Attachment 1 - Figures

Dougherty Reservoir
DSRSD 2
Dougherty Control Station
DSRSD 1
DSRSD 3
DSRSD 4
Dublin
Hopyard Pipeline
Santa Rita-Dougherty Pipeline
PLS 4
Mocho Pipeline
PLS 2
OFFICE
Hopyard Wells
WEST ZONE
Cross Valley Control Station
PLS 3
PLS 1
Mocho Wells
Stoneridge Well
LIV 11
DSRSD 5
Cross Valley Pipeline
El Charro Pipeline
Chain of Lakes Wells
CENTRAL ZONE
LIV 9
LIV 5
Kitty Hawk PS
Airport Control Station
Altamont Pipeline
CWS 5
Silver Oaks PS
220 Control Station
LIV 1
CWS 8
CWS 1
CWS 4
CWS 9
CWS 2
Livermore Pipeline
EAST ZONE
LIV 6
LIV 8
Vasco Pipeline
LLNL
Livermore Pipeline
Patterson Pass WTP
LIV 10
Vineyard Control Station
PLS 5
Vineyard Pipeline
PLS 6
PLS 7
CWS 10
CWS 6
CWS 7
Del Valle - Livermore Pipeline
VA 3, LARPD, EBRPD, WENTE
VA2
WTP
Del Valle WTP
Manning Rd
May School Rd
Raymond Rd
Brushy Peak Regional Preserve
Contra Costa
Alameda
Camp Parks Military Reservation
Dublin Ranch Golf Course
Fallon Sports Park
Las Positas College
Springtown Golf Course
Las Positas Golf Course
Dublin Blvd
Owens Dr
Arthur H Breed Fwy
I-580 W
I-580 E
Airway Blvd
W Jack London Blvd
Portola Ave
East Ave
E Stanley Blvd
College Ave
Stanley Blvd
Valley Ave
Vineyard Ave
Concannon Blvd
Tesla Rd
Patterson Pass Rd
Lawrence Livermore Nat'l Laboratory
Greenville Rd
Bernal Ave
Foothill Rd
Castlewood Country Club
Callippe Preserve Golf Course
Ruby Hill Golf Club
Sycamore Grove Regional Park
Course at Wente Vineyards
Lake del Valle
Poppy Ridge Golf Course
Vallecitos Rd
Livermore Ave
N Livermore Ave
S Livermore Ave
Isabel Ave
Arroyo Rd
Main St
1st St
Sunol Blvd
Sinclair Fwy
Tassajara Rd
Fallon Rd
Dougherty Rd
Hacienda Dr
Santa Rita Rd
Las Positas
Tassajara Ranch Rd
680
580
84
CA-84

N
0 2,640 5,280
Scale in Feet

**Symbology**

- Turnout
- WTP — WTP
- Storage Reservoir
- BPS and Control Station
- Control Station
- Well
- Pipe
- Zone Boundary

Note:
1. This is a representation of the Zone 7 transmission system hydraulic model. The model is intended to demonstrate how the distribution system operates under various operating conditions. This figure is for presentation purposes only and does not depict the exact as-built locations of the current distribution system.

WEST YOST ASSOCIATES

**Figure 1**

**Existing Water Transmission System**

Zone 7 Water Agency
Transmission System
Planning Update

Last Saved: 10/19/2015 10:03:57 AM \\PLS-FS01\Pleasanton\Clients\411 Zone 7\12-15-15 Transmission MP\GIS\Figures\Report\Fig 6-1 ExSysFac.mxd kramirez

**Figure 2 - City of Pleasanton Wells and Turnouts**

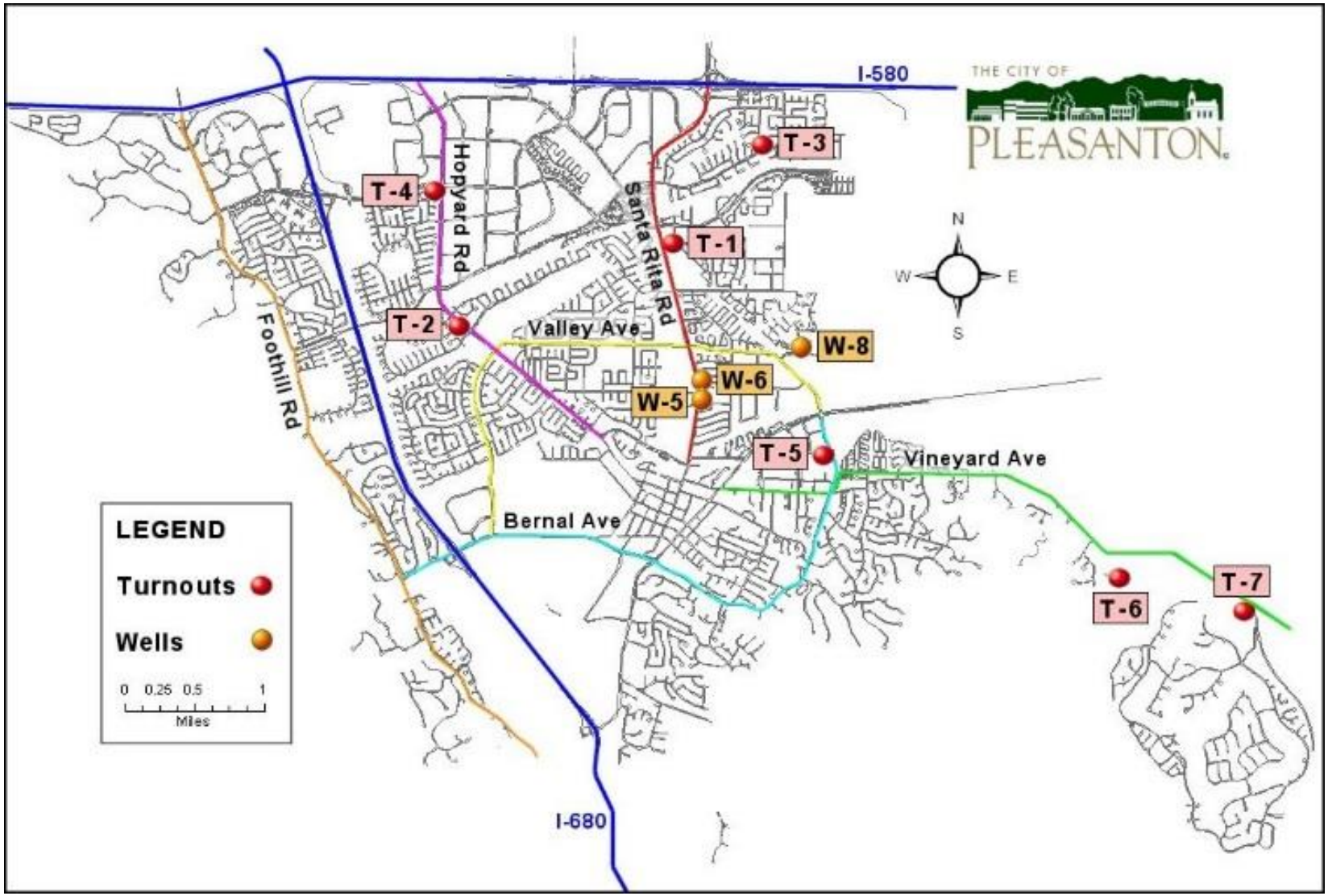
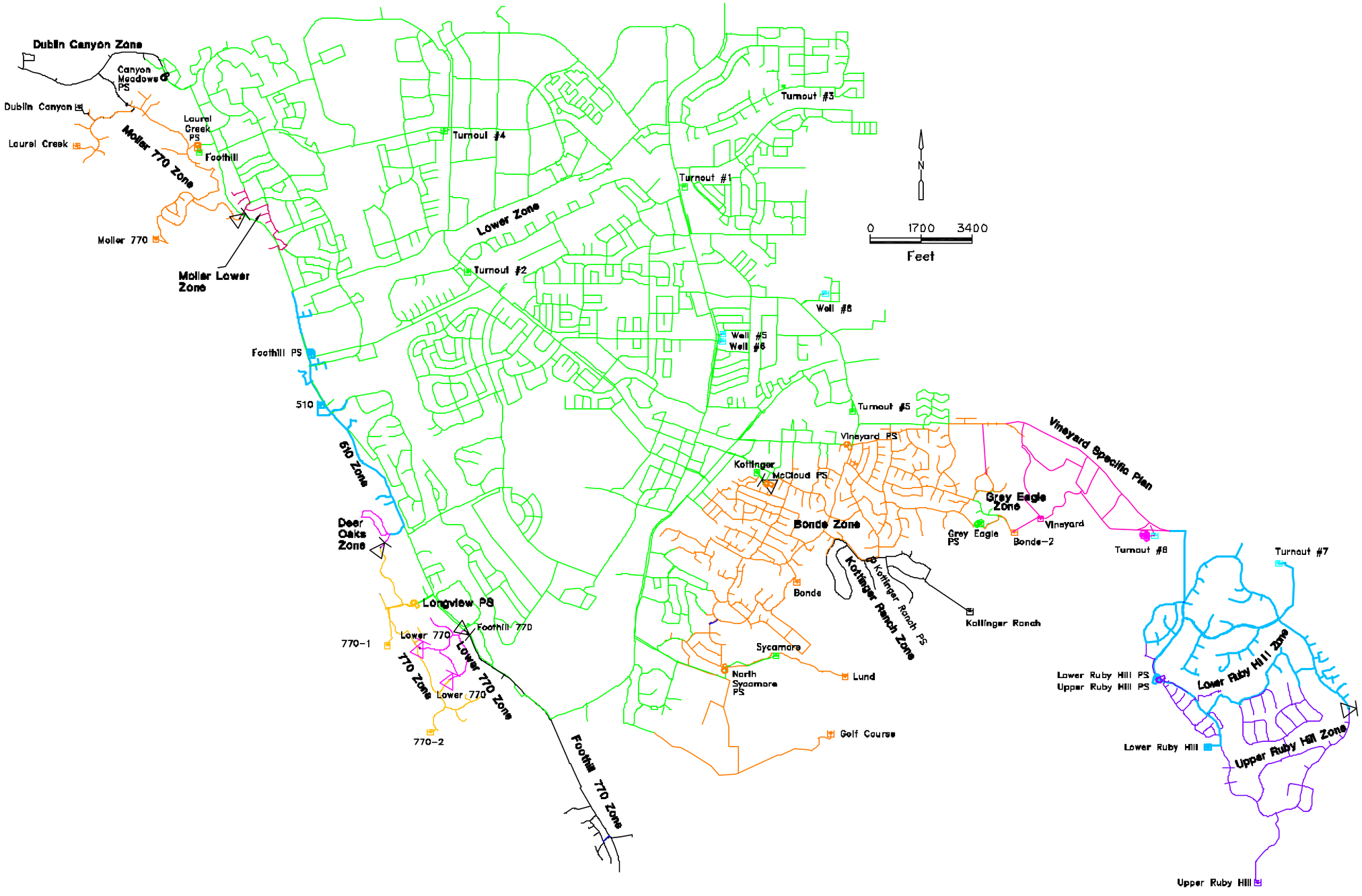
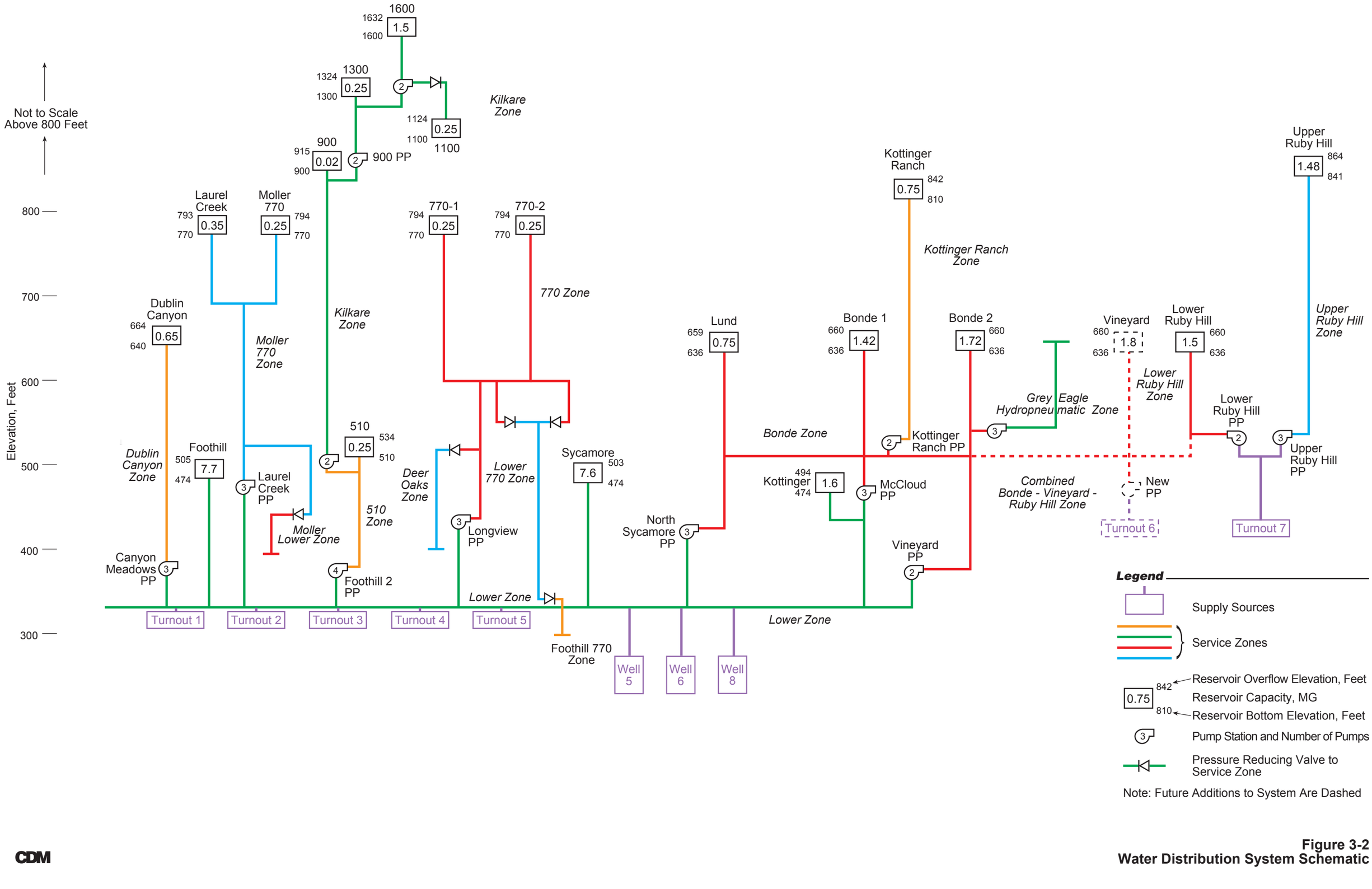


