses.