

**COLUSA  
LOCAL AGENCY FORMATION COMMISSION  
(LAFCo)**

**HEARING DRAFT**

**MAXWELL PUBLIC UTILITY DISTRICT (MPUD)  
MUNICIPAL SERVICE REVIEW (MSR)  
SPHERE OF INFLUENCE (SOI)**

**SEPTEMBER 2017**

## ***EXECUTIVE SUMMARY***

The Maxwell Public Utility District is a well-run District providing sewer and water service for the community of Maxwell. The District has a vacancy on the Board of Directors. Although the District still has enough directors for a quorum, it is important that the District add a new director as soon as feasible. If there is insufficient community interest to have a five-member Board of Directors the District may be in jeopardy in the future.

The water service provided by the District does not include water meters at each service. This should be a high priority for the future. Although there was sufficient rain in 2016-2017, there could be drought years in the future. Water meters would allow the District to charge more for additional water use.

Personnel costs are increasing. The District should be aware of comparable salaries in other districts and may need to work with the County of Colusa or another district to share personnel costs, particularly for the workers requiring State Certification to perform their jobs. The District should also be aware that PERS costs may increase substantially in the future.

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## **1 INTRODUCTION**

### **1.1 Role and Responsibility of LAFCo**

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, as amended (“CKH Act”) (California Government Code §§56000 et seq.), is LAFCo’s governing law and outlines the requirements for preparing Municipal Service Reviews (MSRs) for periodic Sphere of Influence (SOI) updates. MSRs and SOIs are tools created to empower LAFCo to satisfy its legislative charge of “discouraging urban sprawl, preserving open-space and prime agricultural lands, efficiently providing government services, and encouraging the orderly formation and development of local agencies based upon local conditions and circumstances (§56301).

CKH Act Section 56301 further establishes that

*“one of the objects of the commission is to make studies and to obtain and furnish information which will contribute to the logical and reasonable development of local agencies in each county and to shape the development of local agencies so as to advantageously provide for the present and future needs of each county and its communities.”*

Based on that legislative charge, LAFCo serves as an arm of the State; preparing and reviewing studies and analyzing independent data to make informed, quasi-legislative decisions that guide the physical and economic development of the state (including agricultural uses) and the efficient, cost-effective, and reliable delivery of services to residents, landowners, and businesses.

While SOIs are required to be updated every five years, they are not time-bound as planning tools by the statute, but are meant to address the “probable physical boundaries and service area of a local agency” (§56076). SOIs therefore guide both the near-term and long-term physical and economic development of local agencies their broader county area, and MSRs provide the near-term and long-term time-relevant data to inform LAFCo’s SOI determinations.

### **1.2 Purpose of a Municipal Service Review**

As described above, MSRs are designed to equip LAFCo with relevant information and data necessary for the Commission to make informed decisions on SOIs. The CKH Act, however, gives LAFCo broad discretion in deciding how to conduct MSRs, including geographic focus, scope of study, and the identification of alternatives for improving the efficiency, cost-effectiveness, accountability, and reliability of public services.

The purpose of a Municipal Services Review (MSR) in general is to provide a comprehensive inventory and analysis of the services provided by local municipalities, service areas, and special districts. A MSR evaluates the structure and operation of the local municipalities, service areas, and special districts and discusses possible areas for improvement and coordination. The MSR is intended to provide information and analysis to support a sphere of influence update.

A written statement of the study's determinations must be made in the following areas:

1. Growth and population projections for the affected area;
2. The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence;
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;
4. Financial ability of agencies to provide services;
5. Status of, and opportunities for, shared facilities;
6. Accountability for community service needs, including governmental structure and operational efficiencies

The MSR is organized according to these determinations listed above. Information regarding each of the above issue areas is provided in this document.

### **1.3 Purpose of a Sphere Of Influence**

In 1972, LAFCOs were given the power to establish SOIs for all local agencies under their jurisdiction. As defined by the CKH Act, "sphere of influence" means a plan for the probable physical boundaries and service area of a local agency, as determined by the commission" (§56076). SOIs are designed to both proactively guide and respond to the need for the extension of infrastructure and delivery of municipal services to areas of emerging growth and development. Likewise, they are also designed to discourage urban sprawl and the premature conversion of agricultural and open space resources to urbanized uses.

The role of SOIs in guiding the State's growth and development was validated and strengthened in 2000 when the Legislature passed Assembly Bill ("AB") 2838 (Chapter 761, Statutes of 2000), which was the result of two years of labor by the Commission on Local Governance for the 21st Century, which traveled up and down the State taking testimony from a variety of local government stakeholders and assembled an extensive set of recommendations to the Legislature to strengthen the powers and tools of LAFCOs to promote logical and orderly growth and development, and the efficient, cost-effective, and reliable delivery of public services to California's residents, businesses, landowners, and visitors.

The requirement for LAFCOs to conduct MSRs was established by AB 2838 as an acknowledgment of the importance of SOIs and recognition that regular periodic updates of SOIs should be conducted on a five-year basis (§56425(g)) with the benefit of better information and data through MSRs (§56430(a)). A MSR is conducted prior to, or in conjunction with, the update of a SOI and provides the foundation for updating it.

LAFCo is required to make five written determinations when establishing, amending, or updating an SOI for any local agency that address the following (§56425(c)):

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 that 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.
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.



## 2 MAXWELL COMMUNITY BACKGROUND

### 2.1 Maxwell Location

Maxwell is the fourth largest community in Colusa County with a population of 1,015 persons. The town of Maxwell, is located along the I-5 corridor. The 162-acre agriculture and residential community has a well-defined downtown. It is the economic and social center of the north Colusa County region.<sup>1</sup> It lies at an elevation of 92 feet. The main crop grown in the area is rice, though a variety of others such as grapes, almonds, squash, and sunflowers are grown as well.

### 2.2 Maxwell Soils

The following table shows the soils in the Maxwell PUD. A map showing the location of the various soil types is found at the end of this report.

Maxwell PUD Soils	Sum of Acres
102, Capay Clay Loam	517.15
105, Willows silty clay, 0 to 1 percent slopes, occasionally flooded	926.46
106, Willows Silty Clay	1,074.45
144, Hillgate clay loam, 0 to 2 percent slopes	93.48
211, Corval Clay Loam	502.40
<b>Grand Total</b>	<b>3,113.93</b>

### 2.3 Maxwell History<sup>2</sup>

Maxwell was the last of the Central Pacific-Southern Pacific Railway towns to be settled in Colusa County. W.S. McCoy, landowner and constable of the area, decided to emulate Tacitus Arbuckle by developing a town site adjacent to the route of the proposed Northern Railway. The town plat, which was drawn freehand, was recorded at the courthouse in Colusa in 1877. During the same year, a general store, hotel, post office, saloon, blacksmith and wagon shop, and several residences were built.

The town was originally called Occident, but was renamed in honor of George Maxwell (the town's postmaster) after he donated his land to the railroad for construction of its depot. As the tracks were laid in 1878, a construction boom ensued in the new town. Most of the town site was sold to the railroad's development subsidiary, the Western Development Company, for one dollar a lot.

Grain warehouses and livery stables were built as new settlers arrived and stage coach connections were established between Maxwell and Colusa. By 1891, the community had grown to about 400 people. Dry land barley and wheat were grown on the surrounding farms while cattle and sheep grazed the foothills to the west.

<sup>1</sup> Colusa County, General Plan Background Report, June 2010, Prepared by De Novo Planning Group, [WWW.DENOVOPANNING.COM](http://WWW.DENOVOPANNING.COM), Page 1-30.

<sup>2</sup> Colusa County, General Plan Background Report, June 2010, Prepared by De Novo Planning Group, [WWW.DENOVOPANNING.COM](http://WWW.DENOVOPANNING.COM), Page 1-31.

Some of the historic buildings in Maxwell's commercial district still remain today, including the Masonic Temple (1885), the Opera House (1912), Brown's Garage (1910), and the Odd Fellows Hall (1914). Many of these buildings were popular social gathering or entertainment places during the town's early years but are mostly vacant or underutilized today.

## **2.4 Maxwell Population Data**

The 2010 US Census reported that Maxwell had a population of 1,103 living in 365 households out of which 156 (42.7%) had children under the age of 18 living in them, 79 households (21.6%) were made up of individuals and 38 (10.4%) had someone living alone who was 65 years of age or older. The average household size was 3.02. There were 275 families (75.3% of all households); the average family size was 3.56. The population was spread out in age as follows:

### MAXWELL, CALIFORNIA \*\*\* 2010 AGE DISTRIBUTION

AGE	NUMBER OF PEOPLE	PERCENTAGE
Under the age of 18	356 people	32.3%
Aged 18 to 24	89 people	8.1%
Aged 25 to 44	265 people	24.0%
Aged 45 to 64	242 people	21.9%
65 years of age or older	<u>151 people</u>	<u>13.7%</u>
TOTAL	1,103 people	100.0%

The median age was 33.9 years. For every 100 females there were 108.9 males. For every 100 females age 18 and over, there were 101.9 males.

There were 408 housing units of which 235 (64.4%) were owner-occupied, and 130 (35.6%) were occupied by renters. The homeowner vacancy rate was 0.4%; the rental vacancy rate was 1.5%. There were 695 people (63.0% of the population) living in owner-occupied housing units and 408 people (37.0%) living in rental housing units.

## **2.5 Maxwell Land Use**

### **2.5.1 Maxwell Development**

Maxwell's development has historically been oriented around the north-south axis along the railroad and an east-west axis perpendicular to the railroad along Oak Street. The original town site was supplemented during the town's early years by a series of subdivisions or "additions" named after the landowners, including McCoy, Felt, Danley, Harden, and Mathieson. The additions generally extended the town's grid of streets to the configuration it bears today, roughly eight blocks by eight blocks.

## 2.5.2 Maxwell Focus Areas<sup>3</sup>

### A. Business District

The Town's business district extends along both sides of Oak Street for about three blocks. Commercial uses are centered along the blocks just west of the old rail depot. As in other small towns in Colusa County, downtown has been in an economic decline. In response, many of the newer shops in Maxwell focus on the sale of specialty items such as flowers, antiques and gifts. Oak Street also includes a restaurant, market, auto parts shop, beauty salon, barber shop, laundromat, and the town library. Several of the storefronts are vacant. Just west of the retail district, Oak Street includes the post office, fire department and American Legion Hall.

### B. Old 99 and Railroad Area

Agricultural-related industrial uses extend along both sides of the railroad, as they have for more than a century. Most of the wood sheds and buildings that lined the tracks have been demolished or lost to fire. A large grain warehouse, surrounded by rice harvesters, occupies the northeast corner of Oak and the railroad. Other metal or masonry warehouses are located south of Oak Street along the west side of the tracks and Old Highway 99. There are a number of large vacant lots along the railroad and Highway 99 used for truck and harvester parking. These lots are intermixed with scattered commercial uses, including two service stations, two restaurants, a bank, and a convenience store.

### C. Residential Areas

Maxwell contains about 320 houses, 20 apartment units and a mobile home park. One-half of the town's housing lies in the northwest quadrant (north of Oak Street and west of the railroad). In total, about 120 acres in the town are used for housing and the adjoining streets. Most residential lots in the original town site were 25 feet by 116 feet, while the "additions" featured slightly larger lots. Virtually all of the housing in the Maxwell town site was built on parcels consisting of two or more of the original lots. Residential parcels as large as one-half acre are not uncommon within the town, although most homes are on lots of between 6,000 and 15,000 square feet.

The residential areas are fairly compact. Although most blocks contain one or two vacant lots, the lots are often used for backyard gardening and in some cases for raising livestock. Some of the residential blocks include non-residential uses, especially barns, large metal sheds, and small home businesses. The residential area also includes the elementary school on the north edge of town, the high school on the west edge of town, and three churches.

Nearly all recent residential growth in Maxwell has been on the northwest and southern edges of town. This is likely to be the case in the near future as well, since these areas contain most of the available vacant lots in the public utility district. Development on the

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<sup>3</sup> Colusa County, General Plan Background Report, June 2010, Prepared by De Novo Planning Group, [WWW.DENOVOPLANNING.COM](http://WWW.DENOVOPLANNING.COM), Page 1-30.

north has been on one-half and one-third acre lots and has consisted of higher-priced housing. Development in the southeast has been concentrated in the 28 lot subdivision along Cedar Street and Central Avenue and in a series of lots along Cosner Avenue.

### 2.5.3 General Plan and Zoning Designations

The following tables show the Colusa County General Plan and zoning designations for the Maxwell PUD. The District includes over four hundred acres designated for Urban Reserve so there is room for additional development within the District. Maps of the General Plan and Zoning designations are shown at the end of this report.

MAXWELL PUD	
Colusa County General Plan Designations	Sum of Acres
AG-Agriculture General	261.68
C-Commercial	131.84
I-Industrial	775.50
MU-Mixed Use	9.98
NL-No designation, Federal, State and other agency lands	143.51
PS-Public, Semi-Public Service	86.19
ROW-Road right-of-way	1.86
UR-Urban Residential	329.64
URA- Urban Reserve Area	423.87
<b>Grand Total*</b>	<b>2164.07</b>

\*Total is less than soils total because streets are not included.

MAXWELL PUD	
Zone	Sum of Acres
C-2-Community Commercial	48.35
C-H-Highway Service Commercial	161.40
E-A-Exclusive Agriculture	276.90
M-1-Light Industrial	208.46
M-2-Heavy Industrial	567.04
MU-Mixed Use	9.98
P-F-Public Facilities	86.19
R-1-6-Residential Single Family, 6,000 square foot minimum lot size	175.24
R-1-8-Residential Single Family, 8,000 square foot minimum lot size	318.10
R-4-Apartment Professional	43.23
RR-5-Rural Residential, five acre minimum lot size	123.81
SFA, State, Federal and other agency lands	143.51
ROW-Road right-of-way	1.86
<b>Grand Total*</b>	<b>2164.07</b>

\*Total is less than soils total because streets are not included.

## 2.6 Maxwell Schools

The Maxwell Unified School District has two schools, elementary and junior-senior high school. The District Office address is as follows:

Maxwell Unified School District, 515 Oak Street,  
P. O. Box 788, Maxwell, CA 95955  
Phone 530-438-2052, Fax 530-438-2693,  
Website: <http://www.maxwell.k12.ca.us/>

The Maxwell High School address is as follows:

Maxwell High School,<sup>4</sup> P.O. Box 788, Maxwell, CA 95955  
Phone 530-438-2291, Fax 530-438-2693, Ron Turner, Principal.

The Junior-Senior High School has 82 students in grades 7-12.

The Maxwell Elementary School address is as follows:

Maxwell Elementary School,<sup>5</sup> 146 North Street, Maxwell, CA 95955  
Phone 530-438-2401, Ron Turner, Principal E-Mail: [rturner@maxwell.k12.ca.us](mailto:rturner@maxwell.k12.ca.us)

The 2013-14 Student Enrollment by Grade Level for the Maxwell Elementary School is as follows:

Grade Level	Number of Students
Kindergarten	29
Grade 1	30
Grade 2	30
Grade 3	27
Grade 4	27
Grade 5	16
Grade 6	25
Grade 7	20
Grade 8	<u>22</u>
Total	226

## 2.7 Maxwell Cemetery District

The Maxwell Cemetery District is located around the community of Maxwell in Colusa County. The Maxwell Cemetery District was started April 18, 1923. The Cemetery was opened in 1880.<sup>6</sup> The Maxwell Cemetery (Assessor's Parcel No. 11-270-058)<sup>7</sup> is located  $\frac{3}{4}$  mile west of Maxwell at the northeast corner of Sutton Road and the Maxwell-Sites Highway. The Cemetery has fences, lawns, and oil and gravel roads. In 2000-2001, four wrought-iron gates were installed at the entrances of the Cemetery. A sprinkler system was installed. The Cemetery is eight acres in size with approximately 2500 filled plots and 1,800 grave sites available in the new section.<sup>8</sup> The Maxwell Cemetery District has one permanent employee and one temporary employee.