**Figure 3-1**
**Existing Pleasanton Distribution System**






CDM

**Figure 3-2**
**Water Distribution System Schematic**

Attachment 2 – Primary Drinking Water Standards
(MCLs)

# MAXIMUM CONTAMINANT LEVELS AND REGULATORY DATES FOR DRINKING WATER U.S. EPA VS CALIFORNIA

**LAST UPDATED OCTOBER 2018**

| Contaminant | U.S. EPA | | California | |
|---|---|---|---|---|
| | **MCL** (mg/L) | **Date**[a] | **MCL** (mg/L) | **Effective Date** |
| ***Inorganics*** | | | | |
| Aluminum | 0.05 to 0.2[b] | 1/91 | 1<br>0.2[b] | 2/25/89<br>9/8/94 |
| Antimony | 0.006 | 7/92 | 0.006 | 9/8/94 |
| Arsenic | 0.05<br>0.010 | eff: 6/24/77<br>eff: 1/23/06 | 0.05<br>0.010 | 77<br>11/28/08 |
| Asbestos | 7 MFL[c] | 1/91 | 7 MFL[c] | 9/8/94 |
| Barium | 1<br>2 | eff: 6/24/77<br>1/91 | 1 | 77 |
| Beryllium | 0.004 | 7/92 | 0.004 | 9/8/94 |
| Cadmium | 0.010<br>0.005 | eff: 6/24/77<br>1/91 | 0.010<br>0.005 | 77<br>9/8/94 |
| Chromium | 0.05<br>0.1 | eff: 6/24/77<br>1/91 | 0.05 | 77 |
| Copper | 1.3[d] | 6/91 | 1[b]<br>1.3[d] | 77<br>12/11/95 |
| Cyanide | 0.2 | 7/92 | 0.2<br>0.15 | 9/8/94<br>6/12/03 |
| Fluoride | 4<br>2[b] | 4/86<br>4/86 | 2 | 4/98 |
| Lead | 0.05[e]<br>0.015[d] | eff: 6/24/77<br>6/91 | 0.05 [e]<br>0.015[d] | 77<br>12/11/95 |
| Mercury | 0.002 | eff: 6/24/77 | 0.002 | 77 |
| Nickel | Remanded | | 0.1 | 9/8/94 |
| Nitrate | (as N) 10 | eff: 6/24/77 | (as N03) 45 | 77 |
| Nitrite (as N) | 1 | 1/91 | 1 | 9/8/94 |
| Total Nitrate/Nitrite (as N) | 10 | 1/91 | 10 | 9/8/94 |
| Perchlorate | - | - | 0.006 | 10/18/07 |
| Selenium | 0.01<br>0.05 | eff: 6/24/77<br>1/91 | 0.01<br>0.05 | 77<br>9/8/94 |
| Thallium | 0.002 | 7/92 | 0.002 | 9/8/94 |
| ***Radionuclides*** | | | | |
| Uranium | 30 ug/L | 12/7/00 | 20 pCi/L<br>20 pCi/L | 1/1/89<br>6/11/06 |
| Combined Radium - 226+228 | 5 pCi/L | eff: 6/24/77 | 5 pCi/L<br>5 pCi/L | 77<br>6/11/06 |
| Gross Alpha particle activity (excluding radon & uranium) | 15 pCi/L | eff: 6/24/77 | 15 pCi/L<br>15 pCi/L | 77<br>6/11/06 |
| Gross Beta particle activity | 4 millirem/yr | eff: 6/24/77 | 50 pCi/L[f]<br>4 millirem/yr | 77<br>6/11/06 |
| Strontium-90 | 8 pCi/L | eff: 6/24/77<br>now covered by Gross Beta | 8 pCi/L[f]<br>8 pCi/L[f] | 77<br>6/11/06 |
| Tritium | 20,000 pCi/L | eff: 6/24/77<br>now covered by Gross Beta | 20,000 pCi/L[f]<br>20,000 pCi/L[f] | 77<br>6/11/06 |

