Appendix A – References and Attachments

References

American Fact Finder, *Profile of General Population and Housing Characteristics: 2010, Watsonville City, California*, United States Census Bureau. Available from: <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>. [26 February 2016].

California Irrigation Management Information System (CIMIS), *CIMIS Monthly Report, February 2015 - January 2016, Pajaro - Monterey Bay - Station 129*, California Department of Water Resources. Available from: <www.cimis.water.ca.gov>. [5 February 2016].

California's Groundwater Bulletin 118, Central Coast Hydrologic Region, Pajaro Valley Groundwater Basin. Available from: http://www.water.ca.gov/groundwater/bulletin118/basindescriptions/3-02.pdf. [22 April 2016].

Groundwater Monitoring n.d., image. Available from: http://www.pvwma.dst.ca.us/hydrology/basin-monitoring.php. [21 April 2016].

Pajaro Valley Water Management Agency 2012 Basin Management Plan Update. Available from: http://www.pvwma.dst.ca.us/about-pvwma/assets/bmp_update_2012/2012_BMP_Update_Draft_Stamped_Jan2013_screen.pdf. [1 February 2016]

US Climate Data, *Watsonville Weather Averages*. Available from: < http://www.usclimatedata.com/climate.php?location=USCA1215. [5 February 2016].

"Water Use Efficiency – Leak Detection." California Department of Water Resources. State of California, 24 March 2015. Web. 27 May 2016.

Attachments

City of Watsonville Public Water System Statistics, 2005-2015

City of Watsonville 2015-2023 Housing Element

City of Watsonville Water Quality Report 2015

State of California

Department of Water Resources

The Resources Agency

PUBLIC WATER SYSTEM STATISTICS

Calendar Year 2005

1. General Information

Please follow the guidelines on the back of this form.

Contact : Gayland K. Swain
Title: Sr. Utilities Engineer
Phone: (831) 768-3102
Fax: (831) 763-4065
E-mail: gswain@ci.watsonville.ca.us
Website: www.ci.watsonville.ca.us
Communities served:
Watsonville, Freedom, Corralitos
County: Santa Cruz
Population served 64,000+/-

2. Active Service Connections

Customer Class	Recycled Water	Potable Water		Complete this portion if the system serves all or part of an incorporated city			
				Inside City Limits		Outside City Limits	
		Metered	Unmetered	Metered	Unmetered	Metered	Unmetered
Single Family Residential		13,236		9,650		3,586	
Multi-family Residential		366		320		46	
Commercial/Institutional		1,285		1,154		131	
Industrial		21		21			
Landscape Irrigation		293		232		61	
Other		205		204		1	
Agricultural Irrigation		N/A		N/A		N/A	
TOTAL		15406		11581		3825	

3. Total Water Into the System - Units of production:

☐ acre-feet ☑ million gallons ☐ hundred cubic feet

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Potable	*Wells*	155.2	143.1	162.3	180.3	192.5	199.6	220.4	212	193.1	175.2	145.9	161.7	2141.3
	Surface					31.7	45.1	45.6	53.2	52.5	55.2	43.2		326.5
	Purchased [1/]													
	Total Potable	155.2	143.1	162.3	180.3	224.2	244.7	266	265.2	245.6	230.4	189.1	161.7	2467.8
Recycled [2/]														

1/ Potable wholesale supplier(s): NONE

2/ Recycled wholesale supplier(s): NONE

Level of treatment:

4. Metered Water Deliveries - Units of delivery:

☐ acre-feet ☑ million gallons ☐ hundred cubic feet

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
A. Single Family Residential	96.07	77.15	74.97	78.52	96.9	99.43	130.08	130.66	139.32	130.54	118.23	88.63	1260.5
B. Multi-family Residential	26.4	24.54	23.66	27.69	30.24	30.26	33.19	33.55	34.77	34.27	29.76	29.4	357.73
C. Commercial/Institutional	27.85	21.89	18.55	22.78	24.48	33.11	36.11	42.6	37.86	44.83	27.46	29.9	367.42
D. Industrial	12.54	13.06	11.54	12.56	12.92	12.53	7.77	7.77	13.89	18.6	18.25	15.82	157.25
E. Landscape Irrigation	3.31	2.69	2.2	3.71	6.64	13.25	15.27	22.46	17.27	22.03	10.29	12.77	131.89
F. Other	0.26	0.93	0.24	0.92	0.28	1.71	0.33	3.19	0.41	3.52	0.33	1.36	13.48
Total Urban Retail (A thru F)	166.43	140.26	131.16	146.18	171.46	190.29	222.75	240.23	243.52	253.79	204.32	177.88	2288.27
Agricultural Irrigation													
Wholesale(*to other agencies*)													

DWR 38 (Rev. 4/05)

State of California — Department of Water Resources — The Resources Agency

PUBLIC WATER SYSTEM STATISTICS

Calendar Year 2006

Mailing Label

1. General Information

Please follow the provided instructions.