<sup>4</sup> <http://maxwell-ca.schoolloop.com/file/1373895264477/1377365501732/5717301671423479801.pdf>, March 31, 2016.

<sup>5</sup> <http://maxwell-ca.schoolloop.com/file/1373895264477/1377365501732/3659324544243479077.pdf>, March 31, 2016.

<sup>6</sup> County of Colusa, "Special District Audits Fiscal Year 2005-2006."

<sup>7</sup> Colusa County Assessor, August 24, 2007.

<sup>8</sup> Maxwell Cemetery District, Director Kerry Reckers, (530) 438-2076, August 13, 2007.

## **2.8 Maxwell Churches**

Maxwell has three churches as follows:

- Maxwell Baptist Church, 177 N. California Street, Maxwell CA
- Maxwell Methodist Church, 169 Olive Street, Maxwell, CA 95955
- Sacred Heart Catholic Church, 45 North Elm Street, Maxwell, Ca 95955

## **2.9 Water Treatment Background**

Small community water treatment has posed an enormous problem for the drinking water regulatory community, drinking water professionals, and the people living in these communities. The Safe Drinking Water Act (SDWA) and subsequent regulations require that all water in the distribution system and at every tap connected to the distribution system comply. Water treatment usually consists of filtration and disinfection. Water treatment standards essentially mandate central treatment for drinking water prior to entering the distribution system. No water that exceeds a primary standard may be used for drinking water.

Primary Standards have been developed to protect human health and are rigorously enforced by the Department of Health Services. For very small communities, this may be a cost that poses an undue burden. Often it could be a cost that has negative public health implications. For a very low-income family, the money spent on water treatment may not be available for other essentials.

Rather than spend that money, a community may apply for a variance or exemption. Exemptions and variances from the State requirements are intended to be temporary solutions to regulatory compliance. They may, however, extend indefinitely leaving a community with no water that meets the regulation.

Secondary Standards are intended to protect the taste, odor or appearance of drinking water. California Code requires that, if a community water system experiences an exceedance of certain secondary standard, quarterly sampling must be initiated. Compliance is then determined based upon the average of four consecutive quarterly samples. Non-compliant water must then be treated to meet the secondary standards.

Water distribution systems carry water for both domestic use and for fire protection. The distribution system should be sized to perform both functions simultaneously, delivering sufficient water volume and pressure. Pipes should be made of durable and corrosion-resistant materials, and alignments located in areas that are easy to access for repairs and maintenance. Fire hydrants should be placed a maximum of 600 feet apart along the water mains and a maximum of 500 feet from the end of water lines. For structure fires, NFPA recommends the availability of an uninterrupted water supply for 30 minutes with enough pressure to apply at least 400 gallons of water per minute.

Some water loss in the distribution system can be expected. Water loss is the difference between the volume of water pumped from the water supply well and the volume of water sold to users. A loss of water from 10% to 20% is considered acceptable by the American Water Works Association (AWWA).

## **2.10 Wastewater Treatment Overview**

Wastewater is the water that drains from sinks, showers, washers, and toilets. Wastewater also includes water used for some outdoor purposes, such as draining chlorinated pool water, commercial car washes and industrial processes. Underground sanitary sewer pipelines carry sewage to a wastewater treatment plant (WWTP), where it is treated, sanitized and discharged.

Wastewater Treatment demand management strategies include the following:

- Sewer infiltration and inflow (I&I) control
- Industrial pretreatment and recycling
- Water conservation

Service providers can reduce infiltration and inflow with capital improvements, such as pipeline rehabilitation, manhole cover replacement, and root eradication. They can also address sources on private property, such as broken service lines, uncapped cleanouts and exterior drains, through public education, incentives, and regulatory strategies.

Communities use various techniques to prohibit discharge of unwanted pollutants or to reduce the quantity and strength of wastewater discharged to sewers. These techniques include the following:

- Permit limitations on the strength and contaminant levels of industrial and commercial wastewater
- Increased rates or surcharges on high-strength wastes
- Incentives or requirements for water recycling and reuse within the industrial or commercial operation

Water conservation measures are effective for reducing average wastewater flows, but have less impact on peak flows, which are usually strongly influenced by infiltration and inflow contributions. Water conservation has little or no impact on organic loading to the treatment plant.

### **3 MAXWELL PUBLIC UTILITY DISTRICT**

#### **3.1 Maxwell PUD Background**

The Maxwell Public Utility District was incorporated February 23, 1934 in order to provide water and sewer service to the residents in the town of Maxwell. The District's Governing Board consisted of three members all living within the District sphere of influence. Effective November 2003, the District's Governing Board increased to five members all required to be living in the District's sphere of influence.

Mission Statement:

*The District's primary goal is to provide safe drinking water 24 hours a day to customers as well as keep the wastewater safely flowing to the treatment facility. In order to do this we must have properly trained operators, an aggressive preventative maintenance program, a balanced budget, reserve funds to replace components when they wear out, and also to meet all state and federal requirements.<sup>9</sup>*

#### **3.2 Contact Information**

Contact information for the Maxwell PUD is as follows:

Mail: Maxwell PUD, PO Box 294, Maxwell, CA 95955

E-Mail: [maxwpud@frontiernet.net](mailto:maxwpud@frontiernet.net)

Phone: 530-438-2505, Fax: 530-438-2902, Cell Phone: 530-902-1529

#### **3.3 Maxwell PUD Board of Directors**

The Maxwell Public Utility District Board of Directors and the term expiration dates are as follows:<sup>10</sup>

Kenneth Cohen, President	December, 2020
Tom Detlefsen, Vice-President	December, 2020
David Carvalho, Jr., Secretary-Treasurer	December, 2018
Carmelo Para, Sergeant at arms	December, 2020
Vacant	December, 2018

The Board meetings are held on the second Tuesday of the month at 8:00 pm at the District Office, 54 N. San Francisco Street, Maxwell, CA 95955. The District belongs to the California Rural Water Association.<sup>11</sup>

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<sup>9</sup> Maxwell PUD, FINANCIAL STATEMENTS TOGETHER WITH INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED JUNE 30, 2014, Prepared by Smith & Newell, 950 Tharp Road, Yuba City, CA 95993, Phone 530-673-9790, Fax 530-673-1305, E-Mail: SMITHNEW@SBCGLOBAL.NET, Page 4

<sup>10</sup> Maxwell PUD, [maxwpud@frontiernet.net](mailto:maxwpud@frontiernet.net), June 23, 2017.

<sup>11</sup> Colusa LAFCO, Maxwell PUD Questionnaire, March 12, 2015.



### **3.4 Employees**

The staff members of the Maxwell PUD are as follows: <sup>12</sup>

Diana Mason, Office Manager

Dave Wadsworth, General Manager (He has a D1 license for water and a T1 for water transmission and a Grade 1 for wastewater.)

Curt Chambers, Operations supervisor (He has a D1 for water.)

Rick Smith, Chief Plant Operator (He has a Grade 4, wastewater.)

### **3.5 Maxwell PUD Rate Schedule**

The rate schedule for the Maxwell Public Utility District is as follows:

Water:           \$32.00 per EDU  
Sewer:           \$48.00 per EDU

Water Connection:   \$1,450.00  
Sewer Connection:   \$1,750.00  
                                  \$3,200.00

Reconnection fee if water connection is terminated: \$50   Late payment fee: \$2.50

### **3.6 Maxwell PUD Water System**

The district has adopted water standards and water conservation measures. The latest Field Water System Inspection Report was completed in March 2009 and latest SWRCB inspection report was conducted on February 4, 2015.

#### **3.6.1 Water Service Connections**

The District reports the following water service connections: <sup>13</sup>

MAXWELL PUD WATER SERVICE CONNECTIONS	
Total water service connections	399
Single Family water connections	351
Multi-family water connections	3
Commercial/Industrial connections	36
Standby services	0
Vacant lots	13

The District does provide some water connections outside the District boundaries.

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<sup>12</sup> Maxwell PUD, Diane Mason, Office Manager, April 25, 2016.

<sup>13</sup> Colusa LAFCO, Maxwell PUD Questionnaire, March 12, 2015.

### 3.6.2 Water System Equipment

The *Colusa County General Plan Background Report* provides the following description of the Maxwell PUD water system:

The Maxwell Public Utilities District receives all water for municipal purposes from groundwater sources. The District pumps with a total of three wells, Well 1, Well 4 and Well 5 (Well 5 came online in 1997). The District has an elevated steel storage tank with a 100,000-gallon storage capacity.<sup>14</sup>

The District's three wells have the following capacities:<sup>15</sup>

Well 1 @ 150 GPM

Well 4 @ 600 GPM (has limitations for drinking water)

Well 5 @ 500 GPM

Total: 1,250 GPM

The District's sources produce 1,250 GPM well above the District's demand as shown below:

Maxwell PUD Water Demand	
Annual water demand	119.17 MG
Monthly water demand	17.05 MG
Peak Day Demand	0.64 MGD

The District serves 399 connections (residential, commercial, and agricultural) for a total service population of approximately 1,317 people. Peak water usage is 1,384 GPD per Equivalent Dwelling Unit (GPD/EDU). Maximum daily pumping capacity is 2,016,000 GPD compared to an average daily pumping demand of 326,493 GPD. Demand is well below the District's source capacity.

In April 2016, the District reported that the regulatory reports for a new well were nearly completed and that construction of a new well would begin in the near future.<sup>16</sup>

### 3.6.3 Water Distribution System

The District's water distribution system is set in a grid pattern with ten dead-ends.<sup>17</sup> The District's water system was upgraded in 1983. The system is composed entirely of C-900 PVC pipe ranging from 4-inch up to 8-inch installed with cast-iron valves,<sup>18</sup> new hydrants, and metering equipment. The District has a main pressure zone with

<sup>14</sup> Colusa LAFCO, Maxwell PUD Questionnaire, March 12, 2015.

<sup>15</sup> Colusa LAFCO, Maxwell PUD Questionnaire, March 12, 2015.

<sup>16</sup> Maxwell PUD, Diane Mason, Office Manager, April 25, 2016.

<sup>17</sup> Colusa LAFCO, Maxwell PUD Questionnaire, March 12, 2015.

<sup>18</sup> Colusa LAFCO, Maxwell PUD Questionnaire, March 12, 2015.

approximately 52 to 54 pounds per square inch (psi) at all times.<sup>19</sup> The District has twelve backflow prevention devices on the system.<sup>20</sup> The distribution system is properly maintained and is in good working order.

### **3.6.4 Water System and Future Development**

In order to meet the increased demand that would be generated through development of the residential parcels identified in the existing General Plan land use map, the District would need to add one or two new wells to the system. Additionally, new development sites would need to extend conveyance infrastructure to the site. The District has already began engineering work and studies to establish a new well (Well #6). It is feasible that this new well could be online and operational within 1-2 years.<sup>21</sup>

The District estimates that one million gallons or seven percent of the total water pumped per year is lost to leakage.<sup>22</sup> This is below average for public water systems. *(A detailed water audit and leak detection program of 47 California water utilities found an average loss of 10 percent and a range of 30 percent to less than 5 percent of the total water supplied by the utilities. The July 1997 Journal American Water Works Association cites examples of more than 45 percent leakage.)*<sup>23</sup>

The Colusa County General Plan contemplates a maximum of 288 single family units could be built on lands zoned for Single Family Residential in the Maxwell PUD. The Plan realizes figure of 212 additional single family units would be more realistic. The Plan also contemplates as much as 611 additional multi-family units could be developed if such development were to occur on agricultural lands. A more realistic figure would be 280 assuming 150 of these units would be developed in agriculturally zoned areas and 130 units on lands zoned for Multiple Family Residential (R-4).

Using the realistic figures in the County's General Plan, 568 units could be built at full buildout of the District notwithstanding more units could be developed should agricultural lands be converted to urban uses.

Based on the figure of 568 units at 1,384 gpd per EDU an additional 786,112 would be required. The total pumping capacity of the district is 2,016,000 gpd. At full buildout the District would be pumping 1,112,605 gpd. While it appears the district has enough source capacity, it would need to provide additional wells, filtration, storage and conveyance infrastructure to accommodate growth and maintain acceptable fire flows at full buildout, which would be required during the development process.

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<sup>19</sup> Colusa LAFCO, Maxwell PUD Questionnaire, March 12, 2015.

<sup>20</sup> Colusa LAFCO, Maxwell PUD Questionnaire, March 12, 2015.

<sup>21</sup> Colusa County, General Plan Background Report, June 2010, Prepared by De Novo Planning Group, [WWW.DENOVOPANNING.COM](http://WWW.DENOVOPANNING.COM), Page 3-12, 3-13.

<sup>22</sup> Colusa LAFCO, Maxwell PUD Questionnaire, March 12, 2015.

<sup>23</sup> <http://www.water.ca.gov/wateruseefficiency/leak/>, April 1, 2016.

### **3.7 Maxwell PUD Wastewater Collection and Treatment System**

#### **3.7.1 Sewer Service Connections**

The District reports the following sewer service connections:<sup>24</sup>

Total Connections	389
Single-family sewer connections	351
Multi-family sewer connections	3
Commercial/Industrial sewer connections	33
Standby service	0
Unserved lots in treatment area	13

The District does not provide sewer connections outside District boundaries.

#### **3.7.2 Wastewater Treatment**

The District explains the wastewater treatment process in the following outline:<sup>25</sup>

1. Influent flow is screened to remove trash.
2. Lift station pumps and measures influent flow into Aeration Pond 1.
3. Aeration ponds 1 and 2 flow in series to Facultative Pond 1.
4. Facultative Ponds 1 and 2 flow in series to the Effluent Pump Station.
5. Effluent Pump Station flow is chlorinated and pumped to the Storage Pond.
6. Storage Pond stores effluent and is discharged to the recycling site.
7. Recycling site is made up of four 20-acre fields on which alfalfa is grown.
8. Effluent is drawn from the Storage Pond to irrigate the fields as needed in the growing season.
9. The runoff from the fields in irrigation season is captured in the Tail Water Pond and pumped back into the Storage Pond.
10. No effluent is discharged to surface waters.

The *Colusa County General Plan Background Report* provides the following information on the Maxwell PUD wastewater collection and treatment system:

The Maxwell Public Utility District WWTP is located on the southeast end of town adjacent to I-5. The plant is owned and operated by the Maxwell Public Utility District. The treatment plant consists of headworks with a communicator, one aeration lagoon and three oxidation lagoons, chlorine contact and dechlorination with the effluent dissipating into a local agricultural ditch that flows toward Lurline Creek (the district no longer outfalls to Lurline Creek).

The design and permitted capacity (RWQCB Order R5-2002-0022 adopted on March 1, 2002) rating for the plant had an average of 0.2 MGD. The plant was designed and built in 1973-74. The District provided secondary treatment by way of aeration lagoon, three

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<sup>24</sup> Colusa LAFCO, Maxwell PUD Questionnaire, March 12, 2015.

<sup>25</sup> Colusa LAFCO, Maxwell PUD Questionnaire, March 12, 2015.

oxidation ponds, and a chlorine contact basin and dechlorination. On the same date of the issuance of the NPDES permit and Waste Discharge Requirements (WDR's) in 2002, the RWQCB issued a Cease and Desist order since the district could not consistently comply with the effluent limitations for ammonia contained in its NPDES permit and was ordered to comply by 2007.