| Contaminant | U.S. EPA | | California | |
|---|---|---|---|---|
| | **MCL** (mg/L) | **Date**[a] | **MCL** (mg/L) | **Effective Date** |
| ***VOCS*** | | | | |
| Benzene | 0.005 | 6/87 | 0.001 | 2/25/89 |
| Carbon Tetrachloride | 0.005 | 6/87 | 0.0005 | 4/4/89 |
| 1,2-Dichlorobenzene | 0.6 | 1/91 | 0.6 | 9/8/94 |
| 1,4-Dichlorobenzene | 0.075 | 6/87 | 0.005 | 4/4/89 |
| 1,1-Dichloroethane | - | - | 0.005 | 6/24/90 |
| 1,2-Dichloroethane | 0.005 | 6/87 | 0.0005 | 4/4/89 |
| 1,1-Dichloroethylene | 0.007 | 6/87 | 0.006 | 2/25/89 |
| cis-1,2-Dichloroethylene | 0.07 | 1/91 | 0.006 | 9/8/94 |
| trans-1,2-Dichloroethylene | 0.1 | 1/91 | 0.01 | 9/8/94 |
| Dichloromethane | 0.005 | 7/92 | 0.005 | 9/8/94 |
| 1,3-Dichloropropene | - | - | 0.0005 | 2/25/89 |
| 1,2-Dichloropropane | 0.005 | 1/91 | 0.005 | 6/24/90 |
| Ethylbenzene | 0.7 | 1/91 | 0.68<br>0.7<br>0.3 | 2/25/89<br>9/8/94<br>6/12/03 |
| Methyl-tert-butyl ether (MTBE) | - | - | 0.005[b]<br>0.013 | 1/7/99<br>5/17/00 |
| Monochlorobenzene | 0.1 | 1/91 | 0.03<br>0.07 | 2/25/89<br>9/8/94 |
| Styrene | 0.1 | 1/91 | 0.1 | 9/8/94 |
| 1,1,2,2-Tetrachloroethane | - | - | 0.001 | 2/25/89 |
| Tetrachloroethylene | 0.005 | 1/91 | 0.005 | 5/89 |
| Toluene | 1 | 1/91 | 0.15 | 9/8/94 |
| 1,2,4 Trichlorobenzene | 0.07 | 7/92 | 0.07<br>0.005 | 9/8/94<br>6/12/03 |
| 1,1,1-Trichloroethane | 0.200 | 6/87 | 0.200 | 2/25/89 |
| 1,1,2-Trichloroethane | 0.005 | 7/92 | 0.032<br>0.005 | 4/4/89<br>9/8/94 |
| Trichloroethylene | 0.005 | 6/87 | 0.005 | 2/25/89 |
| Trichlorofluoromethane | - | - | 0.15 | 6/24/90 |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane | - | - | 1.2 | 6/24/90 |
| Vinyl chloride | 0.002 | 6/87 | 0.0005 | 4/4/89 |
| Xylenes | 10 | 1/91 | 1.750 | 2/25/89 |

| Contaminant | U.S. EPA | | California | |
|---|---|---|---|---|
| | **MCL** (mg/L) | **Date**[a] | **MCL** (mg/L) | **Effective Date** |
| ***SOCS*** | | | | |
| Alachlor | 0.002 | 1/91 | 0.002 | 9/8/94 |
| Atrazine | 0.003 | 1/91 | 0.003<br>0.001 | 4/5/89<br>6/12/03 |
| Bentazon | - | - | 0.018 | 4/4/89 |
| Benzo(a) Pyrene | 0.0002 | 7/92 | 0.0002 | 9/8/94 |
| Carbofuran | 0.04 | 1/91 | 0.018 | 6/24/90 |
| Chlordane | 0.002 | 1/91 | 0.0001 | 6/24/90 |
| Dalapon | 0.2 | 7/92 | 0.2 | 9/8/94 |
| Dibromochloropropane | 0.0002 | 1/91 | 0.0001<br>0.0002 | 7/26/89<br>5/3/91 |
| Di(2-ethylhexyl)adipate | 0.4 | 7/92 | 0.4 | 9/8/94 |
| Di(2-ethylhexyl)phthalate | 0.006 | 7/92 | 0.004 | 6/24/90 |
| 2,4-D | 0.1<br>0.07 | eff: 6/24/77<br>1/91 | 0.1<br>0.07 | 77<br>9/8/94 |
| Dinoseb | 0.007 | 7/92 | 0.007 | 9/8/94 |
| Diquat | 0.02 | 7/92 | 0.02 | 9/8/94 |
| Endothall | 0.1 | 7/92 | 0.1 | 9/8/94 |
| Endrin | 0.0002<br>0.002 | eff: 6/24/77<br>7/92 | 0.0002<br>0.002 | 77<br>9/8/94 |
| Ethylene Dibromide | 0.00005 | 1/91 | 0.00002<br>0.00005 | 2/25/89<br>9/8/94 |
| Glyphosate | 0.7 | 7/92 | 0.7 | 6/24/90 |
| Heptachlor | 0.0004 | 1/91 | 0.00001 | 6/24/90 |
| Heptachlor Epoxide | 0.0002 | 1/91 | 0.00001 | 6/24/90 |
| Hexachlorobenzene | 0.001 | 7/92 | 0.001 | 9/8/94 |
| Hexachlorocyclopentadiene | 0.05 | 7/92 | 0.05 | 9/8/94 |
| Lindane | 0.004<br>0.0002 | eff: 6/24/77<br>1/91 | 0.004<br>0.0002 | 77<br>9/8/94 |
| Methoxychlor | 0.1<br>0.04 | eff: 6/24/77<br>1/91 | 0.1<br>0.04<br>0.03 | 77<br>9/8/94<br>6/12/03 |
| Molinate | - | - | 0.02 | 4/4/89 |
| Oxamyl | 0.2 | 7/92 | 0.2<br>0.05 | 9/8/94<br>6/12/03 |
| Pentachlorophenol | 0.001 | 1/91 | 0.001 | 9/8/94 |
| Picloram | 0.5 | 7/92 | 0.5 | 9/8/94 |
| Polychlorinated Biphenyls | 0.0005 | 1/91 | 0.0005 | 9/8/94 |
| Simazine | 0.004 | 7/92 | 0.010<br>0.004 | 4/4/89<br>9/8/94 |
| Thiobencarb | - | - | 0.07<br>0.001[b] | 4/4/89<br>4/4/89 |
| Toxaphene | 0.005<br>0.003 | eff: 6/24/77<br>1/91 | 0.005<br>0.003 | 77<br>9/8/94 |
| 1,2,3- Trichloropropane | - | - | $5x10^{-6}$ | 12/14/17 |
| 2,3,7,8-TCDD (Dioxin) | $3x10^{-8}$ | 7/92 | $3x10^{-8}$ | 9/8/94 |
| 2,4,5-TP (Silvex) | 0.01<br>0.05 | eff: 6/24/77<br>1/91 | 0.01<br>0.05 | 77<br>9/8/94 |

| Contaminant | U.S. EPA | | California | |
|---|---|---|---|---|
| | **MCL** (mg/L) | **Date**[a] | **MCL** (mg/L) | **Effective Date** |
| ***Disinfection Byproducts*** | | | | |
| Total Trihalomethanes | 0.100<br><br>0.080 | 11/29/79<br>eff: 11/29/83<br>eff: 1/1/02 [g] | 0.100<br><br>0.080 | 3/14/83<br><br>6/17/06 |
| Haloacetic acids (five) | 0.060 | eff: 1/1/02 [g] | 0.060 | 6/17/06 |
| Bromate | 0.010 | eff: 1/1/02 [g] | 0.010 | 6/17/06 |
| Chlorite | 1.0 | eff: 1/1/02 [g] | 1.0 | 6/17/06 |
| ***Treatment Technique*** | | | | |
| Acrylamide | TT[h] | 1/91 | TT[h] | 9/8/94 |
| Epichlorohydrin | TT[h] | 1/91 | TT[h] | 9/8/94 |

a. "eff." indicates the date the MCL took effect; any other date provided indicates when US EPA established (i.e., published) the MCL.
b. Secondary MCL.
c. MFL = million fibers per liter, with fiber length > 10 microns.
d. Regulatory Action Level; if system exceeds, it must take certain actions such as additional monitoring, corrosion control studies and treatment, and for lead, a public education program; replaces MCL.
e. The MCL for lead was rescinded with the adoption of the regulatory action level described in footnote d.
f. Gross beta MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ; Sr-90 MCL = 4 millirem/year to bone marrow; tritium MCL = 4 millirem/year to total body
g. Effective for surface water systems serving more than 10,000 people; effective for all others 1/1/04.
h. TT = treatment technique, because an MCL is not feasible.

Attachment 3 – Secondary Drinking Water Standards

# Secondary Drinking Water Standards

California Code of Regulations, Title 22
Division 4. Environmental Health
Chapter 15. Domestic Water Quality and Monitoring Regulations
Article 16. Secondary Drinking Water Standards

| Constituents | Maximum Contaminant Levels<br>Consumer Acceptance Contaminant Levels |
|---|---|
| Aluminum | 0.2 mg/L |
| Color | 15 Units |
| Copper | 1.0 mg/L |
| Foaming Agents [MBAS] | 0.5 mg/L |
| Iron | 0.3 mg/L |
| Manganese | 0.05 mg/L |
| Methyl-*tert*-butyl ether [MTBE] | 0.005 mg/L |
| Odor---Threshold | 3 Units |
| Silver | 0.1 mg/L |
| Thiobencarb | 0.001 mg/L |
| Turbidity | 5 Units |
| Zinc | 5.0 mg/L |

| Constituents | Maximum Contaminant Levels<br>Consumer Acceptance Contaminant Levels Ranges | | |
|---|---|---|---|
| | **Recommended** | **Upper** | **Short Term** |
| Total Dissolved Solids [TDS] | 500 mg/L | 1,000 mg/L | 1,500 mg/L |
| Specific Conductance | 900 µS/cm | 1,600 µS/cm | 2,200 µS/cm |
| Chloride | 250 mg/L | 500 mg/L | 600 mg/L |
| Sulfate | 250 mg/L | 500 mg/L | 600 mg/L |

Note: There are no public health goals (PHGs) or maximum contaminant level goals (MCLGs) for these constituents because secondary standards are set on the basis of aesthetic concerns.

Attachment 4 – List of Regulated Contaminants: MCLs and PHGs

**MCLs, DLRs, and PHGs for Regulated Drinking Water Contaminants**

**(Units are in milligrams per liter (mg/L), unless otherwise noted.)**

**Last Update: March 13, 2019**

This table includes:

California's maximum contaminant levels (MCLs)

Detection limits for purposes of reporting (DLRs)

Public health goals (PHGs) from the Office of Environmental Health Hazard Assessment (OEHHA)

Also, the PHG for NDMA (which is not yet regulated) is included at the bottom of this table.