Contact : Gayland K. Swain
Title: Sr. Utilities Engineer
Phone: 831-768-3102
Fax: 831-763-4065
E-mail: gswain@ci.watsonville.ca.us
Website: www.watsonville.ca.us
County: **Santa Cruz**
Population served: **64,000 +/-**
Names of communities served: Watsonville, Freedom, Corralitos

2. Active Service Connections

Customer Class	Potable Water		Recycled Water	
	Metered	Unmetered	Metered	Unmetered
Single Family Residential	13329			
Multi-family Residential	411			
Commercial/Institutional	1466			
Industrial	21			
Landscape Irrigation	304			
Other	36			
Agricultural Irrigation	1			
TOTAL	15568			

3. Total Water Into the System - Units of production:

☐ acre-feet ☑ million gallons ☐ hundred cubic feet

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Potable	*Wells*	151.6	148.1	159.7	162.4	206.6	214.9	248.8	234	202.8	210.1	171.5	170.7	2281.2
	Surface					15.9	50.6	55.8	55.6	53	31.8	26.7	8.3	297.7
	Purchased [1/]													
	Total Potable	151.6	148.1	159.7	162.4	222.5	265.5	304.6	289.6	255.8	241.9	198.2	179	2578.9
Untreated Water														
Recycled [2/]														

1/ Potable wholesale supplier(s): NONE

2/ Recycled wholesale supplier(s): NONE
Level of treatment:

4. Metered Water Deliveries - Units of delivery:

☐ acre-feet ☑ million gallons ☐ hundred cubic feet

If recycled is included, ✓box ↓	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
A.SingleFamilyResidential ☐	95.64	72.31	80.17	75.79	87.54	92.57	132.69	129.05	140.42	130.02	113.02	94.11	1243.33
B.Multi-family Residential ☐	29.34	25.88	26.01	28.46	27.61	29.21	35.94	31.49	38.2	33.03	30.61	28.44	364.22
C.Commercial/Institutional ☐	22.62	23.45	20.43	25.15	21.1	32.58	40.85	43.27	40.9	44.15	34.42	33.46	382.38
D.Industrial ☐	11.51	9.94	11.25	12.07	11.9	7.41	10.88	7.62	10.63	12.94	21.25	21.27	148.67
E.Landscape Irrigation ☐	4.65	2.02	3.18	4.77	2.14	12.01	16.73	21.88	20.31	23.12	13.86	10.36	135.03
F.Other ☐	0.25	0.69	0.17	0.73	0.15	1.52	0.31	3.06	0.39	4.26	0.36	1.66	13.55
Total Urban Retail *(A thru F)*	164.01	134.29	141.21	146.97	150.44	175.3	237.4	236.37	250.85	247.52	213.52	189.3	2287.18
Agricultural Irrigation ☐						9.8	22.6	21	13.3	5.4	3.8	3.3	79.2
Wholesale(*to other agencies*) ☐													

DWR 38 (Rev. 12/06)

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PUBLIC WATER SYSTEM STATISTICS

Calendar Year 2007

Watsonville, City of
Gayland K. Swain, Sr. Utilities Engineer
PO BOX 50000
WATSONVILLE, CA 95077
PWS#4410011 SJD

1. General Information

Please follow the provided instructions.

Contact : Gayland K. Swain
Title: Sr. Utilities Engineer
Phone: 831-768-3102
Fax: 831-763-4065
E-mail: gswain@ci.watsonville.ca.us
Website: www.watsonville.ca.us
County: **Santa Cruz**
Population served: **64,000+/-**
Names of communities served: Watsonville, Freedom Corralitos

2. Active Service Connections

Customer Class	Potable Water		Recycled Water	
	Metered	Unmetered	Metered	Unmetered
Single Family Residential	13323			
Multi-family Residential	445			
Commercial/Institutional	1357			
Industrial	13			
Landscape Irrigation	318			
Other	32			
Agricultural Irrigation	1			
TOTAL	15489			

3. Total Water Into the System - Units of production:

☐ acre-feet ☑ million gallons ☐ hundred cubic feet

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Potable	*Wells*	174.78	154.96	191.91	197.98	227.17	239.01	269.77	268.81	250.98	197.46	171.5	145.81	2490.14
	Surface				19.31	40.51	48.8	44.67	40.73	26.04	37.59	34.14	30.49	322.28
	Purchased 1/													
	Total Potable	174.78	154.96	191.91	217.29	267.68	287.81	314.44	309.54	277.02	235.05	205.64	176.3	2812.42
Untreated Water														
Recycled 2/														

1/ Potable wholesale supplier(s): NONE

2/ Recycled wholesale supplier(s): NONE
Level of treatment:

4. Metered Water Deliveries - Units of delivery:

☐ acre-feet ☑ million gallons ☐ hundred cubic feet

If recycled is included, ✓box ↓	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
A.SingleFamilyResidential ☐	92.73	74.5	81.47	77.6	98.9	125.94	115.37	151.41	113.62	140.65	90.11	106.96	1269.26
B.Multi-family Residential ☐	30.55	26.5	24.77	28.51	28.65	34.42	31.07	35.83	31.58	36.01	27.77	33.66	369.32
C.Commercial/Institutional ☐	23.03	24.96	19.91	29.23	27.28	50.68	34.59	50.4	35.45	50.52	29.04	36.74	411.83
D.Industrial ☐	15.85	13.22	14.25	13.44	13.34	13.65	8.58	9.33	11.71	17.72	18.74	16.48	166.31
E.Landscape Irrigation ☐	5.36	4.08	2.57	8.26	9.23	16.59	19.37	25.41	19.77	22.08	10.66	11.39	154.77
F.Other ☐	0.23	0.8	0.24	1.1	0.2	2.72	0.3	4.91	0.26	2.98	0.19	1.97	15.9
Total Urban Retail *(A thru F)*	167.75	144.06	143.21	158.14	177.6	244	209.28	277.29	212.39	269.96	176.51	207.2	2387.39
Agricultural Irrigation ☐	4.12	3.3	8.18	14.66	25.27	29.36	35.77	39.03	29.64	21.13	15.98	4.84	231.28
Wholesale*(to other agencies)* ☐													