On October 8, 2009 the Central Valley Regional Water Quality Control Board adopted new Waste Discharge Requirements Order R5-2009-0009 (NPDES Permit NO. CA 0079987) for discharge to Lurline Creek. On October 8, 2009 the Central Valley Regional Board adopted Waste Discharge Requirements Order R5-2009-0109 for discharge to land upon construction of a new effluence storage pond. A Cease and Desist Oder R5-2011-0040 was also adopted to extend compliance schedules in the District's 2009 NPDES permit to January 2012 when the effluent storage ponds construction was projected to be completed. The Maxwell PUD constructed the land disposal area. On December 2, 2011, the Maxwell PUD ceased surface water discharges and on January 26, 2012 began discharging treated wastewater to land. Consequently Orders R5-2009-0009 and R5-2011-0040 (NPDES Permit and CDO) became no longer necessary and were rescinded (Order No R5-2012-0081).

As stated, the 2009 the Regional Water Quality Control Board issued new WDR's (RWQCB Order R5 2009-0109). This order includes an effluent recycling site. The storage and disposal capacity of the water recycling site is 0.332 MGD as an average annual flow and should accommodate growth for 20 years, assuming a 3.6 percent annual population growth rate albeit since 2009 the growth rate has been significantly lower.

### **3.7.3 Wastewater Collection System**

The collection system consists primarily of 6-inch and 8-inch concrete pipes and 12-inch clay pipes. Since 1982, work has progressed on replacing many of the concrete pipes (from 1934<sup>26</sup>) with PVC. The pipes are currently being replaced at a rate of approximately 400 feet per year. The entire west side of the District's collection system consists of approximately 70-year old concrete piping. These stretches of pipe are antiquated and need to be replaced as soon as funding and time allows. The remainder of the Districts collection system is PVC and clay and is considered in good condition.

### **3.7.4 Wastewater Treatment Capacity**

The wastewater treatment facility has the permitted capacity to service approximately 1,000 new connections, which is more than adequate to meet the residential growth identified in the Colusa County General Plan. The biggest challenge the District is faced was regulations that took effect in 2009 regarding surface water discharges and the District's NPDES permit (the present system did not meet the new NPDES requirements). The stricter effluent limitations made the District reconsider its present method of wastewater treatment to land disposal. The District has acquired 273 acres of land for land disposal rather than moving to a more advanced form of treatment (tertiary)

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<sup>26</sup> Colusa LAFCO, Maxwell PUD Questionnaire, March 12, 2015.

and discharging to Lurline Creek. Acquisition of land has enabled the District to increase its wastewater capacity. A major wastewater treatment facility was installed in 2012 however much of the infrastructure is still dated back to 1934 when the original collection system was installed.

Today, Influent flow is screened to remove trash. Lift station pumps & measures the influent flow into Aeration Pond 1. Aeration ponds 1 & 2 flow in series to Facultative Pond 1. Facultative Ponds 1 & 2, flow in series to the Effluent Pump Station. Effluent Pump Station flow is chlorinated and pumped to the storage pond. The storage pond stores effluent and is discharged to the recycling site. A recycling site is made up of four 20-acre fields upon which alfalfa is grown. Effluent is then drawn from the storage pond to irrigate the fields as needed in the growing season. The runoff from the fields in irrigation season is captured in the Tail water pond and pumped back into the Storage pond. No effluent is discharged to surface waters. The district does not have any current enforcement actions such as Cease and Desist Orders, Violation notices, or any other actions by regulatory agencies.

The following chart shows the treatment plant performance compared to capacity:<sup>27</sup>

<b>Maxwell PUD Wastewater Treatment Plant</b>			
	<b>AWWF Average Wet Weather Flow</b>	<b>ADWF Average Dry Weather Flow</b>	<b>Peak Flow</b>
<b>2014 Performance</b>	0.14 mgd	0.10 mgd	0.62 mgd
<b>Plant Design Capacity</b>	0.332 mgd	0.224 mgd	1.50 mgd

The Colusa County General Plan contemplates a maximum of 288 single family units could be built on lands zoned for Single Family Residential in the Maxwell PUD. The Plan realizes figure of 212 additional single-family units would be more realistic. The Plan also contemplates as much as 611 additional multi-family units could be developed if such development were to occur on agricultural lands. A more realistic figure would be 280 assuming 150 of these units would be developed in agriculturally zoned areas and 130 units on lands zoned for Multiple Family Residential (R-4).

Using the realistic figures in the County's General Plan, 568 units could be built at full buildout of the District notwithstanding more units could be developed should agricultural lands be converted to urban uses.

Existing demand is 100,000 gpd ADF and the Plant Capacity is 332,000 gpd. There are 389 connections with a wastewater disposal rate of 257 gpd per EDU. The District would have remaining capacity to accommodate 1,034 EDU's assuming Inflow and Infiltration problems were corrected with improved collection infrastructure. While there is sufficient capacity to accommodate the units contemplated in the General Plan, significant improvements would be needed to accommodate the growth.

<sup>27</sup> Colusa LAFCO, Maxwell PUD, March 12, 2015.

**3.8 Maxwell PUD Budget**

The Budget is a plan for revenue and spending. The 2013-14 Budget and the most recent 2016-17 Budget will be shown below in four separate sections, one for revenue, one for personnel expenses and two for other expenses. The Budget is a plan for spending and the actual amount spent may vary from the budget. Amounts over budget would require transfers from other categories.

The following table shows the Maxwell PUD Budget for Income.

MAXWELL PUBLIC UTILITY DISTRICT BUDGET Income									
	2013 -- 2014			2016-2017			2017-2018		
	WATER	SEWER	TOTAL	WATER	SEWER	TOTAL	WATER	SEWER	TOTAL
Operating Revenue									
Income (sales):	167,424	240,768	408,192	254,232	236,160	490,392	266,976	238,464	505,440
Assessment District -S; held at the County until transfer to pay loan payment									
Other Income:									
County Tax Revenue	51,743	51,743	103,486	55,600	55,600	111,200	55,600	55,600	111,200
Rent (water tower space)	19,479		19,479	9,395	-	9,395	9,395		9,395
Rent (farm acre-age)		74,282	74,282	-	79,180	79,180		50,418	50,418
Interest earned	1,737	1,737	3,474	1,445	1,445	2,890	1,445	1,445	2,890
Late Fees	551	577	1,128	500	500	1,000	500	500	1,000
WW Assessment Dist.					190,000	190,000		190,500	190,500
<b>Total Non-Operating Rev.</b>							<b>66,940</b>	<b>298,463</b>	<b>365,403</b>
<b>Total Income</b>	<b>240,934</b>	<b>369,107</b>	<b>610,041</b>	<b>321,172</b>	<b>562,885</b>	<b>884,057</b>	<b>333,916</b>	<b>536,927</b>	<b>870,843</b>

As is common with most water and sewer providers, the amount collected from taxes is much smaller than the amount collected from service fees. The income has increased as shown in the comparison budget from 2013-2014 above.

The expenses are shown in the following three tables:

**MAXWELL PUBLIC UTILITY DISTRICT BUDGET Expenses-Bonds, Personnel**

2013-2014

2016-2017

2017-2018

**COLUSA LAFCo  
MAXWELL PUBLIC UTILITY DISTRICT  
MSR/SOI**

**Operating Expenses:**

	WATER	SEWER	TOTAL	WATER	SEWER	TOTAL	WATER	SEWER	TOTAL
<b>Bonds Payable</b>									
USDA	20,000		20,000	20,000	-	20,000	20,000	-	20,000
Water Line Loan 1981									
USDA WWTP Upgrade 2011*				-	80,000	80,000		82,000	82,000
USDA Water Well 2016				17,931		17,931	22,000	-	22,000
<b>Total Bonds Payable</b>				<b>37,931</b>	<b>80,000</b>	<b>117,931</b>	<b>42,000</b>	<b>82,000</b>	<b>124,000</b>
<b>PERSONNEL COST</b>									
General Manager	23,785	23,785	47,570	24,125	24,125	48,250	24,125	24,125	48,250
Utility Systems Operator Office Manager Chief Plant Operator Payroll Expense	17,774	17,774	35,548	18,562	18,562	37,124	18,813	18,813	37,626
Health Insur-ance Retire- ment (PERS)	15,735	15,735	31,470	16,750	16,750	33,500	16,730	16,730	33,460
		30,000	30,000		14,000	14,000	-	15,000	15,000
	5,518	5,518	11,036	12,750	12,750	25,500	13,892	13,892	27,784
	10,527	10,527	21,054	14,657	14,658	29,315	16,123	16,123	32,246
	<u>5,650</u>	<u>5,650</u>	<u>11,300</u>	**	**	**	3,217 ***	3,218 ***	6,435 ***
<b>Total Person- nel Cost</b>	<b>78,989</b>	<b>108,989</b>	<b>187,978</b>	<b>86,844</b>	<b>100,845</b>	<b>187,689</b>	<b>92,900</b>	<b>107,901</b>	<b>200,801</b>

\* Money collected and held at Colusa County

\*\*Employer share of PERS included in Payroll Expenses for 2016-2017 Budget.

\*\*\* Listed as "Employer Unfunded" in 2017-2018 Budget.

The personnel cost is a significant portion of the budget. However, the District is fortunate to have dedicated and qualified employees.

The general expenses are shown on the following tables.



**COLUSA LAFCo  
MAXWELL PUBLIC UTILITY DISTRICT  
MSR/SOI**

	<b>MAXWELL PUBLIC UTILITY DISTRICT BUDGET Expenses-Operations</b>								
	<b>2013-2014</b>			<b>2016-2017</b>			<b>2017-2018</b>		
	<b>WATER</b>	<b>SEWER</b>	<b>TOTAL</b>	<b>WATER</b>	<b>SEWER</b>	<b>TOTAL</b>	<b>WATER</b>	<b>SEWER</b>	<b>TOTAL</b>
Power	32,297	46,693	78,990	39,625	67,223	106,848	39,625	52,125	<b>91,750</b>
Sampling	4,279	37,562	41,841	3,000	35,000	38,000	3,000	35,000	<b>38,000</b>
Sampling Supplies	100	100	200	500	500	1,000	100	300	<b>400</b>
Chemicals	4,559	15,108	19,667	4,500	5,000	9,500	4,000	4,000	<b>8,000</b>
Repairs/ Maintenance	3,000	3,500	6,500	11,925	39,725	51,650	28,191	17,811	<b>46,002</b>
Permits & Fees	2,400	26,000	28,400	2,823	41,237	44,060	2,823	41,237	<b>44,060</b>
Dues & Membership	281	281	562	375	375	750	375	375	<b>750</b>
Conti. Ed./ Training	200	200	400	700	300	1,000	700	300	<b>1,000</b>
Security	613	1,839	2,452	300	700	1,000	504	756	<b>1,260</b>
Insurance	6,924	9,674	16,598	7,650	8,500	16,150	9,500	9,500	<b>19,000</b>
Supplies	200	300	500	700	700	1,400	2,510	1,200	<b>3,710</b>
Telephones Telemetry	2,616	5,027	7,643	2,500	7,000	9,500	2,500	7,000	<b>9,500</b>
Office Expense	3,076	3,404	6,480	4,100	4,410	8,510	4,100	4,410	<b>8,510</b>
Bank Charges	842	842	1,684	842	842	1,684	842	842	<b>1,684</b>
Travel & Mileage	343	343	686	400	400	800	400	400	<b>800</b>
Legal & Accounting	6,500	24,748	31,248	7,200	6,700	13,900	7,200	6,700	<b>13,900</b>
Garbage	-	1,200	1,200	10	1,457	1,467	10	1,457	<b>1,467</b>
Interest Expense	9,000		9,000	17,200	107,000	124,200	18,900	107,000	<b>125,900</b>
Misc. Expenses	400	28,263	28,663	500	1,000	1,500	500	1,000	<b>1,500</b>
Advertising	500	500	1,000	1,000	1,000	2,000	500	500	<b>1,000</b>
Fuel Expenses	1,291	3,242	4,533	1,200	2,000	3,200	1,200	2,000	<b>3,200</b>
Reports				1,000	18,000	19,000	500	14,000	<b>14,500</b>
Assessment Dist. Exp.*				-	3,500	3,500		3,500	<b>3,500</b>
Bad Debt Allowance				1,322	1,982	3,304	1,322	1,982	<b>3,304</b>
<b>Total Operating expenses</b>	<b>178,410</b>	<b>317,815</b>	<b>496,225</b>	<b>234,147</b>	<b>535,396</b>	<b>769,543</b>	<b>222,202</b>	<b>421,296</b>	<b>643,498</b>

\* Money from County Fund.

**COLUSA LAFCo  
MAXWELL PUBLIC UTILITY DISTRICT  
MSR/SOI**

	MAXWELL PUBLIC UTILITY DISTRICT BUDGET Expenses								
	2013-2014			2016-2017			2017-2018		
	WATER	SEWER	TOTAL	WATER	SEWER	TOTAL	WATER	SEWER	TOTAL
Depreciation Reserves	5,000	5,867	10,867						
Distribution lines 1981				5,000		5,000	5,000		5,000
USDA Water Well 2016				5,965		5,965	5,965		5,965
WWTP Capital Improvement					5,867	5,867		5,867	5,867
Savings 2016 USDA Loan Debt Reserve				73,346	21,622	94,968	56,035	27,764	83,799
Regular Reserves <i>maint. projects/depreciation)</i>	57,013	44,878	101,896	2,714		2,714	2,714		2,714
<b>Total Expenses</b>	<b>240,423</b>	<b>368,560</b>	<b>608,983</b>	<b>321,172</b>	<b>562,885</b>	<b>884,057</b>	<b>333,916</b>	<b>536,927</b>	<b>870,843</b>

The largest expense, interest, will decrease over time as loans are repaid. The District presents a balanced budget for 2017-2018. The actual costs may vary.

**3.9 Maxwell PUD Audit**

A budget is a plan for revenue and spending but the audit shows that expenditures already made.

**3.9.1 Statement of Net Position**

The Statement of Net Position displays information about the District as a whole. These statements present the business-type activities of the District which rely to a significant extent on fees charged to external parties. Funds may be organized into three major categories: governmental, proprietary, and fiduciary. The funds of the District are organized in the proprietary category. The emphasis is placed on major funds, each displayed in a separate column.

The District reports the following major proprietary funds:

- The water fund is an enterprise fund used to account for the activity related to water services provided by the District.
- The Sewer fund is an enterprise fund used to account for activity related to sewer services provided by the District.
- The Special Assessment Fund is an enterprise fund used to account for special assessment revenue.