For comparison:

Federal MCLs and Maximum Contaminant Level Goals (MCLGs) (US EPA)

| Regulated Contaminant | MCL | DLR | PHG | Date of PHG | MCL | MCLG |
|---|---|---|---|---|---|---|
| ***Chemicals with MCLs in 22 CCR §64431—Inorganic Chemicals*** | | | | | | |
| Aluminum | 1 | 0.05 | 0.6 | 2001 | -- | -- |
| Antimony | 0.006 | 0.006 | 0.001 | 2016 | 0.006 | 0,006 |
| Arsenic | 0.010 | 0.002 | 0.000004 | 2004 | 0.010 | zero |
| Asbestos (MFL = million fibers per liter; for fibers >10 microns long) | 7 MFL | 0.2 MFL | 7 MFL | 2003 | 7 MFL | 7 MFL |
| Barium | 1 | 0.1 | 2 | 2003 | 2 | 2 |
| Beryllium | 0.004 | 0.001 | 0.001 | 2003 | 0.004 | 0.004 |
| Cadmium | 0.005 | 0.001 | 0.00004 | 2006 | 0.005 | 0.005 |
| Chromium, Total - OEHHA withdrew the 0.0025-mg/L PHG | 0.05 | 0.01 | withdrawn Nov. 2001 | 1999 | 0.1 | 0.1 |
| Chromium, Hexavalent - 0.01-mg/L MCL & 0.001-mg/L DLR repealed September 2017 | -- | -- | 0.00002 | 2011 | -- | -- |
| Cyanide | 0.15 | 0.1 | 0.15 | 1997 | 0.2 | 0.2 |
| Fluoride | 2 | 0.1 | 1 | 1997 | 4.0 | 4.0 |
| Mercury (inorganic) | 0.002 | 0.001 | 0.0012 | 1999 (rev2005)* | 0.002 | 0.002 |
| Nickel | 0.1 | 0.01 | 0.012 | 2001 | -- | -- |
| Nitrate (as nitrogen, N) | 10 as N | 0.4 | 45 as NO3 (=10 as N) | 2018 | 10 | 10 |
| Nitrite (as N) | 1 as N | 0.4 | 1 as N | 2018 | 1 | 1 |
| Nitrate + Nitrite (as N) | 10 as N | -- | 10 as N | 2018 | -- | -- |
| Perchlorate | 0.006 | 0.004 | 0.001 | 2015 | -- | -- |
| Selenium | 0.05 | 0.005 | 0.03 | 2010 | 0.05 | 0.05 |
| Thallium | 0.002 | 0.001 | 0.0001 | 1999 (rev2004) | 0.002 | 0.0005 |
| ***Copper and Lead, 22 CCR §64672.3*** | | | | | | |
| *Values referred to as MCLs for lead and copper are not actually MCLs; instead, they are called "Action Levels" under the lead and copper rule* | | | | | | |
| Copper | 1.3 | 0.05 | 0.3 | 2008 | 1.3 | 1.3 |
| Lead | 0.015 | 0.005 | 0.0002 | 2009 | 0.015 | zero |
| ***Radionuclides with MCLs in 22 CCR §64441 and §64443—Radioactivity*** | | | | | | |
| [units are picocuries per liter (pCi/L), unless otherwise stated; n/a = not applicable] | | | | | | |
| Gross alpha particle activity - OEHHA concluded in 2003 that a PHG was not practical | 15 | 3 | none | n/a | 15 | zero |
| Gross beta particle activity - OEHHA concluded in 2003 that a PHG was not practical | 4 mrem/yr | 4 | none | n/a | 4 mrem/yr | zero |

| | | | | | | |
|---|---|---|---|---|---|---|
| Radium-226 | -- | 1 | 0.05 | 2006 | | |
| Radium-228 | -- | 1 | 0.019 | 2006 | | |
| Radium-226 + Radium-228 | 5 | -- | -- | -- | 5 | zero |
| Strontium-90 | 8 | 2 | 0.35 | 2006 | -- | -- |
| Tritium | 20,000 | 1,000 | 400 | 2006 | -- | -- |
| Uranium | 20 | 1 | 0.43 | 2001 | 30 µg/L | zero |
| ***Chemicals with MCLs in 22 CCR §64444—Organic Chemicals*** | | | | | | |
| ***(a) Volatile Organic Chemicals (VOCs)*** | | | | | | |
| Benzene | 0.001 | 0.0005 | 0.00015 | 2001 | 0.005 | zero |
| Carbon tetrachloride | 0.0005 | 0.0005 | 0.0001 | 2000 | 0.005 | zero |
| 1,2-Dichlorobenzene | 0.6 | 0.0005 | 0.6 | 1997 (rev2009) | 0.6 | 0.6 |
| 1,4-Dichlorobenzene (p-DCB) | 0.005 | 0.0005 | 0.006 | 1997 | 0.075 | 0.075 |
| 1,1-Dichloroethane (1,1-DCA) | 0.005 | 0.0005 | 0.003 | 2003 | -- | -- |
| 1,2-Dichloroethane (1,2-DCA) | 0.0005 | 0.0005 | 0.0004 | 1999 (rev2005) | 0.005 | zero |
| 1,1-Dichloroethylene (1,1-DCE) | 0.006 | 0.0005 | 0.01 | 1999 | 0.007 | 0.007 |
| cis-1,2-Dichloroethylene | 0.006 | 0.0005 | 0.013 | 2018 | 0.07 | 0.07 |
| trans-1,2-Dichloroethylene | 0.01 | 0.0005 | 0.05 | 2018 | 0.1 | 0.1 |
| Dichloromethane (Methylene chloride) | 0.005 | 0.0005 | 0.004 | 2000 | 0.005 | zero |
| 1,2-Dichloropropane | 0.005 | 0.0005 | 0.0005 | 1999 | 0.005 | zero |
| 1,3-Dichloropropene | 0.0005 | 0.0005 | 0.0002 | 1999 (rev2006) | -- | -- |
| Ethylbenzene | 0.3 | 0.0005 | 0.3 | 1997 | 0.7 | 0.7 |
| Methyl tertiary butyl ether (MTBE) | 0.013 | 0.003 | 0.013 | 1999 | -- | -- |
| Monochlorobenzene | 0.07 | 0.0005 | 0.07 | 2014 | 0.1 | 0.1 |
| Styrene | 0.1 | 0.0005 | 0.0005 | 2010 | 0.1 | 0.1 |
| 1,1,2,2-Tetrachloroethane | 0.001 | 0.0005 | 0.0001 | 2003 | 0.1 | 0.1 |
| Tetrachloroethylene (PCE) | 0.005 | 0.0005 | 0.00006 | 2001 | 0.005 | zero |
| Toluene | 0.15 | 0.0005 | 0.15 | 1999 | 1 | 1 |
| 1,2,4-Trichlorobenzene | 0.005 | 0.0005 | 0.005 | 1999 | 0.07 | 0.07 |
| 1,1,1-Trichloroethane (1,1,1-TCA) | 0.200 | 0.0005 | 1 | 2006 | 0.2 | 0.2 |
| 1,1,2-Trichloroethane (1,1,2-TCA) | 0.005 | 0.0005 | 0.0003 | 2006 | 0.005 | 0.003 |
| Trichloroethylene (TCE) | 0.005 | 0.0005 | 0.0017 | 2009 | 0.005 | zero |
| Trichlorofluoromethane (Freon 11) | 0.15 | 0.005 | 1.3 | 2014 | -- | -- |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113) | 1.2 | 0.01 | 4 | 1997 (rev2011) | -- | -- |
| Vinyl chloride | 0.0005 | 0.0005 | 0.00005 | 2000 | 0.002 | zero |
| Xylenes | 1.750 | 0.0005 | 1.8 | 1997 | 10 | 10 |
| ***(b) Non-Volatile Synthetic Organic Chemicals (SOCs)*** | | | | | | |
| Alachlor | 0.002 | 0.001 | 0.004 | 1997 | 0.002 | zero |
| Atrazine | 0.001 | 0.0005 | 0.00015 | 1999 | 0.003 | 0.003 |
| Bentazon | 0.018 | 0.002 | 0.2 | 1999 (rev2009) | -- | -- |
| Benzo(a)pyrene | 0.0002 | 0.0001 | 0.000007 | 2010 | 0.0002 | zero |
| Carbofuran | 0.018 | 0.005 | 0.0007 | 2016 | 0.04 | 0.04 |
| Chlordane | 0.0001 | 0.0001 | 0.00003 | 1997 (rev2006) | 0.002 | zero |
| Dalapon | 0.2 | 0.01 | 0.79 | 1997 (rev2009) | 0.2 | 0.2 |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.0002 | 0.00001 | 0.0000017 | 1999 | 0.0002 | zero |
| 2,4-Dichlorophenoxyacetic acid (2,4-D) | 0.07 | 0.01 | 0.02 | 2009 | 0.07 | 0.07 |
| Di(2-ethylhexyl)adipate | 0.4 | 0.005 | 0.2 | 2003 | 0.4 | 0.4 |
| Di(2-ethylhexyl)phthalate (DEHP) | 0.004 | 0.003 | 0.012 | 1997 | 0.006 | zero |