State of California

DEPARTMENT OF WATER RESOURCES

California Natural Resources Agency

PUBLIC WATER SYSTEM STATISTICS

Calendar Year 2008

Watsonville, City of
Gayland K. Swain, Sr. Utilities Engineer
PO BOX 50000
WATSONVILLE, CA 95077
PWS#4410011 SJD

1. General Information

Please follow the provided instructions.

Contact : Gayland K. Swain
Title: Sr. Utilities Engineer
Phone: 831-768-3102
Fax: 831-763-4065
E-mail: gswain@ci.watsonville.ca.us
Website: www.watsonville.ca.us
County: **Santa Cruz**
Population served: **64,000 +/-**
Names of communities served: Watsonville, Freedom Corralitos

2. Active Service Connections

Customer Class	Potable Water		Recycled Water	
	Metered	Unmetered	Metered	Unmetered
Single Family Residential	13,203			
Multi-family Residential	233			
Commercial/Institutional	1,996			
Industrial	15			
Landscape Irrigation	316			
Other	32			
Agricultural Irrigation	1			
TOTAL	15796			

3. Total Water Into the System - Units of production:

☐ acre-feet ☑ million gallons ☐ hundred cubic feet

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Potable	*Wells*	158.5	156.58	204.46	235.94	254.47	270.38	287.8	297.75	275.54	254.33	195.37	167.49	2758.61
	Surface	2.51	0	0	16.56	34.39	34.19	22.92	0	0	0	0	0	110.57
	Purchased 1/													
	Total Potable	161.01	156.58	204.46	252.5	288.86	304.57	310.72	297.75	275.54	254.33	195.37	167.49	2869.18
Untreated Water														
Recycled 2/														

1/ Potable wholesale supplier(s): NONE

2/ Recycled wholesale supplier(s): NONE
Level of treatment:

4. Metered Water Deliveries - Units of delivery:

☐ acre-feet ☑ million gallons ☐ hundred cubic feet

If recycled is included, ✓box ↓	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
A.SingleFamilyResidential ☐	71.6	81.63	67.55	81.32	81.21	128.76	100.85	140.8	105.51	125.75	89.75	97.8	1172.53
B.Multi-family Residential ☐	22.42	25.03	22.39	24.39	25.38	31.48	26.49	32.21	28.25	28.25	27.26	25.39	318.94
C.Commercial/Institutional ☐	29.07	39.69	27.53	40.37	37.01	65.13	45.22	71.46	46.85	61.67	40.62	45.97	550.59
D.Industrial ☐	12.17	12.11	11.67	12.58	10.52	7.97	14.88	14.08	11.08	16.16	19.48	13.41	156.11
E.Landscape Irrigation ☐	5.1	2.81	2.11	6.3	11.97	23.34	18.16	26.2	20.43	20.96	21.52	10.13	169.03
F.Other ☐	0.18	1.11	0.15	1.86	0.27	4.34	0.26	6.55	0.3	3.15	0.2	1.47	19.84
Total Urban Retail (A thru F)	140.54	162.38	131.4	166.82	166.36	261.02	205.86	291.3	212.42	255.94	198.83	194.17	2387.04
Agricultural Irrigation ☐	2.37	4.17	15.82	26.61	36.39	36.88	39.56	32.57	28.1	29.54	17.49	6.05	275.55
Wholesale(*to other agencies*) ☐													

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State of California

DEPARTMENT OF WATER RESOURCES

PUBLIC WATER SYSTEM STATISTICS

California Natural Resources Agency

Calendar Year 2009

"Watsonville, City of
Gayland K. Swain, Sr. Utilities
Engineer
PO BOX 50000
WATSONVILLE, CA 95077
PWS#4410011 SCRO

1. General Information

Please follow the provided instructions.

Contact : Gayland K. Swain
Title: Sr. Utilities Engineer
Phone: 831-768-3102
Fax: 831-763-4065
E-mail: gswain@ci.watsonville.ca.us
Website: www.watsonville.ca.us
County: **Santa Cruz**
Population served: **64,000 +/-**
Names of communities served: Watsonville, Freedom Corralitos

2. Active Service Connections

Customer Class	Potable Water		Recycled Water	
	Metered	Unmetered	Metered	Unmetered
Single Family Residential	13425			
Multi-family Residential	229			
Commercial/Institutional	1958			
Industrial	15			
Landscape Irrigation	321			
Other	31			
Agricultural Irrigation	1			
TOTAL	15980			

3. Total Water Into the System - Units of production: MG

(Select: **AF**=acre-feet; **MG**=million gallons; **CCF**=hundred cubic feet)