The statements shown are from the Audit for the year ending June 30, 2016. In most cases the audit for the following year is similar with small changes. The Statement of Net Position as of June 30, 2016 is shown below:

<b>Maxwell Public Utility District Statement of Net Position June 30, 2016<sup>28</sup></b>				
	<b>Water Fund</b>	<b>Sewer Fund</b>	<b>Special Assessment Fund</b>	<b>Total</b>
<b>ASSETS</b>				
<b>Current Assets</b>				
Cash and investments	520,183	1,049,372	211,889	1,781,444
<b>Receivables</b>				
Accounts, net	23,215	22,718	-	45,933
Taxes	7,515	7,873	-	15,388
Interest	734	764	-	1,498
Prepaid costs	8,385	9,280	-	17,665
<b>Total Current Assets</b>	<b>560,032</b>	<b>1,090,007</b>	<b>211,889</b>	<b>1,861,928</b>
<b>Noncurrent Assets</b>				
Non-depreciable capital assets	88,808	1,660,651	-	1,749,459
Depreciable capital assets (net)	190,582	7,664,173	-	7,854,755
<b>Total Capital Assets</b>	<b>279,390</b>	<b>9,324,824</b>	<b>-</b>	<b>9,604,214</b>
<b>Total Assets</b>	<b>839,422</b>	<b>10,414,831</b>	<b>211,889</b>	<b>11,466,142</b>
Deferred pension adjustments	11,468	11,468	-	22,936
<b>LIABILITIES</b>				
<b>Current Liabilities</b>				
Accounts payable	12,365	8,275	-	20,640
Wages payable	5,405	6,737	-	12,142
Prepaid services	2,930	3,263	-	6,193
Interest payable	3,000	34,648	-	37,648
Compensated absences	2,363	2,363	-	4,726
Bonds payable	20,000	79,688	-	99,688
<b>Total Current Liabilities</b>	<b>46,063</b>	<b>134,974</b>	<b>-</b>	<b>181,037</b>
<b>Noncurrent Liabilities</b>				
Bonds payable-net of current portion	100,000	4,297,024	-	4,397,024
Net pension liability	61,681	61,681	-	123,362
<b>Total Noncurrent liabilities</b>	<b>161,681</b>	<b>4,358,705</b>	<b>-</b>	<b>4,520,386</b>
<b>Total Liabilities</b>	<b>207,744</b>	<b>4,493,679</b>	<b>-</b>	<b>4,701,423</b>
Deferred pension adjustments	9,469	9,469	-	18,938

The following table shows the expenses for the District and the change in net position.

<sup>28</sup> Maxwell PUD, FINANCIAL STATEMENTS TOGETHER WITH INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED JUNE 30, 2016, Prepared by Smith & Newell, 950 Tharp Road, Yuba City, CA 95993, Phone 530-673-9790, Fax 530-673-1305, E-Mail: SMITHNEW@SBCGLOBAL.NET, Page 7.

<b>Maxwell PUD Statement of Revenues, Expenses, and Changes in Net Position for the year ended June 30, 2016<sup>29</sup></b>				
	<b>Water Fund</b>	<b>Sewer Fund</b>	<b>Special Assessment Fund</b>	<b>Total</b>
Operating Revenues	189,344	237,344		426,688
<b>Operating Expenses</b>				
Power	30,094	52,600		82,694
Repairs	26,218	32,512	-	58,730
Sampling	3,943	34,972	-	38,915
Chemicals	2,109	3,687		5,796
Licenses and permits	2,562	34,842		37,404
Insurance	7,278	8,086		15,364
Salaries and wages	45,280	59,943		105,223
Telephone	2,846	7,303		10,149
Office expense	3,331	5,712		9,043
Payroll taxes	9,290	10,412		19,702
Auto Expense	417	417		834
Retirement	2,397	2,397		4,794
Health benefits	13,107	13,107		26,214
Legal and audit	6,833	6,953		13,786
Depreciation	52,441	511,469		563,910
Miscellaneous expense	1,688	18,187		19,875
Total Operating Expenses	209,834	802,599		1,012,433
Operating Income (Loss)	(20,490)	(565,255)		(585,745)
<b>Non-operating revenues (Expenses)</b>				
Property taxes	65,624	65,624		131,248
Assessments	-	9,298	178,883	188,181
Interest income	2,320	2,350	1,910	6,580
Rental income	11,195	111,422	-	122,617
Miscellaneous income	279	278	-	557
Interest expense	(6,500)	(104,254)	-	(110,754)
Total non-operating revenue (Expenses)	72,918	84,718	180,793	338,429
Income (Loss) Before contributions and transfers	52,428	(480,537)	180,793	(247,316)
Transfers in	-	167,934	-	167,934
Transfers out	-	-	(167,934)	(167,934)
Change in Net position	52,428	312,603	12,859	(247,316)
<b>Total Net Position-Beginning</b>	<b>581,249</b>	<b>6,235,754</b>	<b>199,030</b>	<b>7,016,033</b>
<b>Total Net Position Ending</b>	<b>633,377</b>	<b>5,923,151</b>	<b>211,889</b>	<b>6,768,717</b>

<sup>29</sup> Maxwell PUD, FINANCIAL STATEMENTS TOGETHER WITH INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED JUNE 30, 2016, Prepared by Smith & Newell, 950 Tharp Road, Yuba City, CA 95993, Phone 530-673-9790, Fax 530-673-1305, E-Mail: SMITHNEW@SBCGLOBAL.NET, Page 9.

The above table shows that the Net Position decreased from 2015 to 2016. A total depreciation expense of \$563,910 was charged to operations for the year ended June 30, 2016.<sup>30</sup>

The Management offers the following explanation and plan for the future:

*Economic Factors for Next Year's Budget<sup>31</sup>*

*The following economic factors were considered in preparing the District's financial plan for fiscal year 2016/2017.*

- *Employee salary and benefit increases*
- *Maintaining the capital improvements fund*
- *Reviewing current rate structures*
- *Rising fuel prices*
- *Increased power costs*
- *Fluctuation in property tax revenue*
- *Ever increasing state mandated requirements*
- *Deteriorating equipment, etc.*
- *Agricultural rental income*
- *Mandated wastewater monitoring*

**Water Well #6**

*The District has been approved for USDA Rural Development funding for the Well #6. This funding was contingent upon a water rate increase which started January 1, 2016. The rates are utilizing a tiered system.*

**3.9.2 Cash and Investments<sup>32</sup>**

As of June 30, 2016, the District's cash and investments consisted of the following:

Cash:

Imprest cash	\$200
Deposits (less outstanding checks)	<u>\$508,770</u>
Total Cash	\$508,970

Investments:

Colusa County treasurer's Pool	\$211,890
California Local Agency Investment Fund (LAIF)	<u>\$1,060,584</u>
Total Investments	\$1,272,474

**Total Cash and Investments** **\$1,781,444**

<sup>30</sup> Maxwell PUD, FINANCIAL STATEMENTS TOGETHER WITH INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED JUNE 30, 2016, Prepared by Smith & Newell, 950 Tharp Road, Yuba City, CA 95993, Phone 530-673-9790, Fax 530-673-1305, E-Mail: SMITHNEW@SBCGLOBAL.NET, Page 20.

<sup>31</sup> Maxwell PUD, FINANCIAL STATEMENTS TOGETHER WITH INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED JUNE 30, 2016, Prepared by Smith & Newell, 950 Tharp Road, Yuba City, CA 95993, Phone 530-673-9790, Fax 530-673-1305, E-Mail: SMITHNEW@SBCGLOBAL.NET, Page 6.

<sup>32</sup> Maxwell PUD, FINANCIAL STATEMENTS TOGETHER WITH INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED JUNE 30, 2016, Prepared by Smith & Newell, 950 Tharp Road, Yuba City, CA 95993, Phone 530-673-9790, Fax 530-673-1305, E-Mail: SMITHNEW@SBCGLOBAL.NET, Page 17.

At year end the carrying amount of the District's cash deposits (including amounts in the checking and savings accounts) was \$508,770 and the bank balance was \$519,520. The difference between the bank balance and the carrying amount represents outstanding checks and deposits in transit. Cash on hand was \$200.00.

### 3.9.3 Capital Assets<sup>33</sup>

The following table from the annual audit shows the effect of depreciation on the capital assets. A total of \$563,910 was charged to depreciation for the year ended June 30, 2016.

<b>Maxwell Public Utility District Capital Assets June 30, 2016</b>				
	Balance July 1, 2015	Additions	Retire- ments/ Additions	Balance June 30, 2016
<b>Capital assets, Not Being Depreciated</b>				
Land	1,671,608	-	-	1,671,608
Construction	46,034	31,817	-	77,851
<b>Total, Not Depreciated</b>	<b>1,717,642</b>	<b>31,817</b>	<b>-</b>	<b>1,749,459</b>
<b>Capital Assets, Being Depreciated</b>				
Equipment	53,507	-	(3,500)	50,007
Office Equipment	2,248	-	-	2,248
Buildings	19,477	-	-	19,477
Water Tower, pumping plant	460,840	-	-	460,840
Sewer Plant	9,703,207	-	-	9,703,207
Pipelines	1,450,331	-	-	1,450,331
<b>Total</b>	<b>11,689,610</b>		<b>(3,500)</b>	<b>11,686,110</b>
<b>Less Accumulated Depreciation for</b>				
Equipment	(45,288)	(2,741)	3,505	(44,524)
Office Equipment	(2,248)	(-)	-	(2,248)
Buildings	(17,281)	(267)	-	(17,548)
Water Tower, pumping plant	(339,769)	(21,246)	-	(361,015)
Sewer Plant	(1,712,665)	(493,183)	-	(2,205,848)
Pipelines	(1,153,699)	(46,473)	-	(1,200,172)
<b>Total Depreciation</b>	<b>(3,270,950)</b>	<b>*(563,910)</b>	<b>3,505</b>	<b>(3,831,355)</b>
<b>Total Capital Assets, Being Depreciated, Net</b>	<b>8,418,660</b>	<b>*(563,910)</b>	<b>5</b>	<b>7,854,755</b>
<b>Total Capital Assets, Net</b>	<b>10,136,302</b>	<b>** (532,093)</b>	<b>5</b>	<b>9,604,214</b>

\*Total depreciation charge to operations for 2015-2016.

\*\* Total Net is less due to construction noted above.

<sup>33</sup> Maxwell PUD, FINANCIAL STATEMENTS TOGETHER WITH INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED JUNE 30, 2016, Prepared by Smith & Newell, 950 Tharp Road, Yuba City, CA 95993, Phone 530-673-9790, Fax 530-673-1305, E-Mail: SMITHNEW@SBCGLOBAL.NET, Page 20.

**3.9.4 Long-term Liabilities<sup>34</sup>**

A summary of the Maxwell PUD long-term debt for the year ended June 30, 2014 is shown in the following table:

<b>Maxwell PUD Long-term Debt as of June 30, 2014</b>					
	Balance July 1, 2015	Additions	Retirements	Balance June 30, 2016	Amounts Due Within One Year
Bonds	4,594,420		(97,708)	4,496,712	99,688
Compensated Absences	4,591	8,850	(8,715)	4,726	4,726
<b>TOTAL</b>	<b>\$4,599,011</b>	<b>\$8,850</b>	<b>\$106,423</b>	<b>\$4,501,438</b>	<b>\$104,414</b>

Individual issues of debt payable outstanding on June 30, 2014, are as follows:

<b>Maxwell Public Utility District Debt Outstanding on June 30, 2016</b>	
<b>Bonds</b>	<b>Principal</b>
1981 Water Revenue Bonds, issued January 1, 1981, in the amount of \$455,200 and payable in annual installments of \$5,200 to \$25,000 with an interest rate of 5.0% and a maturity on January 1, 2021. The bonds were used to finance improvements to the water system.	\$120,000
2013 Wastewater Assessment District Limited Obligation Improvement Bonds Series 2012, issued March 15, 2012, in the amount of \$5,842,656 and payable in annual instalments of \$25,656 to \$181,783, with and interest rate of 2.37% and maturity on September 2, 2050.	\$4,376,712
<b>*Total Revenue Bonds</b>	<b>\$4,496,712</b>

\* This amount does not include interest which is shown below.

<sup>34</sup> Maxwell PUD, FINANCIAL STATEMENTS TOGETHER WITH INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED JUNE 30, 2016, Prepared by Smith & Newell, 950 Tharp Road, Yuba City, CA 95993, Phone 530-673-9790, Fax 530-673-1305, E-Mail: SMITHNEW@SBCGLOBAL.NET, Page 21.

The following is a schedule of debt payment requirements of governmental activities to maturity for long-term debt:

<b>Maxwell Public Utility District Bond Repayment Schedule<sup>35</sup></b>			
<b>Year ending June 30</b>	<b>Bonds</b>		
	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
2017	99,688	92,179	191,867
2018	106,708	89,129	195,837
2019	108,778	85,781	194,559
2020	110,908	82,383	193,291
2021-2025	488,171	366,613	854,784
2026-2030	524,351	303,472	827,823
2031-2035	593,131	233,872	827,003
2036-2040	670,481	155,605	826,086
2041-2045	757,451	68,385	825,836
2046-2050	855,261	28,009	883,270
2051-2052	181,784	5,656	187,440
<b>TOTAL</b>	<b>\$4,496,712</b>	<b>\$1,511,084</b>	<b>\$6,007,796</b>

### **3.9.5 Employee's Retirement Plan<sup>36</sup>**

#### Plan Description

All qualified permanent and probationary employees are eligible to participate in the District's Miscellaneous Employee Pension Plan, cost-sharing multiple employer defined benefit pension plan administered by the California Public Employees' Retirement System (CalPERS). Benefit provisions under the Plan are established by State statute and District resolution. CalPERS issues publicly available reports that include a full description of the pension plan regarding benefit provisions, assumptions and membership information that can be found on the CalPERS website.

Effective January 1, 2013, the District added retirement tiers for the Miscellaneous Plan for new employees as required under the Public Employee Pension Reform Act (PEPRA). New employees hired on or after January 1, 2013 will be subject to new, lower pension formulas, caps on pensionable income levels and new definitions of pensionable income. In addition, new employees will be required to contribute half of the total normal cost of the pension benefit unless impaired by an existing Memorandum of Understanding. The cumulative effect of these PEPRA changes will ultimately reduce the District's retirement costs. As of the valuation date there were no Miscellaneous PEPRA employees.

<sup>35</sup> Maxwell PUD, FINANCIAL STATEMENTS TOGETHER WITH INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED JUNE 30, 2016, Prepared by Smith & Newell, 950 Tharp Road, Yuba City, CA 95993, Phone 530-673-9790, Fax 530-673-1305, E-Mail: SMITHNEW@SBCGLOBAL.NET, Page 22.

<sup>36</sup> Maxwell PUD, FINANCIAL STATEMENTS TOGETHER WITH INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED JUNE 30, 2016, Prepared by Smith & Newell, 950 Tharp Road, Yuba City, CA 95993, Phone 530-673-9790, Fax 530-673-1305, E-Mail: SMITHNEW@SBCGLOBAL.NET, Pages 23-24.



Summary of Plans and Eligible Participants

Open for New Enrollment  
 Miscellaneous PEPRA                      Miscellaneous members hired on or after January 1, 2013

Closed to New Enrollment  
 Miscellaneous                                      Miscellaneous members hired before January 1, 2013

Benefits Provided

CalPERS provides service retirement and disability benefits, annual cost of living adjustments and death benefits to plan members, who must be public employees and beneficiaries. Benefits are based on years of credited service, equal to one year of full time employment. Members with five years of total service are eligible to retire at age 50 with statutorily reduced benefits. Retirement benefits are paid monthly for life.

All members are eligible for non-duty disability benefits after 10 years of service. The death benefit is one of the following: the Basic Death Benefit, the 1957 Survivor Benefit, or the Optional Settlement 2W Death Benefit. The cost of living adjustments for each plan are applied as specified by the Public Employees' Retirement Law.

Each Plan's specific provisions and benefits in effect at June 30, 2016, are summarized as follows:

	<b>Benefit Formula</b>	<b>Retirement Age</b>	<b>Monthly Benefits as a % of Eligible Compensation</b>
Miscellaneous	2.0% @ 55	50-55	1.426% to 2.418%
Miscellaneous PEPRA	2.0% @ 62	50-62	1.000% to 2.500%

The District cost to maintain participation in PERS is expected to increase substantially in the future.

**3.9.6 Risk Management<sup>37</sup>**

The District is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; error and omissions; injuries to employees; and natural disasters. The District purchases coverage from a risk management authority. Settled claims have not exceeded this commercial coverage in any of the past three fiscal years.