| | | | | | | |
|---|---|---|---|---|---|---|
| Dinoseb | 0.007 | 0.002 | 0.014 | 1997 (rev2010) | 0.007 | 0.007 |
| Diquat | 0.02 | 0.004 | 0.006 | 2016 | 0.02 | 0.02 |
| Endothal | 0.1 | 0.045 | 0.094 | 2014 | 0.1 | 0.1 |
| Endrin | 0.002 | 0.0001 | 0.0003 | 2016 | 0.002 | 0.002 |
| Ethylene dibromide (EDB) | 0.00005 | 0.00002 | 0.00001 | 2003 | 0.00005 | zero |
| Glyphosate | 0.7 | 0.025 | 0.9 | 2007 | 0.7 | 0.7 |
| Heptachlor | 0.00001 | 0.00001 | 0.000008 | 1999 | 0.0004 | zero |
| Heptachlor epoxide | 0.00001 | 0.00001 | 0.000006 | 1999 | 0.0002 | zero |
| Hexachlorobenzene | 0.001 | 0.0005 | 0.00003 | 2003 | 0.001 | zero |
| Hexachlorocyclopentadiene | 0.05 | 0.001 | 0.002 | 2014 | 0.05 | 0.05 |
| Lindane | 0.0002 | 0.0002 | 0.000032 | 1999 (rev2005) | 0.0002 | 0.0002 |
| Methoxychlor | 0.03 | 0.01 | 0.00009 | 2010 | 0.04 | 0.04 |
| Molinate | 0.02 | 0.002 | 0.001 | 2008 | -- | -- |
| Oxamyl | 0.05 | 0.02 | 0.026 | 2009 | 0.2 | 0.2 |
| Pentachlorophenol | 0.001 | 0.0002 | 0.0003 | 2009 | 0.001 | zero |
| Picloram | 0.5 | 0.001 | 0.166 | 2016 | 0.5 | 0.5 |
| Polychlorinated biphenyls (PCBs) | 0.0005 | 0.0005 | 0.00009 | 2007 | 0.0005 | zero |
| Simazine | 0.004 | 0.001 | 0.004 | 2001 | 0.004 | 0.004 |
| Thiobencarb | 0.07 | 0.001 | 0.042 | 2016 | -- | -- |
| Toxaphene | 0.003 | 0.001 | 0.00003 | 2003 | 0.003 | zero |
| 1,2,3-Trichloropropane | 0.000005 | 0.000005 | 0.0000007 | 2009 | -- | -- |
| 2,3,7,8-TCDD (dioxin) | $3x10^{-8}$ | $5x10^{-9}$ | $5x10^{-11}$ | 2010 | $3x10^{-8}$ | zero |
| 2,4,5-TP (Silvex) | 0.05 | 0.001 | 0.003 | 2014 | 0.05 | 0.05 |
| ***Chemicals with MCLs in 22 CCR §64533—Disinfection Byproducts*** | | | | | | |
| Total Trihalomethanes | 0.080 | -- | -- | -- | 0.080 | -- |
| Bromodichloromethane | -- | 0.0010 | 0.00006 | 2018 draft | -- | zero |
| Bromoform | -- | 0.0010 | 0.0005 | 2018 draft | -- | zero |
| Chloroform | -- | 0.0010 | 0.0004 | 2018 draft | -- | 0.07 |
| Dibromochloromethane | -- | 0.0010 | 0.0001 | 2018 draft | -- | 0.06 |
| Haloacetic Acids (five) (HAA5) | 0.060 | -- | -- | -- | 0.060 | -- |
| Monochloroacetic Acid | -- | 0.0020 | -- | -- | -- | 0.07 |
| Dichloroacetic Adic | -- | 0.0010 | -- | -- | -- | zero |
| Trichloroacetic Acid | -- | 0.0010 | -- | -- | -- | 0.02 |
| Monobromoacetic Acid | -- | 0.0010 | -- | -- | -- | -- |
| Dibromoacetic Acid | -- | 0.0010 | -- | -- | -- | -- |
| Bromate | 0.010 | 0.0050** | 0.0001 | 2009 | 0.01 | zero |
| Chlorite | 1.0 | 0.020 | 0.05 | 2009 | 1 | 0.8 |
| ***Chemicals with PHGs established in response to DDW requests. These are not currently regulated drinking water contaminants.*** | | | | | | |
| N-Nitrosodimethylamine (NDMA) | -- | -- | 0.000003 | 2006 | -- | -- |

*OEHHA's review of this chemical during the year indicated (rev20XX) resulted in no change in the PHG.

**The DLR for Bromate is 0.0010 mg/L for analysis performed using EPA Method 317.0 Revision 2.0, 321.8, or 326.0.

Attachment 5 – City 2018 CCR

# WATER QUALITY is our top priority

The City of Pleasanton is pleased to distribute this report to its water customers. It provides important information about where your water comes from and the work we perform each day to assure the water delivered to your tap is safe to drink. It also provides data about what is in your water and how water quality tests on your drinking water compare to federal and state drinking water standards during calendar year 2018.

THE CITY OF PLEASANTON

# 2018 ANNUAL WATER QUALITY REPORT

# 1. YOUR WATER MEETS ALL SAFE DRINKING WATER STANDARDS

The technical and analytical water quality information presented in this report is required by State health regulations. These regulations require water suppliers to inform customers about where their water comes from, what is in their water, and any violation of safe drinking water standards that may have occurred during this past reporting period. This report provides results of all tests required to be performed on Pleasanton's water supplies during 2018. We are happy to report that all 2018 water quality tests confirmed that water delivered to your tap met all applicable federal and state drinking water standards without any violations.

This report also includes information regarding steps taken by the City and Zone 7 Water Agency to improve drinking water delivered to customers in 2018, and opportunities for the public to participate in decisions that affect their drinking water quality. Phone numbers and web page addresses of the City and other public agencies responsible for water billing, delivery, supply, and water quality are also presented herein.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

此份有關你的食水報告,內有重要資料和訊息,請找
他人為你翻譯及解釋清楚。

यह सूचना महत्वपूर्ण है ।
कृपा करके किसी से :सका अनुवाद करायें ।

이 안내는 매우 중요합니다.
본인을 위해 번역인을 사용하십시오.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

**Included in this report:**


1. Your Water Meets All Safe Drinking Water Standards
2. Lead in Drinking Water
3. Pleasanton's Water Sources
4. Pleasanton's Water Quality Goals
5. Chemicals & Minerals in Water
6. Definition of Terms
7. Understanding the Summary
8. 2018 Water Quality Results
9. Water Conservation Tips, Programs and Rebates
10. Public Involvement

2. The 2018 City of Pleasanton Annual Water Quality Report explains where your water comes from and the process to ensure the water delivered to you meets all the State and Federal drinking water guidelines.

## LEAD IN DRINKING WATER

Lead can enter drinking water when service pipes, fittings, fixtures, solder and flux that contain lead corrode by a chemical reaction with the water, especially where the water has high acidity or low mineral content. The most common problem is with brass or chrome plated brass faucets and fixtures with lead solder, from which significant amounts of lead can enter into the water, especially with hot water.

To address corrosion of lead and copper into drinking water, the Environmental Protection Agency (EPA) issued the Lead and Copper Rule (LCR) under the authority of the Safe Drinking Water Act of 1974 (SDWA). The LCR contains all of the regulatory requirements for monitoring, tracking, treatment and reporting to prevent lead and copper from contaminating drinking water.

The City of Pleasanton tests between 30 and 60 single family homes built between 1982 and 1986 (Congress banned lead solder in 1986) once every 3 years to comply with the EPA Lead and Copper Rule. Pleasanton source water is also analyzed for lead and copper on a regular schedule specified by the State Water Resources Control Board (State Board). The most recent sample results are included on the 2018 Water Quality Results table in section 8 of this report.

California Assembly Bill 746, approved by the Governor in October 2017, requires all community water systems that serve a schoolsite of a local educational agency with a building construction before January 1, 2010, to test for lead in the potable water system of the schoolsite before July 1, 2019. On September 10, 2018, the Pleasanton Unified School District requested the City of Pleasanton Water Utilities to assist with a lead sampling program for the District.

The City and District coordinated sampling at 15 sites and a minimum of five samples were collected per site and sent to a laboratory certified by Environmental Accreditation Program (ELAP) for lead analysis. Results are submitted to the State Water Resources Control Board and the District. Any sample the exceeded the lead activation level of 15 parts per billion (ppb) required immediate response by the District. In the City's potable water distribution system that was tested prior to entering each school site, lead was not detected. The District is responsible for sharing sampling results with its School Board, School District, parents and students, and/or other stakeholders.

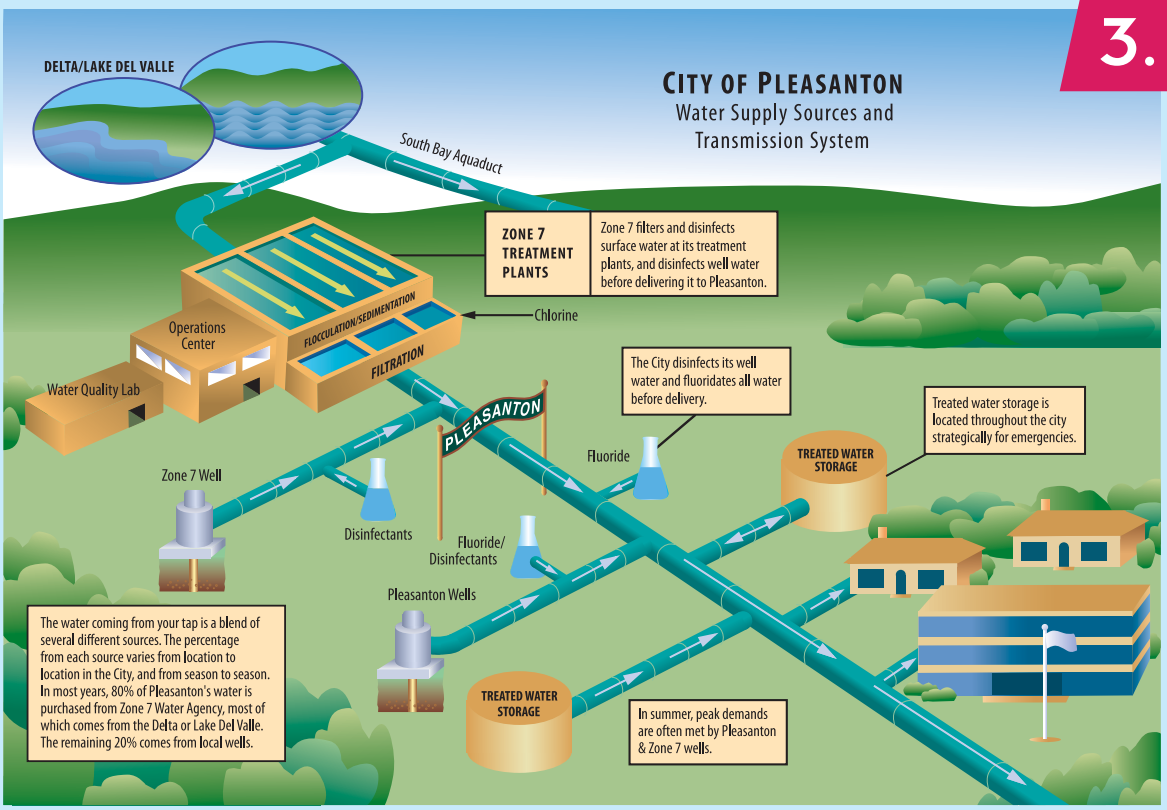
For additional information, please contact the Pleasanton Unified School District at 925-462-5500 or visit the websites listed.

www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/leadsamplinginschools/faqs_lead_in_schools_final.pdf

www.calwater.com/waterquality/lead-in-schools/

**For more details on Lead in Drinking Water for the City of Pleasanton, please visit the City's website: www.cityofpleasantonca.gov**

**For more general information about Lead in Drinking Water and the Environment, please visit the EPA website: www.epa.gov/lead**




3.