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Potable	*Wells*	165.78	140.5	168.37	218.36	236.57	253.47	246.46	241.09	226.53	198.71	167.82	143.91	2407.57
	Surface	0	0	0	0	0	4.19	27.8	21.72	18.01	6.81	29.83	12.89	121.25
	Purchased 1/													
	Total Potable	165.78	140.5	168.37	218.36	236.57	257.66	274.26	262.81	244.54	205.52	197.65	156.8	2528.82
Untreated Water														
Recycled 2/														

1/ Potable wholesale supplier(s):

2/ Recycled wholesale supplier(s):

Level of treatment:

4. Metered Water Deliveries - Units of delivery: MG

(Select: **AF**=acre-feet; **MG**=million gallons; **CCF**=hundred cubic feet)

If recycled is included, X box ↓	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
A.SingleFamilyResidential	71.14	93.54	51.94	76.46	127.4	90.43	109.71	125.63	128.32	97.65	86.1	81.8	1140.12
B.Multi-family Residential	25.28	30.62	21	24.08	29.7	24.98	27.22	32.07	49.24	9.2	26.01	24.48	323.88
C.Commercial/Institutional	28.75	39.99	25.09	37.28	58.67	42.04	48.99	55.21	74.44	27.2	42.08	36.78	516.52
D.Industrial	12.93	7.66	7.3	12.58	12.49	8.56	6.49	7.73	12.37	7.99	15.35	12.11	123.56
E.Landscape Irrigation	4.9	5.63	3.08	4.36	15.45	14.97	18.77	22.77	28.64	10.15	9.74	8.07	146.53
F.Other	0.13	0.87	0	0.71	0.91	0.86	1.2	3.28	1.69	1.43	0.9	0.61	12.59
Total Urban Retail *(A thru F)*	143.13	178.31	108.41	155.47	244.62	181.84	212.38	246.69	294.7	153.62	180.18	163.85	2263.2
Agricultural Irrigation	3.03	0	0.07	12.03	19.92	28.28	20.98	15.38	16.95	5.49	21.02	4.89	148.04
Wholesale*(to other agencies)*													

State of California

DEPARTMENT OF WATER RESOURCES

California Natural Resources Agency

PUBLIC WATER SYSTEM STATISTICS

Calendar Year **2010**

1. General Information

Please follow the provided instructions.

Contact : Gayland K. Swain
Title: Senior Utilities Engineer
Phone: (831) 768-3102
Fax: (831) 763-4065
E-mail: gswain@ci.watsonville.ca.us
Website: http://www.ci.watsonville.ca.us
County: **Santa Cruz**
Population served: **60785**
Names of communities served: Watsonville,Freedom,Corralit

2. Active Service Connections

Customer Class	Potable Water		Recycled Water	
	Metered	Unmetered	Metered	Unmetered
Single Family Residential	13,773			
Multi-family Residential	233			
Commercial/Institutional	1,226			
Industrial	14			
Landscape Irrigation	318			
Other	31			
Agricultural Irrigation	1			
TOTAL	15596			

3. Total Water Into the System - Units of production: MG

(Select: **AF**=acre-feet; **MG**=million gallons; **CCF**=hundred cubic feet)

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Potable	*Wells*	158.51	141.78	169.7	161.14	186.38	207.49	232.19	218.1	224.98	189.74	146.32	155.97	2192.3
	Surface					18.99	49.5	48.23	41.18	29.15	26.75	24.73		238.53
	Purchased 1/													
	Total Potable	158.51	141.78	169.7	161.14	205.37	256.99	280.42	259.28	254.13	216.49	171.05	155.97	2430.83
Untreated Water														
Recycled 2/														

1/ Potable wholesale supplier(s):

2/ Recycled wholesale supplier(s):

Level of treatment:

4. Metered Water Deliveries - Units of delivery: MG

(Select: **AF**=acre-feet; **MG**=million gallons; **CCF**=hundred cubic feet)

If recycled is included, X box ↓		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
A.SingleFamilyResidential		101.78	61.36	110.53	50.5	89.68	92.16	125.16	123.4	116	127.25	101.68	89.86	1189.36
B.Multi-family Residential		30.04	16.79	38.06	5.84	26.48	22.41	29.56	30.19	27.15	28.89	27.44	24.33	307.18
C.Commercial/Institutional		28.14	14.36	34.49	7.35	27.17	26.35	36.7	37.19	34.5	38.51	34.33	25.82	344.91
D.Industrial		8.3	8.59	9.18	6.03	9.61	8.25	5.18	8.66	9.4	11.18	18.58	14.9	117.86
E.Landscape Irrigation		4.31	1.61	2.87	1.18	6.43	7.34	18.21	23.49	19.89	20.28	15.15	4.27	125.03
F.Other		0.55	0.35	0.52	0.62	0.64	0.83	1.36	1.64	2.85	2.01	1.33	0.63	13.33
Total Urban Retail *(A thru F)*		173.12	103.06	195.65	71.52	160.01	157.34	216.17	224.57	209.79	228.12	198.51	159.81	2097.67
Agricultural Irrigation		8.95	4.03	7.79	1.7	18.08	32.61	30.68	22.5	24.19	8.82	4.29	0.96	164.6
Wholesale *(to other agencies)*														

State of California

DEPARTMENT OF WATER RESOURCES

California Natural Resources Agency

PUBLIC WATER SYSTEM STATISTICS

Calendar Year **2011**

Watsonville, City of
Beau Kayser, Water Operator
500 Clearwater Lane
WATSONVILLE, CA 95076
PWS# 4410011 SCRO

1. General Information

Please follow the provided instructions.