<sup>37</sup> Maxwell PUD, FINANCIAL STATEMENTS TOGETHER WITH INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED JUNE 30, 2016, Prepared by Smith & Newell, 950 Tharp Road, Yuba City, CA 95993, Phone 530-673-9790, Fax 530-673-1305, E-Mail: SMITHNEW@SBCGLOBAL.NET, Page 27.

#### 4 WATER AND SEWER SERVICE COST COMPARISON

##### 4.1 Comparison of Water Service Rates

The following table is included to compare the cost of water rates from different districts in Northern California. It is difficult to compare one district with another because the base rates include different amounts of water. Where the base amount of water is low, the average bill will almost always be higher than the base fee shown.

COMPARISON OF DOMESTIC WATER SERVICE RATES NORTHERN CALIFORNIA		
District/County	Number of Connections	Monthly Water Rate (Base Rate)
Arbuckle PUD/Colusa	792 (mostly unmetered) <sup>38</sup>	\$15.00 <sup>39</sup>
Artois CSD/Glenn	59 metered <sup>40</sup>	\$39.00 (16,000 gallons)
Butte City CSD/Glenn	48 unmetered	\$20 per month
Clear Creek CSD/Lassen	156 unmetered <sup>41</sup>	\$27.00 <sup>42</sup>
CSA 1 Century Ranch/Colusa	112 metered	\$39.22 (8,000 gallons) <sup>43</sup>
CSA 2 Stonyford/Colusa	91 metered	\$45.58 (10,000 gallons) <sup>44</sup>
Elk Creek CSD/Glenn	90 metered <sup>45</sup>	\$44.00 (14,961 gallons)
<b>Maxwell PUD/Colusa</b>	<b>400 (meters, not read)</b>	<b>\$40.00 (unlimited)<sup>46</sup></b>
Lassen Co. Waterworks 1, Bieber/Lassen	172 metered <sup>47</sup>	\$35.00 (40,000 gallons) <sup>48</sup>
Little Valley CSD/Lassen	50 unmetered	\$23.00 <sup>49</sup>
Westwood CSD/Lassen	765 metered	\$35.78 (30,000 gallons) <sup>50</sup>
City of Colusa/Colusa	2088 metered	\$21.76 (300 cubic feet*) <sup>51</sup>
City of Corning/Tehama	2267 metered	\$16.21 (4,000 gallons) <sup>52</sup>
City of Orland/Glenn	2615 metered	\$14.93 (15,000 gallons) <sup>53</sup>
City of Susanville/Lassen	4200 metered	\$23.65 (300 cubic feet*) <sup>54</sup>
City of Williams/Colusa	1321	\$15.72 (500 cubic feet) <sup>55</sup>

\*(100 cubic feet of water = 748 gallons)

<sup>38</sup> Arbuckle PUD, Small Water System 2011 Annual Report to the Drinking Water Program for year Ending December 31, 2011.  
<sup>39</sup> Arbuckle PUD, Water Rates as of January 1, 2009.  
<sup>40</sup> Artois Community Services District, Jack Cavier, Jr., President, March 1, 2012.  
<sup>41</sup> Clear Creek CSD, Pat Mudrich, Manager, August 22, 2012  
<sup>42</sup> Clear Creek CSD, Lassen LAFCO Questionnaire June 6, 2012.  
<sup>43</sup> Colusa County Ordinance No. 673, An Ordinance of the Colusa County Board of Supervisors Increasing water service Fees; authorizing administrative Fees; providing for the Collection of Delinquent Charges; and Directing That No New Water Hook-ups Be Permitted for County Service Area Number 1-Century Ranch, March 16, 2004.,  
<sup>44</sup> Colusa County Ordinance No 674, An Ordinance of the Colusa County Board of Supervisors Increasing Water Service Fees; Authorizing Administrative Fees; Providing for the Collection of Delinquent charges; and Directing That No New Water Hook-ups be permitted for County Service Area Number 2-Stonyford, March 16, 2004.  
<sup>45</sup> Elk Creek Community Services District, Arnold Kjer, Water Plant Operator, September 28, 2011  
<sup>46</sup> Maxwell PUD, Diana Mason, Phone 438-2505, April 25, 2016.  
<sup>47</sup> Lassen County Waterworks District 1 (Bieber), Stephen Jackson, Manager, Phone: 530-294-5524, March 1, 2011.  
<sup>48</sup> Lassen County Waterworks District 1 (Bieber), Ordinance 09-2, An Ordinance amending the Ordinance Establishing the Rate for Water Service by the Lassen County Waterworks District 1 (Bieber), June 16, 2009.  
<sup>49</sup> Little Valley CSD, Director Devora Kelley, March 19, 2012.  
<sup>50</sup> Westwood Community Services District, Resolution 2011-01, A resolution of the Westwood Community Services District Increasing Water Rates, June 6, 2011.  
<sup>51</sup> City of Colusa, Water Department, Phone 458-4740 Ex100, August 7, 2012.  
<sup>52</sup> City of Corning, Laurie Sims, Department of Finance, Phone 530-834-7029, February 20, 2014.  
<sup>53</sup> City of Orland, Angela Crook, Assistant City Manager/City Clerk, 815 Fourth Street, Orland CA 95963, December 30, 2013.  
<sup>54</sup> City of Susanville, 530-252-5111, August 3, 2012.  
<sup>55</sup> City of Williams, Greg Endeman, [gendeman@cityofwilliams.org](mailto:gendeman@cityofwilliams.org), October 1, 2012.

Areas that are served by the California Water Service (a public utility) usually have higher fees than those areas served by a government facility. For example, in the Willows area California Water Service charges \$47.50 for the smallest meter size and 800 cubic feet of water.<sup>56</sup>

#### **4.2 Water Service Pricing Strategy**

Proposition 218 prohibits any formal subsidies that depart from cost-of-service principles. In other words, one customer class cannot pay more than its fair share of revenue requirements for the purpose of providing a subsidy to other customers. Informally, there are ways to design rate structures that benefit low income groups. For example, senior and low income customers tend to have smaller homes and yards that consume less water than higher income customers.

Therefore, seniors and low income groups will benefit from:

- 1) Water rates that have lower fixed monthly charges
- 2) Water rates that include a lower minimum water consumption amount in the fixed charges
- 3) Water rates that have lower consumption rates for customers using less than the average amount of water<sup>57</sup>

To encourage water conservation it makes sense to charge for the number of gallons (or cubic feet) used in addition to the base rate because then the water bill always reflects consumption. There are water meters available that can be read electronically so the cost of a meter-reader can be eliminated.

#### **4.3 Sewer Service Cost Comparison**

The following table shows sewer service rates in various places in northern California. It is difficult to compare the rates because some jurisdictions have had to install expensive upgrades to their wastewater treatment plants to meet the requirements of the State Water Quality Control Board. There are not as many comparisons as there are for water rates because not as many jurisdictions have wastewater treatment plants.

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<sup>56</sup> California Water Service Company, 1720 North First Street, San Jose, California, 95112, Phone: 408-367-8200, Schedule No. WL-1-R Willows Tariff Area, Effective 5/3/12.

<sup>57</sup> *Average or slightly less than average water consumption is a good gage for setting lower tier water rates for this purpose, since most low income customers use less than average amount of water. Seniors in particular tend to have smaller household sizes that would benefit from this approach.*

COMPARISON OF DOMESTIC SEWER SERVICE RATES		
District/County	Number of Connections	Monthly Sewer Service Rate (Base Rate-Single Family Residential)
Arbuckle PUD/Colusa	820	\$15.00 <sup>58</sup>
Lassen Co. Waterworks District 1(Bieber)/Lassen	172 <sup>59</sup>	\$25.00 <sup>60</sup>
<b>Maxwell PUD/Colusa</b>	<b>400</b>	<b>\$48.00 plus \$358.62/year<sup>61</sup></b>
Westwood CSD	781	\$34.22 <sup>62</sup>
City of Colusa/Colusa	2082	\$65.77 <sup>63</sup>
City of Orland	2615	\$15.90 <sup>64</sup>
City of Willows/Glenn	2255	\$40.19 <sup>65</sup>
Susanville Sanitary District/Lassen	3747	\$15.15 <sup>66</sup>
City of Williams/Colusa	1360	\$74.27 <sup>67</sup>

<sup>58</sup> Arbuckle PUD, PO Box 207, Arbuckle, CA 95912, Phone: (530) 476-2054, Fax: 530-476-2761, E-Mail: [apud@frontiernet.net](mailto:apud@frontiernet.net)

<sup>59</sup> Lassen County Waterworks District 1 (Bieber), Stephen Jackson, Manager, Phone: 530-294-5524, March 1, 2011.

<sup>60</sup> Lassen County Waterworks District 1 (Bieber), Ordinance 09-1, An Ordinance Amending the Ordinance Establishing the Rate for sewer services by the Lassen County Waterworks District 1 (Bieber), June 16, 2009.

<sup>61</sup> Maxwell PUD, Maxwell, CA, Diana Mason, Phone: 438-2505, August 7, 2012.

<sup>62</sup> Westwood CSD, Susan Coffi, E-Mail: [office@westwoodcsd.org](mailto:office@westwoodcsd.org), September 6, 2012.

<sup>63</sup> City of Colusa, Water Department, Phone 458-4740 Ex100, September 12, 2012.

<sup>64</sup> City of Orland, Angela Crook, Assistant City Manager/City Clerk, 815 Fourth Street, Orland CA 95963, December 30, 2014

<sup>65</sup> City of Willows, Skyler Lipski, Public Works Director, Phone: 530-934-7041, September 5, 2012.

<sup>66</sup> Susanville Sanitary District, PO Box 162, Susanville, Ca 96130, Phone: 530-257-5685, Fax: 530-251-5328, September 11, 2012.

<sup>67</sup> City of Williams, Greg Endeman, [gendeman@cityofwilliams.org](mailto:gendeman@cityofwilliams.org), October 1, 2012.

## **5 MAXWELL PUD MUNICIPAL SERVICE REVIEW**

### **5.1 Growth and Population Projections for the Maxwell PUD Area<sup>68</sup>**

***Purpose: To evaluate service needs based on existing and anticipated growth patterns and population projections.***

#### **5.1.1 Maxwell PUD Area Population Projections**

The Maxwell PUD area is shown in the Colusa County General Plan with various land use designations as shown on the map at the end of this report. The land use designations would allow for population growth. The population is unlikely to grow substantially due to limited economic opportunities in the area.

#### **5.1.2 MSR Determinations on Growth and Population Projections for the Maxwell PUD Area**

- 1-1) The Maxwell PUD is not expected to increase substantially in population.
- 1-2) The sewer and water systems operated by the Maxwell PUD are sized for accommodation of additional population growth.
- 1-3) The PUD needs to maintain a close relationship with the Colusa County Planning Department to make sure that the zoning and general plan are compatible with the proposed development for the District.
- 1-4) The District needs to ensure that any growth will pay for the additional infrastructure and services needed.

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<sup>68</sup> California Government Code Section 56430. (a) (1)

**5.2 Location and Characteristics of any Disadvantaged Unincorporated Communities (DUC) within or Contiguous to Maxwell PUD**<sup>69</sup>

**Purpose: To comply with the State Law to examine any unincorporated areas which could be provided with better services by annexing to an adjacent city.**

**5.2.1 Determination of Maxwell PUD Area Disadvantaged Unincorporated Community Status**

SB 244 requires LAFcos to consider disadvantaged unincorporated communities when developing spheres of influence. Upon the next update of a sphere of influence on or after July 1, 2012, SB 244 requires LAFCo to include in an MSR (in preparation of a sphere of influence update):

- 1) The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere; and
- 2) The 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 community within or contiguous to the sphere of influence.

In determining spheres of influence, SB 244 authorizes LAFCo to assess the feasibility of and recommend reorganization and consolidation of local agencies to further orderly development and improve the efficiency and affordability of infrastructure and service delivery.

The Median Household Income is not available for the Maxwell Public Utility District. The Median Household Income for the County of Colusa is \$52,158. The Median Household Income for California is \$61,094.<sup>70</sup> Eighty percent of the State Median Household Income is \$48,875 so the Median Household Income for Colusa County does not qualify as Disadvantaged. However, the Median Household income for the Maxwell Census Designated Place from the 2010 census indicates the median income for Maxwell is 43,750. Therefore, the Maxwell PUD is a disadvantaged community

In any case, there is no incorporated city close enough to annex the community of Maxwell.

**5.2.2 MSR Determinations on Disadvantaged Unincorporated Communities near Maxwell PUD**

- 2-1) According to the data available the community of Maxwell is a Disadvantaged Unincorporated Community.

<sup>69</sup> California Government Code Section 56430. (a) (2)

<sup>70</sup> US Census Bureau, <http://quickfacts.census.gov/qfd/states/06/06011.html>, October 26, 2015.

### **5.3 Capacity and Infrastructure Maxwell PUD**

***Purpose: To evaluate the 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.<sup>71</sup>***

#### **5.3.1 Maxwell PUD Infrastructure**

The Maxwell PUD infrastructure is described above in this report.

#### **5.3.2 MSR Determinations on Infrastructure for Maxwell PUD**

- 3-1) The infrastructure available to the Maxwell Public Utility District is adequate but the District should have a Master Plan and a Capital Improvement Plan to schedule regular upgrades and maintenance of equipment and infrastructure.
- 3-2) The District should look into the costs and benefits of using the water meters at each connection and adjusting the rates to reflect usage.
- 3-3) The district has 399 water service connections serving a population of approximately 1,317 with peak service demand of 0.628 MGD and a pumping capacity of to pump up to 1,550 MGD.
- 3-4) As stated In the most recent Water System Evaluation, the Maxwell PUD operates the domestic water system in a professional manner and is in general compliance with drinking water standards.
- 3-5) The water system has good water quality and the Consumer Confidence Report on water quality is available to the public upon request; however, the District should consider a website to make this report available to all.
- 3-6) The District should work to help other employees to become certified to operate the wastewater treatment plant.
- 3-7) The wastewater collection and treatment facilities are adequate to service the community of Maxwell as envisioned in the Colusa County General Plan and to comply with the State of California regulations in light of recent improvements made to the treatment system.
- 3-8) The Average Dry and Wet Weather flows do not exceed the design capacity and permitted capacity of the wastewater treatment plant.
- 3-9) To reduce inflow and infiltration, the district should continue to make improvements to the wastewater collection system as funding is available

<sup>71</sup> California Government Code Section 56430. (a)(3).

#### **5.4 Financial Ability to Provide Services<sup>72</sup>**

**Purpose: To evaluate factors that affect the financing of needed improvements and to identify practices or opportunities that may help eliminate unnecessary costs without decreasing service levels.**

##### **5.4.1 Financial Considerations for Maxwell PUD**

The finances of the Maxwell PUD are explained above in this report. In evaluating the finances it is important to consider the future financial needs of the District as well as the present financial situation.

##### **5.4.2 MSR Determinations on Financing for Maxwell PUD**

- 4-1) The Maxwell PUD maintains a balanced budget.
- 4-2) The Maxwell PUD has an independent audit performed each year by an outside auditor.
- 4-3) The fees and taxes collected by the Maxwell PUD are adequate to support the District operations.
- 4-4) The District should develop and adopt a Capital Improvement Plan. The Capital Improvement Plan is necessary to determine the long-term financing needs of the District.
- 4-5) The District should study the fee schedules to make sure that the fees will be adequate in the future to pay for increased personnel costs and improvements.
- 4-6) The District should have a website or a page on the Colusa County website to provide for public access to the financial documents such as the budget, audit and fee schedules.