## PLEASANTON'S WATER SOURCES

Zone 7 Water Agency, the Valley's water wholesaler, provides wholesale treated water to four major Valley water retailers, delivers untreated water to a number of agricultural customers, and monitors flood control measures and coordinates groundwater management resources in the Tri-Valley area. Approximately 80% of Pleasanton's water is purchased from Zone 7 and is comprised of treated surface water blended with some local groundwater. The remaining 20% comes from local groundwater pumped from wells owned and operated by the City of Pleasanton. All water sources are disinfected and fluoridated before delivery to our customers.

### Imported Surface Water

The State Water Project (SWP) delivers water to Zone 7. The SWP water originates from the Feather River watershed, where it is stored behind the Oroville Dam before being released into the Sacramento River/San Joaquin Delta. This water is pumped from the Delta by the Department of Water Resources (DWR) to the South Bay Aqueduct (SBA) system, which then flows to the Tri-Valley area. The SBA continues through Alameda County and into Santa Clara County.

### Local Surface Water

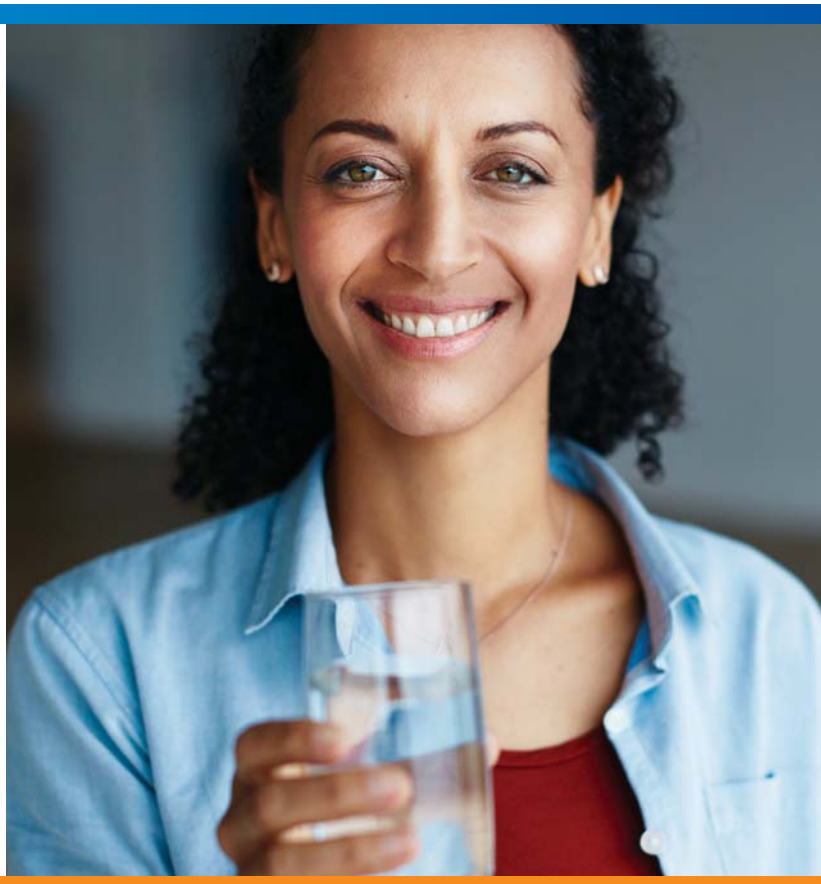
Lake Del Valle, our local water storage reservoir, is operated and maintained by the DWR as a water supply reservoir, local flood control resource and recreation area. The water stored at Lake Del Valle comes from local rainfall and from the SWP. Water from Zone 7's two surface treatment plants (Del Valle and Patterson Pass) undergoes several stages of treatment in order to comply with the State Water Resources Control Board (State Board), Division of Drinking Water.

### Local Groundwater

Groundwater comes from wells and springs. Both the City and Zone 7 use the local groundwater to increase the volume of drinking water available, especially during the hot summer months, when demand for water rises. On any given summer day, over half of the water being delivered in the City may be groundwater. In August 2009, Zone 7 began operating a demineralization plant that will help soften a portion of the groundwater delivered to certain parts of our service area.

# 4. PLEASANTON'S WATER QUALITY GOALS

The City's goal is to continuously provide a dependable supply of high quality drinking water to its customers. To accomplish this, the treated surface water delivered to customers is continuously monitored at Zone 7's two local water treatment plants. These plants also perform specific chemical and biological tests every four hours to check the purification process. All groundwater sources comply with State Board testing regulations. In addition, there are 48 sampling points located throughout the City's water distribution system that are monitored and tested daily, weekly and monthly by the City, to assure your drinking water continuously complies with all federal and State drinking water standards. If you have questions regarding the quality of the water supplied to you by the City, this report should provide most of the answers. We appreciate the time you take to read this report and welcome any additional questions or comments you may have regarding your water supply. For further information on Pleasanton's water quality or water supplies, call the City's Water Quality Lab at 925-931-5510, or email your questions to us at osd@pleasantonca.gov.



## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the US EPA Safe Drinking Water Hotline at 800-426-4791 or www.cdc.gov/healthywater/drinking.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

The City of Pleasanton is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline, 800-426-4791, or at http://www.epa.gov/lead

# 5. CHEMICALS AND MINERALS IN WATER

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Drinking water, including bottled waters, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA Safe Drinking Water Hotline at 800-426-4791. The disinfectant, Chloramine (a combination of chlorine and ammonia), is used to disinfect both Zone 7 and the City's water. This disinfectant is utilized to protect public health by destroying disease-causing organisms that may be present in water supplies. Chloramines, at the low levels used, will not cause any health problems for the general public. However, aquarium owners and home dialysis patients must take special precautions before chloraminated water can be used in aquariums or home kidney dialysis machines, due to the very small amount of ammonia present in the water.

## *Zone 7 Water Agency PFOS (perfluorooctanesulfonic acid) Detection in Groundwater*

PFOS is a fluorinated organic chemical that is part of a larger group of chemicals referred to as PFAS (per- and poly-fluoroalkyl substances). These manmade substances have been used extensively in consumer products designed to be waterproof, stain-resistant, or non-stick. In addition, they have been used in fire-retarding foam and various industrial processes.

PFOS is currently not a regulated contaminant in California. However, in July 2018, California DDW established a Notification Level (NL) of 13 parts per trillion (ppt) and a recommended Response Level (RL) of 70 ppt for PFOS in drinking water. These levels are health-based advisory levels established as precautionary measures for contaminants that may be considered candidates for establishment of maximum contaminant levels, but have not yet undergone or completed the regulatory standard setting process prescribed for the development of maximum contaminant levels and are not drinking water standards.

Zone 7 conducted monitoring for several PFAS at select drinking water sources in 2013 during UCMR3 (Unregulated Contaminant Monitoring Rule 3) monitoring, and all sources in late 2108 and early 2019. Due to advancement in analytical technology, MRLs (Minimum Reporting Limits) were much lower during recent monitoring as compared to 2013. Zone 7 found some of its groundwater wells have PFOS above its NL during the most recent monitoring efforts:

| Supply Source | Average | Range |
|---|---|---|
| Chain of Lakes Wellfield | 24 | 12–35 |
| Mocho Wellfield | 38 | <2–86 |

There is no immediate indication of a source for this contaminant. Immediately after detection of PFOS above its RL in the Mocho 1 Well, Zone 7 implemented procedures to reduce PFOS below the RL in the delivered water from the Mocho Wellfield. Zone 7 also has initiated quarterly monitoring on wells with detections to assess seasonal variation.

Current available treatment options at Zone 7 for reduction of PFOS include membrane filtration and blending of water sources.

Additional information is available at: www.zone7water.com, www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/PFOA_PFOS.html and www.epa.gov/pfas

***To view the Water Quality Report online, please visit www.pleasantonwater.com***

**Saving Water Saves Money!** Households can save hundreds of dollars a year on utility and water bills by using energy-efficient appliances or by simply using existing appliances more efficiently.

# 6. DEFINITION OF TERMS

The following terms are used in the water industry to define contaminant levels. Pleasanton's drinking water is tested at the levels in the table in section 8.

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

**MCL – Maximum Contaminant Level:** The highest level of a contaminant that is allowed in drinking water.

**MCLG – Maximum Contaminant Level Goal:** The level of contaminant below which there is no known or expected risk to health—set by the USEPA.

**MRDL – Maximum Residual Disinfectant Level:** The highest level of a disinfectant that is allowed in drinking water.

**MRL – Minimum Reporting Level:** Minimum Reporting Level: The minimum level of contaminate that is allowed in drinking water.

**MRDLG – Maximum Residual Disinfectant Level Goal:** The level of a disinfectant below which there is no known or expected risk to health.

**NA –** Not Applicable

**ND –** Not Detected: Concentration not found above Minimum Reporting Limit (MRL) or Detection Limit for Purpose of Reporting (DLR) set by the State Board.

**PHG – Public Health Goal:** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

**TT – Treatment Technique:** A required process for reducing contaminant levels. Turbidity – A measure of the cloudiness of the water. Turbidity levels are a good indicator of the effectiveness of the treatment plant's filtration system.