Contact : Beau Kayser
Title: Water Operator
Phone: (831) 768-3193
Fax: (831) 763-1970
E-mail: beau.kayser@cityofwatsonville.org
Website: http://www.ci.watsonville.ca.us
County: **Santa Cruz**
Population served: **65,739**
Names of communities served: Watsonville, Freedom, Corralitos

2. Active Service Connections

Customer Class	Potable Water		Recycled Water	
	Metered	Unmetered	Metered	Unmetered
Single Family Residential	12441			
Multi-family Residential	227			
Commercial/Institutional	1185			
Industrial	20			
Landscape Irrigation	318			
Other	373			
Agricultural Irrigation	1			
TOTAL	14565			

3. Total Water Into the System - Units of production: MG

(Select: **AF**=acre-feet; **MG**=million gallons; **CCF**=hundred cubic feet)

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Potable	*Wells*	169.94	147.02	157.62	190.04	228.58	169.27	195.51	180.08	188.92	165.84	146.42	145.08	2084.32
	Surface	0	0	0	0	2.41	45.35	52.24	51.08	43.17	34.54	28.53	37.34	294.66
	Purchased 1/													
	Total Potable	169.94	147.02	157.62	190.04	230.99	214.62	247.75	231.16	232.09	200.38	174.95	182.42	2378.98
Untreated Water														
Recycled 2/														

1/ Potable wholesale supplier(s): NONE

2/ Recycled wholesale supplier(s): NONE

Level of treatment:

4. Metered Water Deliveries - Units of delivery: MG

(Select: **AF**=acre-feet; **MG**=million gallons; **CCF**=hundred cubic feet)

If recycled is included, X box ↓		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
A.SingleFamilyResidential		88.60	68.63	89.65	74.78	81.17	178.05	112.85	100.85	78.81	187.32	10.20	187.11	1258.022
B.Multi-family Residential		24.25	20.57	24.82	22.93	22.51	49.21	29.58	28.30	5.61	51.24	1.62	37.56	318.2029
C.Commercial/Institutional		25.33	16.33	23.85	22.19	22.70	54.65	35.86	32.88	9.30	60.40	3.01	44.53	351.0282
D.Industrial		13.78	6.87	7.57	14.09	12.59	17.28	10.97	10.27	1.99	21.22	11.73	14.53	142.8904
E.Landscape Irrigation		4.15	0.22	4.13	2.04	4.85	25.44	17.12	16.89	3.18	24.68	2.01	9.14	113.8531
F.Other		0.63	0.26	0.70	0.50	3.93	6.56	0.13	2.04	2.04	1.87	0.30	1.47	20.43386
Total Urban Retail *(A thru F)*		156.7389	112.8941	150.719	136.5272	147.7487	331.1837	206.5153	191.2284	100.9276	346.7399	28.86532	294.3417	2204.43
Agricultural Irrigation		17.38	7.68	0.99	15.05	17.27	9.13	12.9	7.6	12.45	3.66	9.93	19.26	133.3
Wholesale *(to other agencies)*														

The value of per capita water use is out of range. Please check your population, units, or volumes of water and try again

State of California | DEPARTMENT OF WATER RESOURCES | California Natural Resources Agency

PUBLIC WATER SYSTEM STATISTICS

Calendar Year **2012**

Watsonville, City of
Beau Kayser, Water Operator
500 Clearwater Lane
WATSONVILLE, CA 95076
PWS# 4410011
SCRO

1. General Information

Please follow the provided instructions.

Contact : Beau Kayser
Title: Water Operator
Phone: (831) 768-3193
Fax: (831) 763-1970
E-mail: beau.kayser@cityofwatsonville.org
Website: http://www.cityofwatsonville.org
County: **Santa Cruz**
Population served: **65,739**
Names of communities served: Watsonville, Freedom, Corralitos

2. Active Service Connections

Customer Class	Potable Water		Recycled Water	
	Metered	Unmetered	Metered	Unmetered
Single Family Residential	12483			
Multi-family Residential	229			
Commercial/Institutional	1190			
Industrial	17			
Landscape Irrigation	322			
Other	376			
Agricultural Irrigation	1			
TOTAL	14618			

3. Total Water Into the System - Units of production: MG

(Select: **AF**=acre-feet; **MG**=million gallons; **CCF**=hundred cubic feet)

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Potable	*Wells*	177.46	177.29	172.6	170.24	251.9	230.54	236.36	229.94	209.78	185.36	152.29	128.46	2322.22
	Surface	0.5	0	0	0	0	33.9	43.57	32.07	26.00	26.49	25.33	17.98	205.84
	Purchased 1/													
	Total Potable	177.96	177.29	172.6	170.24	251.9	264.44	279.93	262.01	235.78	211.85	177.62	146.44	2528.06
Untreated Water														
Recycled 2/														

1/ Potable wholesale supplier(s): NONE

2/ Recycled wholesale supplier(s): NONE

Level of treatment:

4. Metered Water Deliveries - Units of delivery: MG

(Select: **AF**=acre-feet; **MG**=million gallons; **CCF**=hundred cubic feet)

If recycled is included, X box ↓		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
A.SingleFamilyResidential		1.73	81.76	79.44	78.06	81.12	118.27	113.40	123.44	122.31	102.64	101.04	90.95	1094.165
B.Multi-family Residential		14.21	21.07	23.41	24.26	22.78	27.42	27.22	28.71	29.71	25.41	26.50	25.85	296.5543
C.Commercial/Institutional		11.41	19.19	22.93	23.56	22.17	34.10	35.38	38.07	39.07	33.58	33.74	28.28	341.4762
D.Industrial		12.39	4.65	10.26	11.51	12.14	11.65	7.80	7.97	6.19	10.94	19.05	16.64	131.1685
E.Landscape Irrigation		2.64	5.18	5.31	4.82	4.58	14.66	19.08	22.38	22.28	15.96	13.37	6.95	137.2109
F.Other		0.00	1.07	0.81	0.56	0.75	1.13	1.90	3.04	1.89	1.48	1.07	0.56	14.26361
Total Urban Retail (A thru F)		42.38093	132.9159	142.1604	142.776	143.5434	207.2207	204.7822	223.5959	221.4424	190.0219	194.7635	169.235	2014.838
Agricultural Irrigation		16.95	27.58	13.29	10.37	35.31	37.17	37.94	25.33	18.51	6.81	9.93	1.41	240.6
Wholesale(*to other agencies*)														

The value of per capita water use is out of range. Please check your population, units, or volumes of water and try again

State of California | DEPARTMENT OF WATER RESOURCES | California Natural Resources Agency

PUBLIC WATER SYSTEM STATISTICS

Calendar Year **2013**

Watsonville, City of
Beau Kayser, Water Operations Sup.
500 CLEARWATER LANE
WATSONVILLE, CA 95077
PWS# 4410011 SCRO

1. General Information

Please follow the provided instructions.

Contact : Beau Kayser
Title: Water Operations Supervisor
Phone: (831) 768-3193
Fax: (831) 763-1970
E-mail: beau.kayser@cityofwatsonville.org
Website: http://www.cityofwatsonville.org
County: **Santa Cruz**
Population served: **65,739**
Names of communities served: Watsonville, Freedom, Corralitos

2. Active Service Connections

Customer Class	Potable Water		Recycled Water	
	Metered	Unmetered	Metered	Unmetered
Single Family Residential	12557			
Multi-family Residential	227			
Commercial/Institutional	1201			
Industrial	18			
Landscape Irrigation	329			
Other	387			
Agricultural Irrigation	1			
TOTAL	14720			

3. Total Water Into the System - Units of production: MG

(Select: **AF**=acre-feet; **MG**=million gallons; **CCF**=hundred cubic feet)

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Potable	*Wells*	158.04	151.21	181.23	225.64	271.45	251.98	261.06	255.57	245.62	225.51	191.33	169.73	2588.37
	Surface	0	0	0	0	0	19.93	21.96	19.24	12.91	12.97	14.79	17.4	119.2
	Purchased [1/]													
	Total Potable	158.04	151.21	181.23	225.64	271.45	271.91	283.02	274.81	258.53	238.48	206.12	187.13	2707.57
Untreated Water														
Recycled [2/]														

1/ Potable wholesale supplier(s): NONE

2/ Recycled wholesale supplier(s): NONE
Level of treatment:

4. Metered Water Deliveries - Units of delivery: MG

(Select: **AF**=acre-feet; **MG**=million gallons; **CCF**=hundred cubic feet)

If recycled is included, X box ↓		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
A.SingleFamilyResidential		136.56	65.87	76.97	86.47	129.97	114.5	140.38	106.71	106.07	128.42	88.3	79.43	1259.65
B.Multi-family Residential		39.4	20.78	21.87	17.44	35.68	24.78	32.62	25.54	23.28	34.02	23.69	22.38	321.48
C.Commercial/Institutional		38.6	20.87	22.33	18.44	45.97	33.89	40.94	32.69	30.97	49.97	27.63	23.19	385.5037
D.Industrial		11.23	9.81	12.17	15.69	20.81	14.00	13.20	9.58	9.25	16.40	19.16	11.93	163.2184
E.Landscape Irrigation		3.82	2.99	6.14	7.08	20.55	19.14	22.30	18.65	16.66	23.86	12.83	13.57	167.6035
F.Other		0.63	0.48	0.68	0.96	1.25	2.42	4.38	2.14	2.35	1.66	1.12	0.89	18.97156
Total Urban Retail *(A thru F)*		230.24	120.80	140.16	146.08	254.23	208.73	253.83	195.32	188.58	254.33	172.73	151.40	2316.427
Agricultural Irrigation		12.04	6.57	4.83	20.69	31.84	32.89	37.78	40.22	26.22	18.45	22.89	21.58	276
Wholesale*(to other agencies)*														

State of California | DEPARTMENT OF WATER RESOURCES | California Natural Resources Agency

PUBLIC WATER SYSTEM STATISTICS

Calendar Year **2014**

Watsonville, City of
Beau Kayser, Water Operations Sup.
500 CLEARWATER LANE
WATSONVILLE, CA 95077
PWS# 4410011 SCRO

1. General Information

Please follow the provided instructions.