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<sup>72</sup> California Government Code Section 56430. (a)(4)



## **5.5 Status of and Opportunities for Shared Facilities**<sup>73</sup>

**Purpose: To evaluate the opportunities for a jurisdiction to share facilities and resources to develop more efficient service delivery systems.**

### **5.5.1 Maxwell PUD Facilities**

The Maxwell Public Utility District facilities are described above in this report.

### **5.5.2 MSR Determinations on Shared Facilities for Maxwell PUD**

- 5-1) The Maxwell PUD is too far from any other community to share water or wastewater collection and treatment facilities with other communities.
- 5-2) The Maxwell PUD could investigate ways of sharing administrative functions with another district.
- 5-3) The District should explore ways to share a web-site with Colusa County or another agency.
- 5-4) The District may need to work with the County Public Works Department or one of the cities to get a qualified wastewater treatment plant and water system operator on a contract basis.

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<sup>73</sup> California Government Code Section 56430. (a)(5)

## **5.6 Accountability for Community Service Needs, Government Structure and Operational Efficiencies<sup>74</sup>**

***Purpose: To consider the advantages and disadvantages of various government structures that could provide public services, to evaluate the management capabilities of the organization and to evaluate the accessibility and levels of public participation associated with the agency's decision-making and management processes.***

### **5.6.1 Maxwell PUD Government Structure**

The governing board and the staff of the Maxwell PUD are described above in this report.

### **5.6.2 MSR Determinations on Local Accountability and Governance**

- 6-1) The Board of Directors has regular meetings with posted agendas and meets in a public place.
- 6-2) The District has a vacancy on the Board of Directors. This is a concern for the future of the District and every effort should be made to fill this seat as soon as possible.
- 6-3) The District could benefit from a website or a page on the Colusa County website, to post agendas and minutes of meetings, fee schedules and other information on the District.
- 6-4) The District should consider a publication that can be inserted into water bills to enhance communication with ratepayers.
- 6-5) The Board of Directors should consider a program or process for maintaining the District Staff should any staff members leave or retire. The District may need to hire additional employees and train them to have a qualified person available to operate both the wastewater treatment and water systems.
- 6-6) The District was cooperative and provided information to Colusa LAFCo in a timely manner.

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<sup>74</sup> California Government Code Section 56430. (a)(6).

## **6 MAXWELL PUD SPHERE OF INFLUENCE UPDATE**

### **6.1 SOI Requirements**

#### **6.1.1 LAFCo's Responsibilities**

This Sphere of Influence (SOI) has been prepared for the Colusa Local Agency Formation Commission (Colusa LAFCo). Local Agency Formation Commissions are quasi-legislative local agencies created in 1963 to assist the State in encouraging the orderly development and formation of local agencies. This SOI consists of a review of water and sewer service as provided by the Maxwell Public Utility District and the District Boundary.

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code §56000 et seq.) is the statutory authority for the preparation of an MSR, and periodic updates of the Sphere of Influence of each local agency. A Sphere of Influence is a plan for the probable physical boundaries and service area of a local agency, as determined by the affected Local Agency Formation Commission (Government Code §56076). Government Code §56425(f) requires that each Sphere of Influence be updated not less than every five years, and §56430 provides that a Municipal Service Review shall be conducted in advance of the Sphere of Influence update.

#### **6.1.2 SOI Determinations**

In determining the Sphere of Influence for each local agency, LAFCo must consider and prepare a statement of determinations with respect to each of the following:

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

#### **6.1.3 Possible Approaches to the SOI**

LAFCo may recommend government reorganizations to particular agencies in the county, using the SOIs as the basis for those recommendations. Based on review of the guidelines of Colusa LAFCo as well as other LAFCos in the State, various conceptual approaches have been identified from which to choose in designating an SOI. These seven approaches are explained below:

1) Coterminous Sphere:

The sphere for a city or special district that is the same as its existing boundaries. **This is the recommendation for the Maxwell PUD.**

2) Annexable Sphere:

A sphere larger than the agency's boundaries identifies areas the agency is expected to annex. The annexable area is outside its boundaries and inside the sphere.

3) Detachable Sphere:

A sphere that is smaller than the agency's boundaries identifies areas the agency is expected to detach. The detachable area is the area within the agency bounds but not within its sphere.

4) Zero Sphere:

A zero sphere indicates the affected agency's public service functions should be reassigned to another agency and the agency should be dissolved or combined with one or more other agencies.

5) Consolidated Sphere:

A consolidated sphere includes two or more local agencies and indicates the agencies should be consolidated into one agency.

6) Limited Service Sphere:

A limited service sphere is the territory included within the SOI of a multi-service provider agency that is also within the boundary of a limited purpose district which provides the same service (e.g., fire protection), but not all needed services. Territory designated as a limited service SOI may be considered for annexation to the limited purpose agency without detachment from the multi-service provider.

This type of SOI is generally adopted when the following four conditions exist:

- a) The limited service provider is providing adequate, cost effective and efficient services
- b) The multi-service agency is the most logical provider of the other services
- c) There is no feasible or logical SOI alternative, and
- d) Inclusion of the territory is in the best interests of local government organization and structure in the area

Government Code §56001 specifically recognizes that in rural areas it may be appropriate to establish limited purpose agencies to serve an area rather than a single service provider, if multiple limited purpose agencies are better able to provide efficient services to an area rather than one service district.

Moreover, Government Code Section §56425(i), governing sphere determinations, also authorizes a sphere for less than all of the services provided by a district by requiring a district affected by a sphere action to "establish the nature, location, and extent of any functions of classes of services provided by existing districts" recognizing that more than one district may serve an area and that a given district may provide less than its full range of services in an area.

7) Sphere Planning Area:

LAFCo may choose to designate a sphere planning area to signal that it anticipates expanding an agency's SOI in the future to include territory not yet within its official SOI.

**6.1.4 SOI Update Process**

LAFCo is required to establish SOIs for all local agencies and enact policies to promote the logical and orderly development of areas within the SOIs. Furthermore, LAFCo must update those SOIs every five years, as necessary. In updating the SOI, LAFCo is required to conduct a Municipal Service Review (MSR) and adopt related determinations.

LAFCo must notify affected agencies 21 days before holding a public hearing to consider the SOI and may not update the SOI until that hearing is closed. The LAFCo Executive Officer must issue a report including recommendations on the SOI amendment and update under consideration at least five days before the public hearing.

**6.1.5 SOI Amendments and CEQA**

LAFCo has the discretion to limit SOI updates to those that it may process without unnecessarily delaying the SOI update process or without requiring its funding agencies to bear the costs of environmental studies associated with SOI expansions. Any local agency or individual may file a request for an SOI amendment. The request must state the nature of and reasons for the proposed amendment, and provide a map depicting the proposal.

LAFCo may require the requester to pay a fee to cover LAFCo costs, including the costs of appropriate environmental review under CEQA. LAFCo may elect to serve as lead agency for such a review, may designate the proposing agency as lead agency, or both the local agency and LAFCo may serve as co-lead agencies for purposes of an SOI amendment. Local agencies are encouraged to consult with LAFCo staff early in the process regarding the most appropriate approach for the particular SOI amendment under consideration.

Certain types of SOI amendments are usually exempt from CEQA review. Examples are SOI expansions that include territory already within the bounds or service area of an agency, SOI reductions, and zero SOIs. SOI expansions for limited purpose agencies that provide services (e.g., fire protection, levee protection, cemetery, and resource conservation) needed by both rural and urban areas are typically not considered growth-inducing and are likely exempt from CEQA. Similarly, SOI expansions for districts serving rural areas (e.g., irrigation water) are typically not considered growth-inducing.

*Remy et al. write*

*In City of Agoura Hills v. Local Agency Formation Commission (2d Dist.1988) 198 Cal.App.3d480, 493-496 [243 Cal.Rptr.740] (City of Agoura Hills), the court held that a LAFCO's decision to approve a city's sphere of influence that in most respects was coterminous with the city's existing municipal boundaries was not a "project" because such action did not entail any potential effects on the physical environment.<sup>75</sup>*

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<sup>75</sup> Remy, Michael H., Tina A. Thomas, James G. Moose, Whitman F. Manley, Guide to CEQA, Solano Press Books, Point Arena, CA, February 2007, page 111.

Since the recommendation for the Maxwell PUD Sphere of Influence follows the land use designations in the Colusa County General Plan adopted in 2012, the environmental review for the SOI adoption will reference the Environmental Impact Report prepared for the General Plan.

### **6.1.6 Recommendation for Maxwell PUD Sphere of Influence**

The recommendation for the Maxwell PUD Sphere of Influence is for the Sphere to be coterminous with the District Boundary. There is ample room within the District for growth and development should they occur.

## **6.2 Present and Planned Land Uses in the Maxwell PUD Area, Including Agricultural and Open Space Lands<sup>76</sup>**

### **6.2.1 Colusa County General Plan and Zoning for Maxwell PUD SOI Area**

The General Plan and Zoning for the Maxwell Public Utility District is shown on maps at the end of this report and is analyzed above in this report. The District has land included in the District boundary for future development. The land surrounding the District is zoned for agriculture.

### **6.2.2 SOI Determinations on Present and Planned Land Use for Maxwell PUD Area**

- 1-1] The land within the Maxwell PUD includes appropriate zoning for future development.
- 1-2] Encouraging development within the Maxwell PUD will preserve agricultural lands in the surrounding area.
- 1-3] The District is not a land use authority, and does not hold primary responsibility for implementing growth strategies. The land use authority for unincorporated areas is Colusa County.

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<sup>76</sup> California Government Code Section 56425 (e)(1)

### **6.3 Present and Probable Need for Public Facilities and Services in the Maxwell PUD Area<sup>77</sup>**

#### **6.3.1 Municipal Service Background**

There is a need for sewer and water service to serve the population of Maxwell and this need will continue into the future.

#### **6.3.2 SOI Determinations on Facilities and Services Present and Probable Need for Maxwell PUD**

2-1] The need for the Maxwell Public Utilities District will continue into the foreseeable future.

### **6.4 Present Capacity of Public Facilities Present and Adequacy of Public Services<sup>78</sup>**

#### **6.4.1 Capacity Background**

The capacity of the Maxwell PUD facilities is described above in this report.

#### **6.4.2 SOI Determinations on Public Facilities Present and Future Capacity for Maxwell PUD**

3-1] The capacity of the water treatment and distribution system is adequate to serve the Maxwell PUD now and in the future as envisioned in the Colusa County General Plan.

3-2] The capacity of the wastewater collection and treatment system is adequate to serve the Maxwell PUD now and in the future as envisioned in the Colusa County General Plan.

3-3] The capacity of the District administration and management is adequate at this time but it would be good for the District to have all staff with the certifications to operate both the sewer and the water systems.

<sup>77</sup> California Government Code Section 56425 (e)(2)

<sup>78</sup> California Government Code Section 56425 (e)(3)

## **6.5 Social or Economic Communities of Interest for Maxwell PUD<sup>79</sup>**

### **6.5.1 Maxwell PUD Community Background**

Maxwell has most of the services of a complete community. Residents may need to travel to Willows or Chico for medical services. Residents may travel to Willows or Chico for some shopping needs as well.

### **6.5.2 SOI Determinations on Social or Economic Communities of Interest for Maxwell PUD**

4-1] Maxwell is a complete community with both sewer and water systems and schools for elementary and high school students.

## **6.6 Disadvantaged Unincorporated Community Status<sup>80</sup>**

### **6.6.1 Disadvantaged Unincorporated Communities**

In addition to a consideration of population growth, the State Law requires LAFCo to consider whether or not an area is a Disadvantaged Unincorporated Community (DUC). A DUC is an area where the Median Household Income is less than 80% of the State of California Median Household Income.

The Median Household Income is \$43,750 for the Maxwell Public Utility District. The Median Household Income for the County of Colusa is \$52,158. The Median Household Income for California is \$61,094.<sup>81</sup> Eighty percent of the State Median Household Income is \$48,875 so the Median Household Income for Colusa County does not qualify as Disadvantaged. However, the median household income for the Maxwell area does.

### **6.6.2 Maxwell PUD Disadvantaged Unincorporated Community Status**

5-1] According to the Median Household Income for the Maxwell PUD and surrounding area, Maxwell would qualify as a Disadvantaged Unincorporated Community.

<sup>79</sup> California Government Code Section 56425 (e)(4)

<sup>80</sup> California Government Code Section 56425 (e)(5)

<sup>81</sup> US Census Bureau, <http://quickfacts.census.gov/qfd/states/06/06011.html>, October 26, 2015.



## **APPENDIX A**

March 23, 2015

Maxwell Public Utility District

P.O. Box 294

Maxwell, CA 95955

**RE: Report of 2015 Inspection, Maxwell PUD, System No. 0610003**

Dear David Wadsworth,

On Thursday, February 4, 2015, I met with you and Kurt Chambers to conduct an inspection of the Maxwell PUD public water system. The water system appeared well operated and maintained. However, two monitoring deficiencies were noted, as described in the enclosed Inspection Report and System Deficiency Record. These deficiencies are for monitoring violations and must be reported in the 2014 Consumer Confidence Report.

If you have any questions, please call me at (530) 224-3252, or the District Engineer, Reese Crenshaw, at (530) 224-4861.

Sincerely,

Ray Bruun, P.E.

Associate Engineer

Drinking Water Field Operations Branch

**ABBREVIATIONS**

<b>AB</b>	Assembly Bill
<b>ADWF</b>	Average Dry Weather Flow
<b>AWWA</b>	American Water Works Association
<b>AWWF</b>	Average Wet Weather Flow
<b>CKH</b>	Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000
<b>County</b>	Colusa County
<b>CPA</b>	Community Planning Area
<b>District</b>	Maxwell Public Utility District
<b>DUC</b>	Disadvantaged Unincorporated Community
<b>EDU</b>	Equivalent Dwelling Unit
<b>FY</b>	Fiscal Year
<b>GPD</b>	Gallons per Day
<b>gpm</b>	gallons per minute
<b>I and I</b>	Inflow and Infiltration
<b>LAFCO</b>	Local Agency Formation Commission
<b>LAIF</b>	Local Agency Investment Fund
<b>MG</b>	Million Gallons
<b>mgd</b>	million gallons per day
<b>MSR</b>	Municipal Service Review
<b>NFPA</b>	National Fire Protection Association
<b>NPDES</b>	National Pollutant Discharge Elimination System
<b>PEPRA</b>	Public Employee Pension Reform Act
<b>PERS</b>	Public Employee Retirement System
<b>psi</b>	pounds per square inch

<b>PUD</b>	Public Utility District
<b>PVC</b>	Poly-Vinyl-Chloride
<b>RWQCB</b>	Regional Water Quality Control Board
<b>SDWA</b>	Safe Drinking Water Act
<b>SOI</b>	Sphere of Influence
<b>USDA</b>	United States Department of Agriculture
<b>WW</b>	Waste Water
<b>WWTP</b>	Waste Water Treatment Plant

## DEFINITIONS

**Acre-foot (acre-ft):** The volume of water required to cover 1 acre of land (43,560 square feet) to a depth of 1 foot. One Acre-foot is equal to 325,851 gallons or 1,233 cubic meters.<sup>82</sup>

**Agriculture:** Use of land for the production of food and fiber, including the growing of crops and/or the grazing of animals on natural prime or improved pasture land.

**Aquifer:** An underground, water-bearing layer of earth, porous rock, sand, or gravel, through which water can seep or be held in natural storage. Aquifers generally hold sufficient water to be used as a water supply.

**Bond:** An interest-bearing promise to pay a stipulated sum of money, with the principal amount due on a specific date. Funds raised through the sale of bonds can be used for various public purposes.