**Table Units**

| | |
|---|---|
| **mg/L** | Milligrams per Liter or parts per million |
| **µg/L** | Micrograms per Liter or parts per billion |
| **µS/cm** | Microsiemens per Centimeter |
| **NTU** | Nephelometric Turbidity Unit |

## *The following contaminants may also be found in drinking water:*

**TTHMs (Total Trihalomethanes):** TTHMs are by-products of drinking water disinfected with chlorine compounds. Some people who use water containing TTHMs in excess of the MCL, over many years, may experience liver, kidney, or central nervous system problems and may have an increased risk of getting cancer. In 2018, the Locational Running Annual Average (LRAA) of Pleasanton's designated sample locations in the distribution system were under the MCL of 80 parts per billion (ppb).

**MTBE (Methyl Tertiary Butyl Ether):** Pleasanton's well water sources were monitored for MTBE in 2018, and it was not detected (next monitoring in 2020). MTBE was not detected in any of Zone 7's sources in the past year. The current detection limit for reporting purposes is 3 ppb.

**Nitrate:** If found in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

## 7. UNDERSTANDING THE SUMMARY

Primary Drinking Water Standards (PDWS) are set after considerable research and data have been analyzed by health experts. These standards, called Maximum Contaminant Levels (MCLs) are set by USEPA and strictly enforced by the State Water Resources Control Board (State Board), Division of Drinking Water. Primary MCLs are set as close to the Public Health Goals (PHGs) (or Maximum Contaminant Level Goals–MCLGs) as is economically and technologically feasible.

Secondary Standards are based upon qualities of water such as taste, odor, color or clarity of the water. These standards, called Secondary Maximum Contaminant Levels (SMCLs) set limits on substances that may influence customer-acceptance of the water and are established by the State Board.

Detected Contaminants: The chemical table shows the level of each detected regulated contaminant, the average level of each detected contaminant (Average), and, if more than one sample was collected, the range of levels found during the 2018 calendar year (Range).

In addition to the regulated contaminants, Zone 7 and the City monitor additional "unregulated contaminants" as required. Unregulated contaminant monitoring helps EPA and State Board to determine where certain contaminants occur and whether the contaminants need to be regulated in the future.

In order to ensure that tap water is safe to drink, USEPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The limits for contaminants in bottled water provide the same level of protection.

Contaminants that may be present in source water include the following: microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities.

Pleasanton sampling frequency meets, and for some parameters, is more frequent than State Board requirements. The State Board allows monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Hence, some of our data, though representative, may have been sampled prior to 2018.

A Drinking Water Source Assessment and Protection Program (DWSAP) was conducted for the City of Pleasanton Wells #5, #6 and #8 in December 2002. No contaminants have been detected in the City's groundwater supply. However, all groundwater sources are considered vulnerable to activities located near the drinking water supply source. DWSAP is updated whenever new water sources are added.

A completed copy of the assessment may be viewed at the City Water Quality Laboratory, 3333 Busch Road, Pleasanton, CA 94566. You may request a summary of the assessment be sent to you by calling 925-931-5510.

# 8. 2018 WATER QUALITY RESULTS

The following is a list of contaminants that may be found in drinking water and their sources. Also included in the table below is a summary of all chemical analyses required by the USEPA and the State Board for Pleasanton's water supply during calendar year 2018[1].

**Primary Standards**—Mandatory health-related standards established by the State Water Resources Control Board (State Board) Division of Drinking Water (DDW)

| WATER SUPPLY SOURCES | | | ZONE 7 WATER AGENCY[2] | | | | CITY OF PLEASANTON[3] | | |
|---|---|---|---|---|---|---|---|---|---|
| **Contaminants** (units) | **MCL** | **PHG MCLG*** | **Treated Surface Water** | | **Groundwater[6]** | | **Groundwater** | | **Sources** |
| Turbidity (NTU) | TT=1 NTU Maximum | NA | Highest Level Found=0.13 NTU | | Not Applicable | | Not Applicable | | Soil runoff |
| | TT=95% of Samples ≤ 0.3 NTU | NA | % of samples ≤ 0.3 NTU=100 | | Not Applicable | | Not Applicable | | Soil runoff |
| Total Organic Carbon | TT=Quarterly RAA Removal Ratio ≥ 1.0 | NA | Lowest Quarterly RAA Ratio=1.8 | | Not Applicable | | Not Applicable | | Runoff/leaching from natural deposits |
| **Inorganic Chemicals** | | | Average | Range | Average | Range | Average | Range | |
| Barium (µg/L) | 1000 | 2000 | ND | ND | 170 | ND–336 | 277 | 180–330 | Erosion of natural deposits |
| Chromium Total (µg/L) | 50 | 100* | ND | ND | ND | ND–12 | ND | ND | Erosion of natural deposits |
| Selenium (µg/L) | 50 | 30 | ND | ND | 1.2 | ND–10 | ND | ND | Erosion of natural deposits |
| Fluoride (mg/L) (Naturally Occurring) | 2 | 1 | ND | ND–0.1 | 0.1 | ND–0.1 | ND | ND–0.11 | Erosion of natural deposits |
| Nitrate (as N) (mg/L) | 10 | 10 | ND | ND–0.8 | 3.7 | 1.0–5.0 | 2.7 | 2.2–3.1 | Erosion of natural deposits |
| **Radionuclides** | | | | | | | | | |
| Uranium (pCi/L) | 20 | 0.43 | ND | ND | ND | ND–4 | ND | ND–1.9 | Erosion of natural deposits |
| **Regulated Contaminants with Secondary MCLs,** established by the State Board DDW | | | | | | | | | |
| Color | 15 | – | 0.8 | ND–2.5 | 0 | 0 | 2 | ND–5 | Naturally occurring organic materials |
| Conductivity (µS/cm) | 1600 | – | 492 | 361–694 | 943 | 424–1706 | 1020 | 760–1200 | Substances that form ions in water |
| Chloride (mg/L) | 500 | – | 93 | 57–140 | 100 | 45–209 | 115 | 76–140 | Runoff/leaching from natural deposits |
| Sulfate (mg/L) | 500 | – | 31 | 11–75 | 64 | 12–148 | 62 | 45–72 | Runoff/leaching from natural deposits |
| Total Dissolved Solids (mg/L) | 1000 | – | 260 | 182–361 | 551 | 228–1020 | 680 | 450–830 | Runoff/leaching from natural deposits |
| Turbidity (NTU) | 5 | – | NA | NA | 0.1 | ND–2.2 | 1.4 | 0.29–3.6 | Soil runoff |
| **Additional Parameters,** included to assist consumers in making health or economic decisions, i.e. low sodium diet, water softening, etc. | | | | | | | | | |
| Alkalinity (as CaCO3)(mg/L) | – | – | 65 | 44–115 | 290 | 120–484 | 407 | 290–490 | Runoff/leaching from natural deposits |
| Boron (µg/L) | – | – | 123 | ND–200 | 746 | 290–2010 | NA | NA | Runoff/leaching from natural deposits |
| Hardness (as CaCO3) (mg/L) | – | – | 89 | 64–144 | 366 | 106–672 | 452 | 316–529 | Runoff/leaching from natural deposits |
| Potassium (mg/L) | – | – | 3 | 2–4 | 2 | 2–4 | NA | NA | Runoff/leaching from natural deposits |
| Sodium (mg/L) | – | – | 59 | 42–82 | 59 | 30–141 | 54 | 38–64 | Runoff/leaching from natural deposits |
| pH (Units) | – | – | 8.6 | 8.3–9 | 7.6 | 7.2–8.7 | 7.3 | 7.1–7.6 | Runoff/leaching from natural deposits |
| Silica (mg/L) | – | – | 10 | 7–14 | 25 | 8–33 | NA | NA | Runoff/leaching from natural deposits |

**DISTRIBUTION SYSTEM SAMPLING RESULTS**—Disinfection by-products, disinfectant residuals, fluoridation

| **Contaminants** (units) | **MCL** | **PHG MCLG* MRDLG**** | **City of Pleasanton[3]** | | **Sources** |
|---|---|---|---|---|---|
| | | | Highest Locational Running Annual Average | Range of Individual Samples Collected in 2018 | |
| Total Trihalomethanes (TTHMs) (µg/L) | 80 | NA | 55 | ND–62 | By-product of drinking water chlorination |
| Haloacetic Acids (HAA5) (µg/L) | 60 | NA | 27 | ND–40 | By-product of drinking water chlorination |
| | | | Highest % of Monthly Positive Samples | | |
| Total Coliform Bacteria | More than 5% of monthly samples are positive | 0 | 0.66% | | Naturally present in the environment |
| | | | Running Annual Average (RAA) | Range of Monthly Average | |
| Chloramines as Chlorine (mg/L) | Maximum Residual Disinfectant Level (MRDL)=4.0 | 4** | 1.66 | 1.31–1.92 | Drinking water disinfectant added for treatment |
| Fluoride (mg/L)[5] | 2 | 1 | 0.73 | 0.07–1.07 | Water additive that promotes strong teeth |
| **EPA/State Lead Copper Rule**—Monitored at Customers Tap—2016[4] | | | No. Collected / 90th Percentile | No. of Samples > Action Level | |
| EPA Lead Study (µg/L) | AL = 15 | 0.2 | 62 / 4.2 | 0 | Internal corrosion of household plumbing |
| EPA Copper Study (mg/L) | AL = 1.3 | 0.3 | 62 / 0.41 | 0 | Internal corrosion of household plumbing |

[1] Pleasanton and Zone 7 also test for a number of additional constituents in the water supply sources. Test results for all of these constituents were non-detected and therefore not included in the table. A complete list of all constituents tested during 2018 is available upon request. [2] Zone 7 Water Agency supplies surface and groundwater to the City of Pleasanton. For more information regarding this source, call 925-447-0533. [3] The City of Pleasanton owns and operates three groundwater wells for drinking water purposes. For more information on this source, please call 925-931-5510. [4] Tested every 3 years; next scheduled testing in September 2019. Number of schools requesting lead sampling in 2018 (15). [5] The City treats the water delivered to your tap by adding fluoride to the naturally occurring level in order to help prevent dental caries in consumers. The fluoride levels in the treated water are maintained within a range of 0.6 to 1.2 ppm, as required by the State Board regulations. [6] Zone 7 Groundwater includes Zone 7 demineralization plant water.