Contact : Beau Kayser
Title: Water Operations Supervisor
Phone: (831) 768-3193
Fax: (831) 763-1970
E-mail: beau.kayser@cityofwatsonville.org
Website: http://www.cityofwatsonville.org
County: **Santa Cruz**
Population served: **65,739**
Names of communities served: Watsonville, Freedom, Corralitos

2. Active Service Connections

Customer Class	Potable Water		Recycled Water	
	Metered	Unmetered	Metered	Unmetered
Single Family Residential	12559			
Multi-family Residential	227			
Commercial/Institutional	1195			
Industrial	18			
Landscape Irrigation	328			
Other	391			
Agricultural Irrigation	1			
TOTAL	14719			

3. Total Water Into the System - Units of production: MG

(Select: **AF**=acre-feet; **MG**=million gallons; **CCF**=hundred cubic feet)

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Potable	*Wells*	194.73	142.45	169.51	184.86	257.69	246.70	259.47	244.15	221.68	209.20	158.54	140.52	2429.50
	Surface	0.00	0.00	0.00	0.00	0.00	10.28	9.51	0.07	0.00	0.00	0.00	0.00	19.86
	Purchased 1/													
	Total Potable	194.73	142.45	169.51	184.86	257.69	256.98	268.98	244.22	221.68	209.20	158.54	140.52	2449.36
Untreated Water														
Recycled 2/														

1/ Potable wholesale supplier(s): NONE

2/ Recycled wholesale supplier(s): NONE

Level of treatment:

4. Metered Water Deliveries - Units of delivery: MG

(Select: **AF**=acre-feet; **MG**=million gallons; **CCF**=hundred cubic feet)

If recycled is included, X box ↓		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
A.SingleFamilyResidential		101.53	76.06	69.27	93.04	88.27	94.02	120.71	91.99	89.56	101.61	79.77	67.34	1073.16
B.Multi-family Residential		27.46	21.94	20.78	26.92	23.61	25.41	29.33	23.17	22.51	27.59	20.85	20.35	289.92
C.Commercial/Institutional		27.85	22.24	20.59	27.43	28.56	31.66	40.35	31.41	31.48	36.22	24.50	21.67	343.97
D.Industrial		6.86	10.01	11.34	11.37	15.20	12.07	11.82	7.82	7.65	19.40	18.39	11.37	143.28
E.Landscape Irrigation		2.52	7.01	3.53	9.63	10.61	14.66	21.34	15.97	15.22	14.80	8.00	2.75	126.03
F.Other		1.06	1.37	0.75	1.16	1.11	1.43	2.78	3.36	2.19	1.75	0.84	0.60	18.41
Total Urban Retail (A thru F)		167.28	138.63	126.25	169.55	167.37	179.25	226.33	173.71	168.60	201.36	152.35	124.09	1994.777
Agricultural Irrigation		24.33	3.15	9.84	14.07	44.07	48.48	52.95	43.82	30.14	18.5	11.31	0.29	300.95
Wholesale(*to other agencies)*														

State of California | DEPARTMENT OF WATER RESOURCES | California Natural Resources Agency

PUBLIC WATER SYSTEM STATISTICS

Calendar Year **2015**

Watsonville, City of
Beau Kayser, Water Operations Sup.
500 CLEARWATER LANE
WATSONVILLE, CA 95077
PWS# 4410011 SCRO

1. General Information

Please follow the provided instructions.

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Website: http://www.cityofwatsonville.org
County: **Santa Cruz**
Population served: **65,739**
Names of communities served: Watsonville, Freedom, Corralitos

2. Active Service Connections

Customer Class	Potable Water		Recycled Water	
	Metered	Unmetered	Metered	Unmetered
Single Family Residential	12608			
Multi-family Residential	227			
Commercial/Institutional	1125			
Industrial	17			
Landscape Irrigation	408			
Other	396			
Agricultural Irrigation	1			
TOTAL	14782			

3. Total Water Into the System - Units of production: MG

(Select: **AF**=acre-feet; **MG**=million gallons; **CCF**=hundred cubic feet)

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Potable	*Wells*	194.73	154.31	172.56	182.34	210.01	222.97	234.75	227.15	214.12	184	150.41	133.47	2280.82
	Surface	0	0	0	0	0	0	0	0	0	0	0	0	0
	Purchased 1/													
	Total Potable	194.73	154.31	172.56	182.34	210.01	222.97	234.75	227.15	214.12	184	150.41	133.47	2280.82
Untreated Water														
Recycled 2/														

1/ Potable wholesale supplier(s):

2/ Recycled wholesale supplier(s):

Level of treatment:

4. Metered Water Deliveries - Units of delivery: MG

(Select: **AF**=acre-feet; **MG**=million gallons; **CCF**=hundred cubic feet)