**California Environmental Quality Act (CEQA):** A State Law requiring State and local agencies to regulate activities with consideration for environmental protection. If a proposed activity has the potential for a significant adverse environmental impact, an environmental impact report (EIR) must be prepared and certified as to its adequacy before taking action on the proposed project.

**DBP: Disinfection byproducts** or DBPs, are chemicals that are formed when organic carbon reacts with chlorine, a chemical used to disinfect water against pathogenic organisms. The DBPs that are tracked are trihalomethanes (TTHMs) and haloacetic acids (HAA5).

**Distribution System:** A network of pipes leading from a treatment plant to customers' plumbing systems.

**Domestic water use:** Water used for household purposes, such as drinking, food preparation, bathing, washing clothes, dishes, and dogs, flushing toilets, and watering lawns and gardens. About 85% of domestic water is delivered to homes by a public-supply facility, such as a county water department. About 15% of the Nation's population supplies their own water, mainly from wells.<sup>83</sup>

**Environmental Impact Report (EIR):** A report required pursuant to the California Environmental Quality Act that assesses all the environmental characteristics of an area, determines what effects or impact will result if the area is altered or disturbed by a proposed action, and identifies alternatives or other measures to avoid or reduce those impacts. (See California Environmental Quality Act.)

**Filtration:** A process by which solids are filtered out of liquids, a stage in water treatment, a process for removing particulate matter from water by passage through porous media.

**Finished Water:** Water that has been treated and is ready to be delivered to customers.

**Human consumption:** the ingestion or absorption of water or water vapor as the result of drinking, cooking, dishwashing, hand washing, bathing, showering or oral hygiene.

**Infrastructure:** Public services and facilities such as sewage-disposal systems, water-supply systems, and other utility systems, schools and roads.

**Land Use Classification:** A system for classifying and designating the appropriate use of properties.

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<sup>82</sup> <http://ga.water.usgs.gov/edu/dictionary.html>

<sup>83</sup> <http://ga.water.usgs.gov/edu/dictionary.html>

**Leapfrog Development:** New development separated from existing development by substantial vacant land.

**Local Agency Formation Commission (LAFCo):** A five-or seven-member commission within each county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, and merger of districts with cities. Each county's LAFCo is empowered to approve, disapprove, or conditionally approve such proposals. The LAFCo members generally include two county supervisors, two city council members, and one member representing the general public. Some LAFCOs include two representatives of special districts.

**Maximum Contaminant Level (MCL):** The designation given by the U.S. Environmental Protection Agency (EPA) to water-quality standards promulgated under the Safe Drinking Water Act. The MCL is the greatest amount of a contaminant that can be present in drinking water without causing a risk to human health.<sup>84</sup>

**Municipal water system:** A water system that has at least five service connections or which regularly serves 25 individuals for 60 days; also called a public water system.<sup>85</sup>

**Potable Water:** Water of a quality suitable for drinking.<sup>86</sup>

**Per capita water use:** The water produced by or introduced into the system of a water supplier divided by the total residential population; normally expressed in gallons per capita per day (gpcd).<sup>87</sup>

**Proposition 13:** (Article XIII A of the California Constitution) Passed in 1978, this proposition enacted sweeping changes to the California property tax system. Under Prop. 13, property taxes cannot exceed 1% of the value of the property and assessed valuations cannot increase by more than 2% per year. Property is subject to reassessment when there is a transfer of ownership or improvements are made.<sup>88</sup>

**Proposition 218:** (Article XIII D of the California Constitution) This proposition, named "The Right to Vote on Taxes Act", filled some of the perceived loopholes of Proposition 13. Under Proposition 218, assessments may only increase with a two-thirds majority vote of the qualified voters within the District. In addition to the two-thirds voter approval requirement, Proposition 218 states that effective July 1, 1997, any assessments levied may not be more than the costs necessary to provide the service, proceeds may not be used for any other purpose other than providing the services intended, and assessments may only be levied for services that are immediately available to property owners.<sup>89</sup>

**Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the California Environmental Protection Agency.

**Public Water Systems (PWS):** A public water system provides piped water for human consumption to at least 15 service connections or serves an average of at least 25 people for at least 60 days each year, and includes the source of the water supply (i.e., surface or groundwater). PWSs can be community, nontransient noncommunity, or transient noncommunity systems, as defined by the EPA's Public Water System Supervision (PWSS) Program.

**Ranchette:** A single dwelling unit occupied by a non-farming household on a parcel of 2.5 to 20 acres that has been subdivided from agricultural land.

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<sup>84</sup> <http://ga.water.usgs.gov/edu/dictionary.html>

<sup>85</sup> <http://ga.water.usgs.gov/edu/dictionary.html>

<sup>86</sup> <http://ga.water.usgs.gov/edu/dictionary.html>

<sup>87</sup> <http://rubicon.water.ca.gov/v1cwp/glossry.html>

<sup>88</sup> [http://www.californiaataxdata.com/A\\_Free\\_Resources/glossary\\_PS.asp#ps\\_08](http://www.californiaataxdata.com/A_Free_Resources/glossary_PS.asp#ps_08)

<sup>89</sup> [http://www.californiaataxdata.com/A\\_Free\\_Resources/glossary\\_PS.asp#ps\\_08](http://www.californiaataxdata.com/A_Free_Resources/glossary_PS.asp#ps_08)

**Raw Water:** Water in its natural state, prior to any treatment for drinking.

**Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Sanitary Sewer:** A system of subterranean conduits that carries refuse liquids or waste matter to a plant where the sewage is treated, as contrasted with storm drainage systems (that carry surface water) and septic tanks or leech fields (that hold refuse liquids and waste matter on-site).

**Sanitary Survey:** An on-site review of the water sources, facilities, equipment, operation, and maintenance of a public water systems for the purpose of evaluating the adequacy of the facilities for producing and distributing safe drinking water.

**Secondary Drinking Water Standards (SDWS):** Non-enforceable federal guidelines regarding cosmetic effects (such as tooth or skin discoloration) or aesthetic effects (such as taste, odor, or color) of drinking water.

**Sedimentation:** A process of settling particles out of a liquid in a treatment plant, a process for removal of solids before filtration by gravity or separation.

**Service area:** The geographical land area served by a distribution system of a water agency.<sup>90</sup>

**Source Water:** Water in its natural state, prior to any treatment for drinking.

**Sphere of Influence (SOI):** The probable physical boundaries and service area of a local agency, as determined by the Local Agency Formation Commission (LAFCO) of the county.

**Surface Water:** The water that systems pump and treat from sources open to the atmosphere, such as rivers, lakes, and reservoirs.

**Total dissolved solids (TDS):** A quantitative measure of the residual minerals dissolved in water that remains after evaporation of a solution. TDS is usually expressed in milligrams per liter.<sup>91</sup>

**Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.

**Trihalomethanes (THMs)** are a byproduct of chlorine disinfection and to a lesser degree, disinfection using chloroamines. The THMs (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) are formed when free chlorine combines with organic matter, like decaying vegetation commonly found in lakes and reservoirs. Total Trihalomethanes (TTHM) are regulated by the EPA at a maximum allowable annual average of 80 parts per billion.

**Turbidity:** The cloudy appearance of water caused by the presence of tiny particles. High levels of turbidity may interfere with proper water treatment and monitoring.

**Urban:** Of, relating to, characteristic of, or constituting a city. Urban areas are generally characterized by moderate and higher density residential development (i.e., three or more dwelling units per acre), commercial development, and industrial development, and the availability of public services required for that development, specifically central water and sewer service, an extensive road network, public transit, and other such services (e.g., safety and emergency response). Development not providing such services

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<sup>90</sup> <http://rubicon.water.ca.gov/v1cwp/glssry.html>

<sup>91</sup> <http://rubicon.water.ca.gov/v1cwp/glssry.html>

may be “non-urban” or “rural”. CEQA defines “urbanized area” as an area that has a population density of at least 1,000 persons per square mile (Public Resources Code Section 21080.14(b)).

**Urban Services:** Utilities (such as water, gas, electricity, and sewer) and public services (such as police, fire protection, schools, parks, and recreation) provided to an urbanized or urbanizing area.

**Violation:** A failure to meet any state or federal drinking water regulation.

**Vulnerability Assessment:** An evaluation of drinking water source quality and its vulnerability to contamination by pathogens and toxic chemicals.

**Water quality:** Used to describe the chemical, physical, and biological characteristics of water, usually in regard to its suitability for a particular purpose or use.<sup>92</sup>

**Water year:** A continuous 12-month period for which hydrologic records are compiled and summarized. In California, it begins on October 1 and ends September 30 of the following year.<sup>93</sup>

**Watershed:** The land area from which water drains into a stream, river, or reservoir.

**Zoning:** The division of a city by legislative regulations into areas, or zones, that specify allowable uses for real property and size restrictions for buildings within these areas; a program that implements policies of the general plan.

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<sup>92</sup> <http://rubicon.water.ca.gov/v1cwp/glssry.html>

<sup>93</sup> <http://rubicon.water.ca.gov/v1cwp/glssry.html>

**REFERENCES**

Arbuckle PUD, PO Box 207, Arbuckle, CA 95912, Phone: (530) 476-2054, Fax: 530-476-2761,  
E-Mail: [apud@frontiernet.net](mailto:apud@frontiernet.net)

Arbuckle PUD, Small Water System 2011 Annual Report to the Drinking Water Program for year  
Ending December 31, 2011.

Arbuckle PUD, Water Rates as of January 1, 2009.

Artois Community Services District, Jack Cavier, Jr., President, March 1, 2012.

California Water Service Company, 1720 North First Street, San Jose, California, 95112,  
Phone: 408-367-8200, Schedule No. WL-1-R Willows Tariff Area, Effective 5/3/12.

City of Colusa, Water Department, Phone 458-4740 Ex100, August 7, 2012.

City of Colusa, Water Department, Phone 458-4740 Ex100, September 12, 2012.

City of Corning, Laurie Sims, Department of Finance, Phone 530-834-7029, February 20, 2014.

City of Orland, Angela Crook, Assistant City Manager/City Clerk, 815 Fourth Street, Orland CA  
95963, December 30, 2013.

City of Orland, Angela Crook, Assistant City Manager/City Clerk, 815 Fourth Street, Orland CA  
95963, December 30, 2014

City of Susanville, 530-252-5111, August 3, 2012.

City of Williams, Greg Endeman, [gendeman@cityofwilliams.org](mailto:gendeman@cityofwilliams.org), October 1, 2012.

City of Willows, Skyler Lipski, Public Works Director, Phone: 530-934-7041, September 5, 2012.

Clear Creek CSD, Pat Mudrich, Manager, August 22, 2012

Clear Creek CSD, Lassen LAFCO Questionnaire June 6, 2012.

Colusa County Assessor, August 24, 2007.

Colusa County, General Plan Background Report, June 2010, Prepared by De Novo Planning  
Group, [WWW.DENOVOPLANNING.COM](http://WWW.DENOVOPLANNING.COM).

Colusa County Ordinance No. 673, An Ordinance of the Colusa County Board of Supervisors  
Increasing water service Fees; authorizing administrative Fees; providing for the  
Collection of Delinquent Charges; and Directing That No New Water Hook-ups Be  
Permitted for County Service Area Number 1-Century Ranch, March 16, 2004.,

Colusa County Ordinance No 674, An Ordinance of the Colusa County Board of Supervisors  
Increasing Water Service Fees; Authorizing Administrative Fees; Providing for the



Collection of Delinquent charges; and Directing That No New Water Hook-ups be permitted for County Service Area Number 2-Stonyford, March 16, 2004.

Colusa County, "Special District Audits Fiscal Year 2005-2006."

Colusa LAFCO, Maxwell PUD Questionnaire, March 12, 2015.

Elk Creek Community Services District, Arnold Kjer, Water Plant Operator, September 28, 2011

<http://ga.water.usgs.gov/edu/dictionary.html>

<http://h2ouse.org/action/top5.cfm>, March 5, 2013.

<http://maxwell-ca.schoolloop.com/file/1373895264477/1377365501732/5717301671423479801.pdf>,  
March 31, 2016.

<http://maxwell-ca.schoolloop.com/file/1373895264477/1377365501732/3659324544243479077.pdf>,  
March 31, 2016.

<http://rubicon.water.ca.gov/v1cwp/glossry.html>

[http://www.californiataxdata.com/A\\_Free\\_Resources/glossary\\_PS.asp#ps\\_08](http://www.californiataxdata.com/A_Free_Resources/glossary_PS.asp#ps_08)

<http://www.water.ca.gov/wateruseefficiency/leak/>, April 1, 2016.

Lassen County Waterworks District 1 (Bieber), Stephen Jackson, Manager, Phone: 530-294-5524, March 1, 2011.

Lassen County Waterworks District 1 (Bieber), Ordinance 09-1, An Ordinance Amending the Ordinance Establishing the Rate for sewer services by the Lassen County Waterworks District 1 (Bieber), June 16, 2009.

Lassen County Waterworks District 1 (Bieber), Ordinance 09-2, An Ordinance amending the Ordinance Establishing the Rate for Water Service by the Lassen County Waterworks District 1 (Bieber), June 16, 2009.

Little Valley CSD, Director Devora Kelley, March 19, 2012.

Maxwell Cemetery District, Director Kerry Reckers, (530) 438-2076, August 13, 2007.

Maxwell PUD, Diana Mason, Office Manager, Phone 438-2505, April 25, 2016.

Maxwell PUD, Maxwell, CA, Diana Mason, Phone: 438-2505, August 7, 2012.

Maxwell PUD, FINANCIAL STATEMENTS TOGETHER WITH INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED JUNE 30, 2016, Prepared by Smith & Newell, 950

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Tharp Road, Yuba City, CA 95993, Phone 530-673-9790, Fax 530-673-1305, E-Mail:  
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Maxwell PUD, FINANCIAL STATEMENTS TOGETHER WITH INDEPENDENT AUDITOR'S  
REPORT FOR THE YEAR ENDED JUNE 30, 2015, Prepared by Smith & Newell, 950  
Tharp Road, Yuba City, CA 95993, Phone 530-673-9790, Fax 530-673-1305, E-Mail:  
SMITHNEW@SBCGLOBAL.NET,

NRCS, USDA,  
[http://www.nrcs.usda.gov/Internet/FSE\\_MANUSCRIPTS/california/CA011/0/colusaCA.p  
df](http://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/CA011/0/colusaCA.pdf) April 18, 2016

Remy, Michael H., Tina A. Thomas, James G. Moose, Whitman F. Manley, Guide to CEQA,  
Solano Press Books, Point Arena, CA, February 2007, page 111.

Sonoma County Water Agency, <http://www.scwa.ca.gov/lower.php?url=residential>, January 16,  
2013

State of California, CALIFORNIA REGIONAL WATER QUALITY CONTROL REGIONAL  
BOARD CENTRAL VALLEY REGION ORDER NO. R5-2009-0109 WASTE  
DISCHARGE REQUIREMENTS FOR MAXWELL PUBLIC UTILITIES DISTRICT  
MAXWELL WASTEWATER TREATMENT FACILITY COLUSA COUNTY, October 8,  
2009.

Susanville Sanitary District, PO Box 162, Susanville, Ca 96130, Phone: 530-257-5685, Fax:  
530-251-5328, September 11, 2012.

US Census Bureau, <http://quickfacts.census.gov/qfd/states/06/06011.html>, October 26, 2015.

Westwood CSD, Susan Coffi, E-Mail: [office@westwoodcsd.org](mailto:office@westwoodcsd.org), September 6, 2012.