*In an effort to reduce outdoor water use, many homeowners across California are choosing to replace turf with California native and water-wise landscaping. Water-wise landscapes are beautiful, colorful and low-maintenance not to mention attractive to pollinators and beneficial insects, which help natural ecosystems thrive. Visit Save Our Water (www.saveourwaterrebates.com) for turf rebate information.*

Photo courtesy of California Department of Water Resources

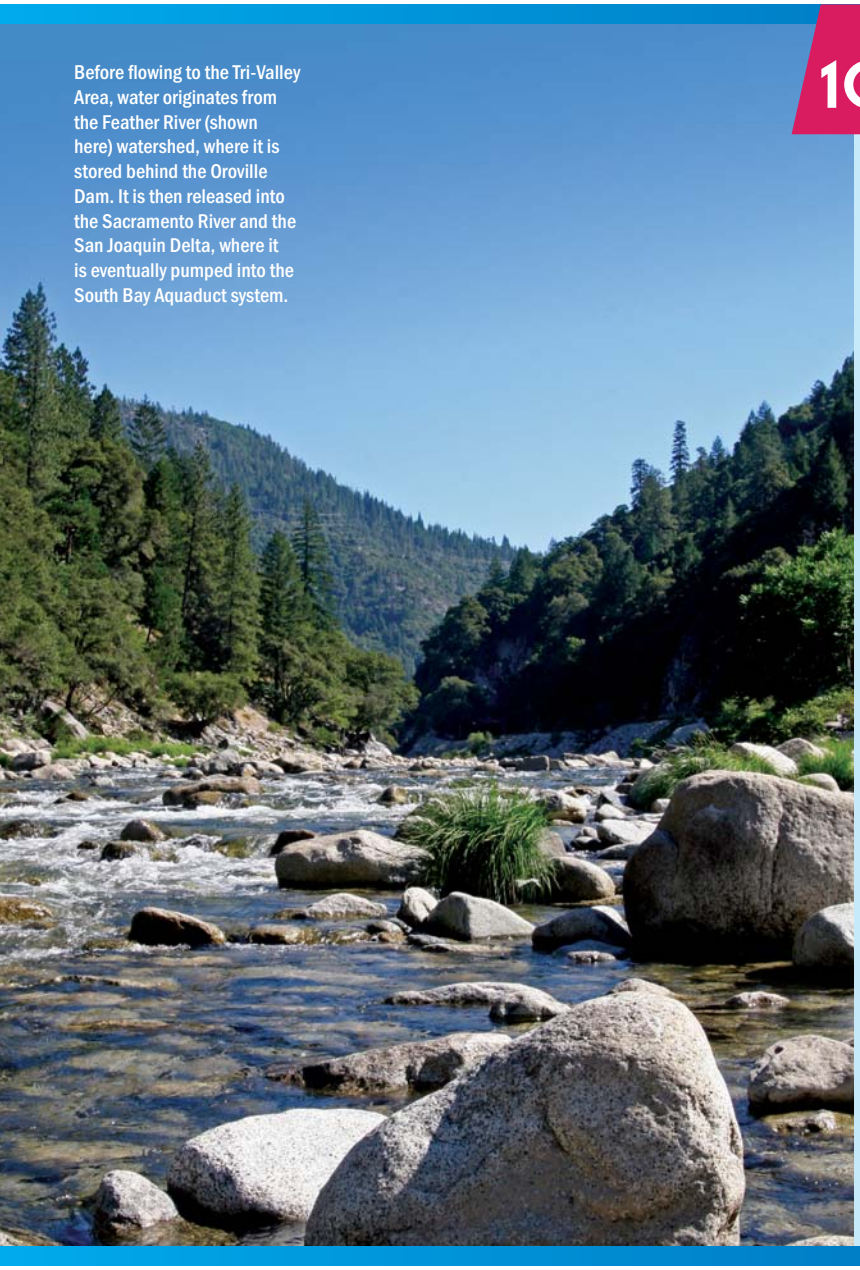
# 9. WATER CONSERVATION TIPS, PROGRAMS & REBATES

Monitoring your own water use is now easier than ever. The Pleasanton Water Portal gives you 24/7 access to your water account. See hourly readings from your water meter, make online payments, see historic use, and sign up for automatic leak notification. Register for free at www.PleasantonWater.com

**Rain or shine, water conservation is a way of life for California residents. Adopt the following habits for life-long water savings:**

- Limit outdoor watering to no more than 1 day per week when it's not raining, October 1 through March 31. Residents can participate in our free Controller Assistance Program to learn how to efficiently set your controller to water during warmer weather. Learn how to schedule you're appointment at PleasantonWaterConservation.com.
- Turn off the controller when rain is expected and keep it off for 48 hours after measurable rainfall.
- Use a broom rather than a hose to clean driveways, sidewalks, and other hardscapes.
- Eliminate water runoff from irrigation by shortening watering time and adding multiple watering cycles.
- Only water landscaping after 6 p.m. and before 9 a.m. to reduce water loss from wind and evaporation.
- Wash cars, trucks, etc., only with a hose equipped with a shut-off nozzle — and remember — no water may enter the storm drain system (this includes the gutter).
- **CHECK FOR & FIX ALL** leaks in and around your home and/or business regularly; these include leaky toilets, faucets, showers, sprinklers, and valves. Signup to monitor your water usage at www.PleasantonWater.com
- Turn off the tap when brushing your teeth, shaving, or dish washing by hand.
- Wash only full loads of laundry and dishes.
- Install water-efficient devices, such as faucet aerators and showerheads.
- Take shorter showers. Reducing your showering time by 5 minutes can save up to 12.5 gallons of water!
- Keep your pool covered when it's not in use — this will significantly reduce water loss from evaporation.

**Visit www.PleasantonWaterConservation.com for more helpful water conservation tips, programs and rebates.**



Before flowing to the Tri-Valley Area, water originates from the Feather River (shown here) watershed, where it is stored behind the Oroville Dam. It is then released into the Sacramento River and the San Joaquin Delta, where it is eventually pumped into the South Bay Aquaduct system.

# 10. PUBLIC INVOLVEMENT

Zone 7, the Valley's water wholesaler, and the City of Pleasanton encourage citizens who would like to become involved in local water issues and water quality topics to attend Zone 7's regular board meetings, which are held the third Wednesday of each month at 7:00 p.m. at the Zone 7 offices in Livermore at 100 North Canyons Parkway. These meetings are open to the public. Agendas and other pertinent information on these meetings are available on the Zone 7 web site at www.zone7water.com. For further assistance, please refer to the contact information below:

## Contact Information

**Water Quality Information** 925-931-5510
M-F 7:00 a.m.–3:30 p.m.
Stephanie Perley, sperley@cityofpleasantonca.gov

*Para informacion en español, llamar al telefono* 925-931-5500

**Utility Billing Information/Water Conservation Material & Programs** 925-931-5500
M-F 7:00 a.m.–3:30 p.m.

**Emergency Water Service** 925-931-5500
M-F 7:00 a.m.–3:30 p.m.
**After hours and weekends, call Pleasanton Police Dispatch** 925-931-5100

**Zone 7 Water Agency** 925-454-5000
M-F 8:00 a.m.–5:00 p.m.
www.zone7water.com

**Alameda County Household Hazardous Waste Collection Sites** 800-606-6606
M-F 8:30 a.m.–5:00 p.m.
www.household-hazwaste.org

**EPA Safe Drinking Water Hotline** 800-426-4791
www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline

**EPA National Radon Hotline** 800-767-7236
www.sosradon.org

*Lake Del Valle*

# 2018 ANNUAL **WATER QUALITY** REPORT

Drought-resilient plants like the California native, bush anemone are both beautiful and waterwise. This flowering evergreen shrub tolerates both sun and shade, making it a perfect addition to your garden.

THE CITY OF PLEASANTON

For any further questions you may have regarding the City's water supplies or quality, you can contact us by visiting the City's web site at www.cityofpleasantonca.gov or calling 925-931-5500.

Attachment 6 – Unregulated Chemicals with Notification Levels

**Table 1. Drinking Water Notification Levels**

| Notes* | Chemical | Notification Level (milligrams per liter) |
|---|---|---|
| 1 | Boron | 1 |
| 2 | n-Butylbenzene | 0.26 |
| 3 | sec-Butylbenzene | 0.26 |
| 4 | tert-Butylbenzene | 0.26 |
| 5 | Carbon disulfide | 0.16 |
| 6 | Chlorate | 0.8 |
| 7 | 2-Chlorotoluene | 0.14 |
| 8 | 4-Chlorotoluene | 0.14 |
| 9 | Diazinon | 0.0012 |
| 10 | Dichlorodifluoromethane (Freon 12) | 1 |
| 11 | 1,4-Dioxane | 0.001 |
| 12 | Ethylene glycol | 14 |
| 13 | Formaldehyde | 0.1 |
| 14 | HMX | 0.35 |
| 15 | Isopropylbenzene | 0.77 |
| 16 | Manganese | 0.5 |
| 17 | Methyl isobutyl ketone (MIBK) | 0.12 |
| 18 | Naphthalene | 0.017 |
| 19 | N-Nitrosodiethylamine (NDEA) | 0.00001 |
| 20 | N-Nitrosodimethylamine (NDMA) | 0.00001 |
| 21 | N-Nitrosodi-n-propylamine (NDPA) | 0.00001 |
| 22 | Perfluorooctanoic acid (PFOA) | 0.0000051 |
| 23 | Perfluorooctanesulfonic acid (PFOS) | 0.0000065 |
| 24 | Propachlor | 0.09 |
| 25 | n-Propylbenzene | 0.26 |
| 26 | RDX | 0.0003 |
| 27 | Tertiary butyl alcohol (TBA) | 0.012 |
| 28 | 1,2,4-Trimethylbenzene | 0.33 |
| 29 | 1,3,5-Trimethylbenzene | 0.33 |
| 30 | 2,4,6-Trinitrotoluene (TNT) | 0.001 |
| 31 | Vanadium | 0.05 |

* Notes include toxicological endpoint, references, history, and other information (see page 6)