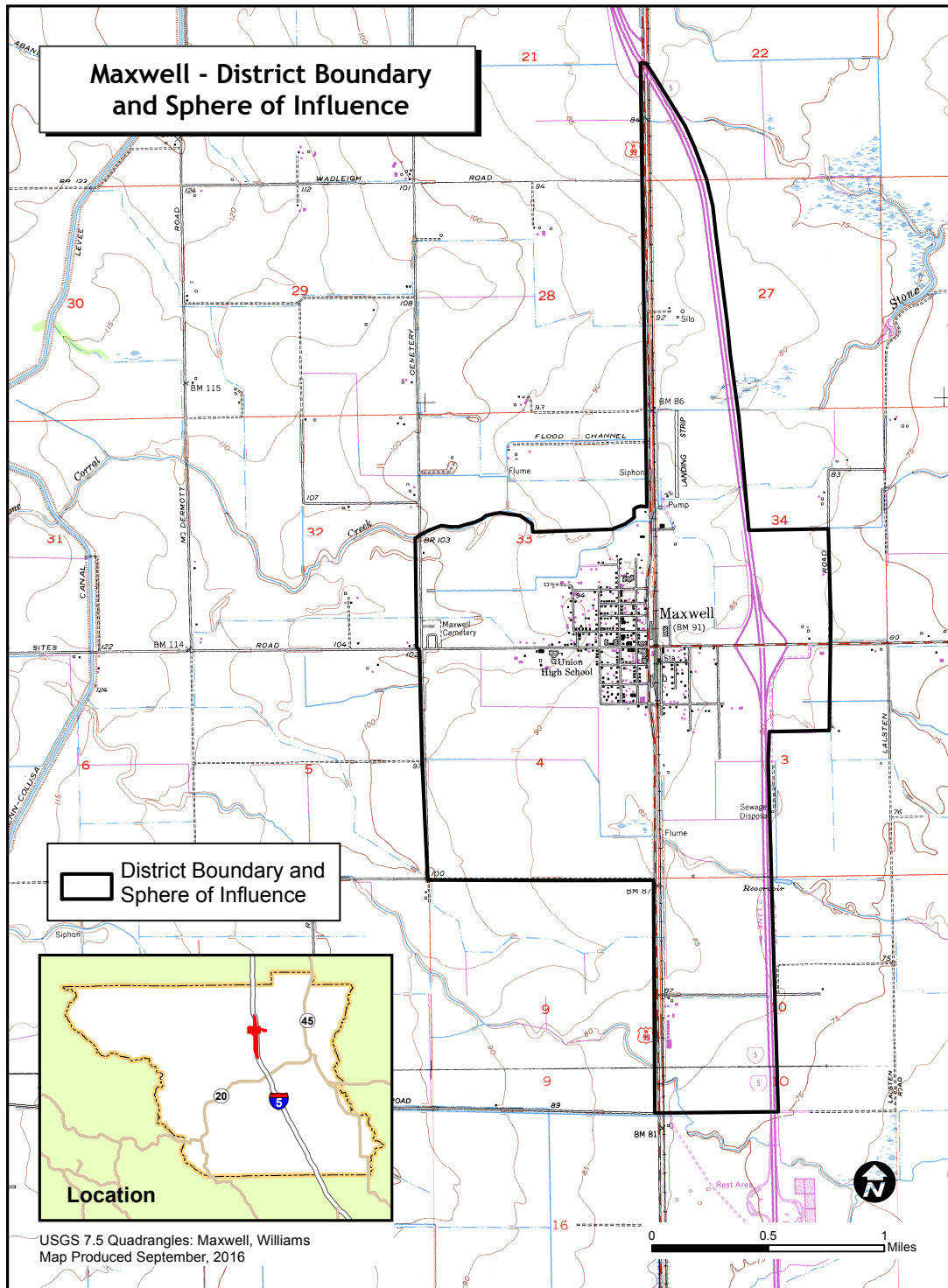
Westwood Community Services District, Resolution 2011-01, A resolution of the Westwood  
Community Services District Increasing Water Rates, June 6, 2011.

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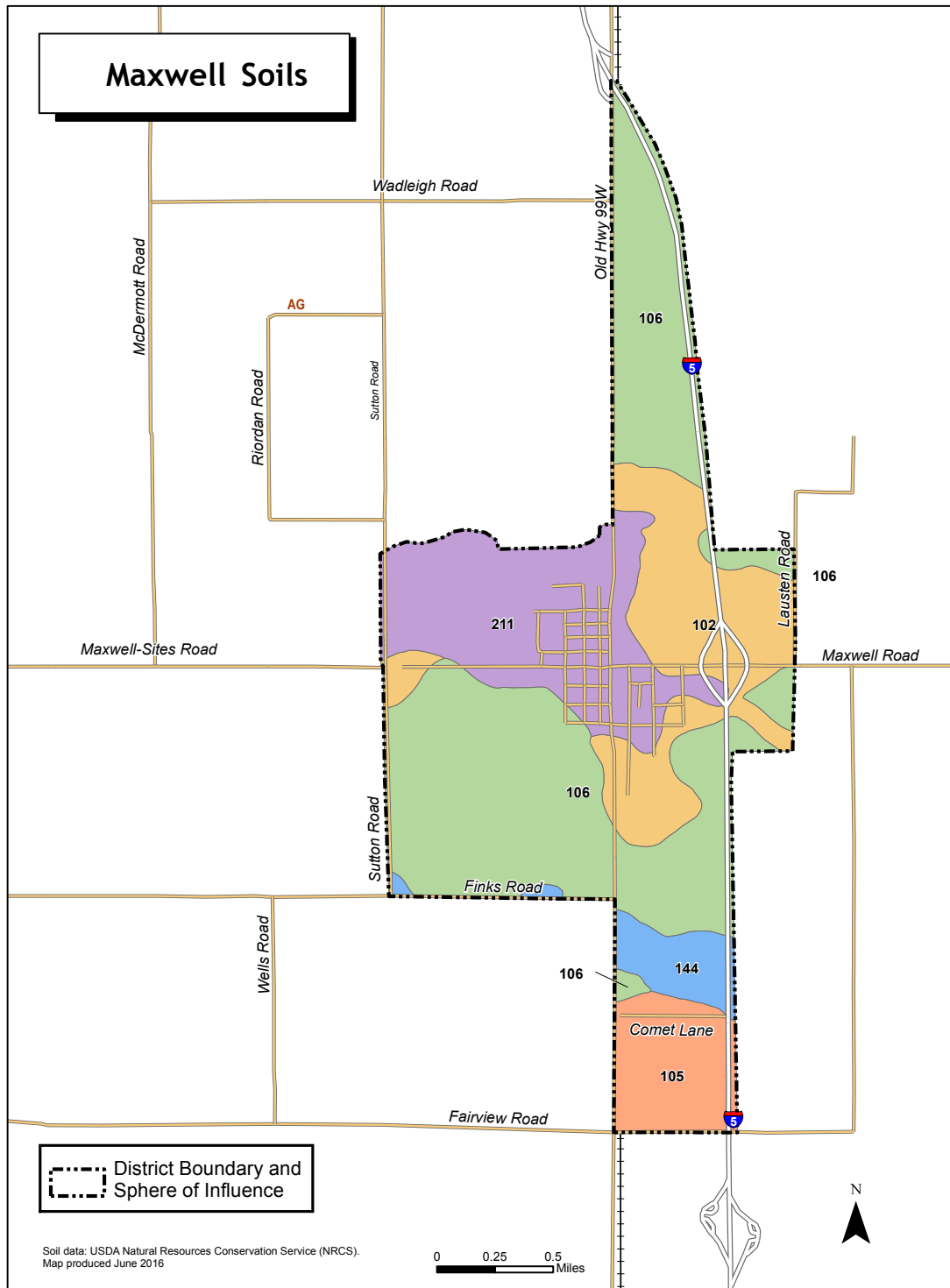
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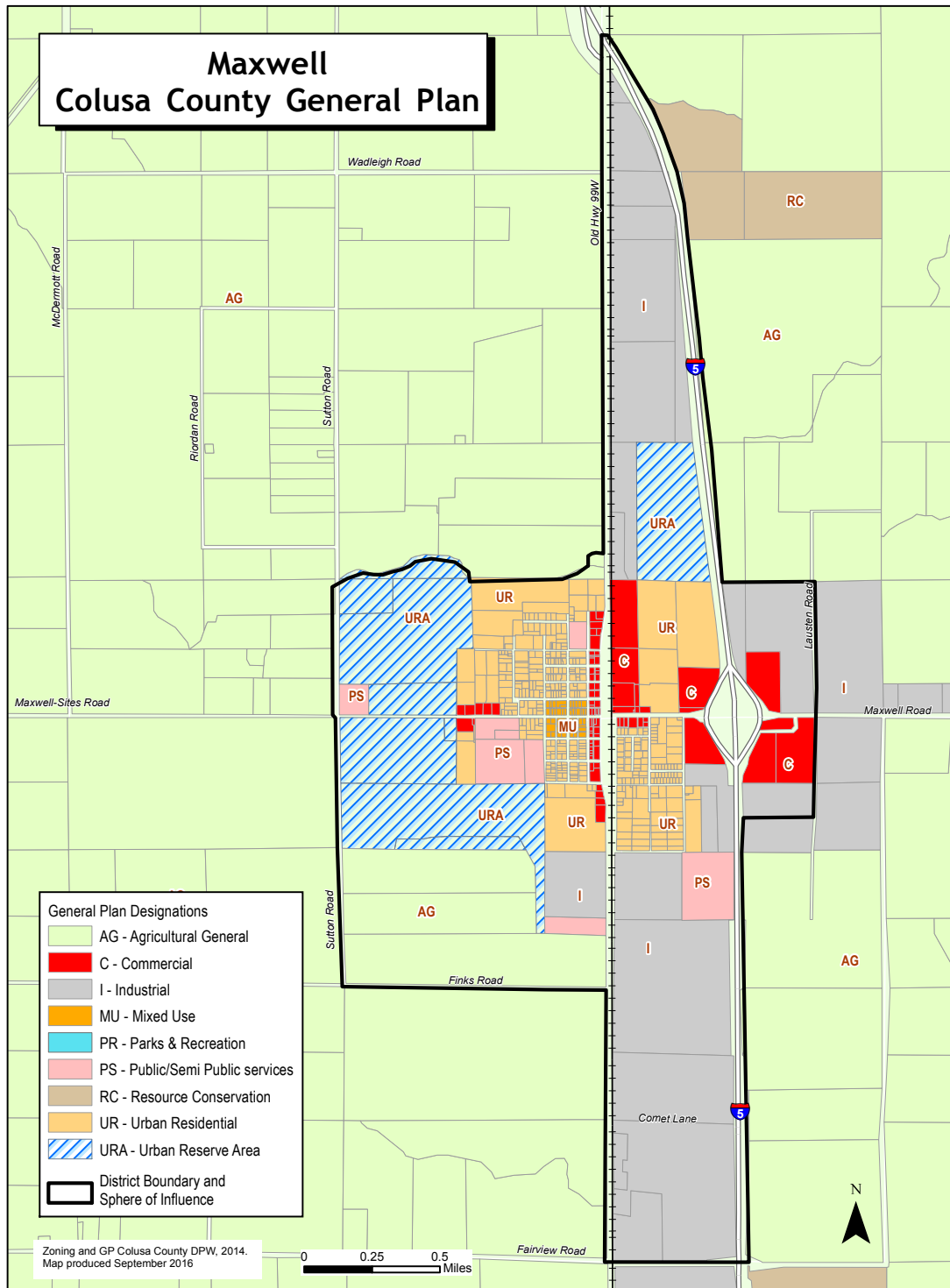
MAPS: Maxwell PUD Location and TOPO Map



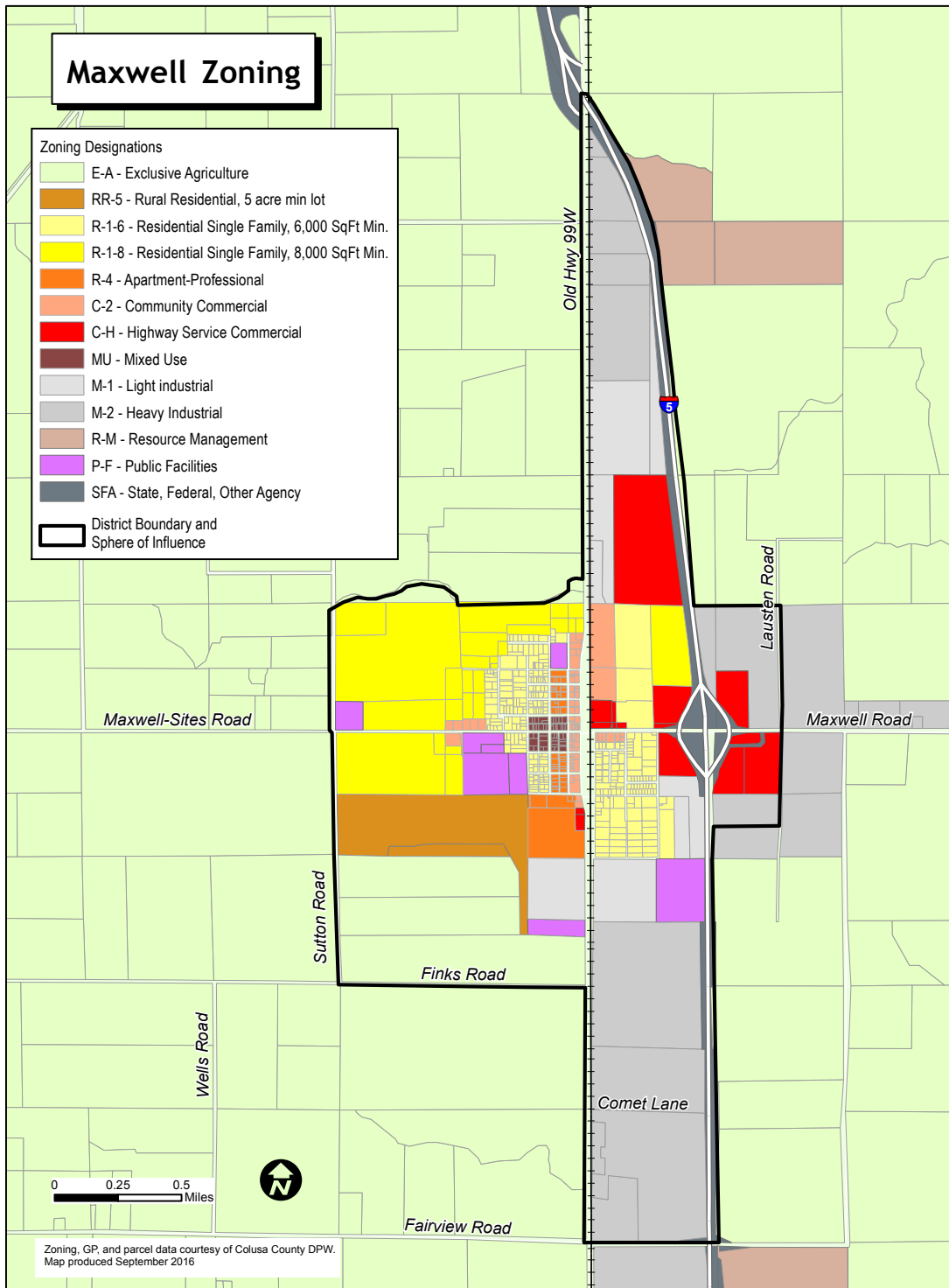
Maxwell PUD Soils Map



Maxwell PUD General Plan Map



**Maxwell PUD Zoning Map**



**Maxwell PUD Boundary and Sphere of Influence Map**