If recycled is included, X box ↓		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
A.SingleFamilyResidential		84.57	76.54	73.66	87.74	70.82	72.16	94.04	75.22	108.75	81.56	86.03	77.35	988.44
B.Multi-family Residential		28.13	23.01	23.08	29.41	24.6	24.53	31.43	24.48	30.41	24.18	23.26	27.38	313.9
C.Commercial/Institutional		36.5	23.75	24	31.78	27.48	28.17	37.91	29.73	37.95	29.52	25.67	27.35	359.81
D.Industrial		12.08	16.88	16.26	9.94	27.17	16.98	14.91	5.75	11.51	18.04	22.67	12.52	184.71
E.Landscape Irrigation		33.39	4.06	5.55	12.92	10.14	10.98	15.06	11.57	14.39	12.35	7.93	3.63	141.97
F.Other		0.04	0.02	0.03	0.06	0.04	0.03	0.04	0.04	0.05	0.05	0.02	0	0.42
Total Urban Retail (A thru F)		194.71	144.26	142.58	171.85	160.25	152.85	193.39	146.79	203.06	165.7	165.58	148.23	1989.25
Agricultural Irrigation		9.20	14.74	11.65	18.40	34.11	47.69	50.53	45.00	28.61	7.93	8.45	4.71	281.015
Wholesale(*to other agencies)*														

City of Watsonville

Water Quality Report 2015

Why Do We Test Our Drinking Water?

The sources of drinking water (both tap water 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.

Contaminants that may be present in source water include:

- **Microbial contaminants,** such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants,** such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides,** that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants,** including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- **Radioactive contaminants**, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resouces Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water, including bottled water, 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's Safe Drinking Water Hotline (1-800-426-4791).

The City of Watsonville is proud to report that the water provided by our Utilities Department met all Federal and State standards for drinking water during 2015.

Information for People with Special Health Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons 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. USEPA/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 Safe Drinking Water Hotline (1-800-426-4791). Remember, the City's water met all Federal and State standards for drinking water during 2015.

2015 Water Quality Information

This table lists only the substances detected, out of the more than 2,000 water quality analyses conducted during 2015.

Arsenic. While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Lead. 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 Watsonville 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 or at **http://www.epa.gov/safewater/lead.**

Nitrate: Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than 6 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 if you are pregnant, you should ask advice from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

Terms & Abbreviations Used in Table:

Public Health Goal (PHG): 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 Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements.

Regulatory Action Level (AL): The concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.

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

NA: not applicable

ND: not detectable at testing limit

ppb: parts per billion or micrograms per liter

ppm: parts per million or milligrams per liter

ppt: parts per trillion or nanograms per liter

pCi/l: picocuries per liter (a measure of radiation)

Source Water Assessment

The Source Water Assessment is a tool to help us protect our water supplies by identifying *potential* sources of contamination. **It is important to note that the City is in compliance with all State water quality regulations.** An assessment of the City's drinking water was completed in March 2013. Our sources are considered most vulnerable to the following activities associated with nitrate detected in the water supply: agricultural drainage channels, fertilizer and pesticide application to irrigated crops. In addition, the sources are considered most vulnerable to gas stations, known contaminant plumes from historical leaking fuel tanks, utility stations, septic systems, and recreational areas.

The City works closely with State agencies to ensure the proper and rapid cleanup of potential contaminant sources, such as leaking underground fuel tank sites, and our program has effectively protected the City water supply. A copy of the complete assessment is available for viewing at the City's Main Library, located at 275 Main Street. A summary of the assessment can be mailed upon request by calling Beau Kayser at 768-3193.

Footnotes to Table

1. The limit of 1,300 ppb for copper & 15 ppb for lead is at the 90th percentile of data after ranking. Lead & copper have not been detected in the City water system, but may occur due to corrosion of plumbing in private homes. Thirty sites were sampled in 2013.
2. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.
3. Compliance based on presence of coliform bacteria in less than 5% of distribution samples collected in a month.
4. Total trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane and bromoform.
5. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.Turbidity is measured in NTUs (nephelometric turbidity units).
6. Treatment Technique performance standard: 0.5 NTU for filtered water in 95% of measurements taken each month and shall not exceed 5.0 NTU at any time.
7. Treatment Technique performance standard: 5.0 NTU for unfiltered water at any time.
8. Divide by 17.12 to convert ppm to grains/gallon as $CaCO_3$.

Primary Drinking Water Standards / Normas primarias del agua potable

Substance (units) Sustancia (unidad)	Highest Level Allowed: MCL *NMC*	Ideal Goals: PHG or (MCLG) *MSP o (MMNC)*	Treated Surface Water Agua de la superficie		Treated Groundwater[2] Agua subterránea[2]		Violation? ¿violación?	Major Sources Origen
			Range Límites	Average Promedio	Range Límites	Average Promedio		
Arsenic (ppb) Arsénico (ppb)	10	0.004	ND-1.9	1.0	ND-6.5	0.5	No	Naturally occurring mineral Mineral natural
Barium (ppb) Bario (ppb)	1000	2000	39-62	50	3.4-68	33	No	Erosion of deposits of naturally occurring minerals La erosión de depósitos de minerales radioactivas naturales
Chlorine (ppm) Cloro (ppm)	MRDL =4	MRDLG =4	Average= 0.61, Range = 0.21-0.97 Promedio = 0.61, margen = 0.21-0.97				No	Drinking water disinfectant Desinfectante de agua
Chromium (ppb) Cromo (ppb)	50	100	ND	ND	0.6-19	8.6	No	Naturally occurring mineral; Chrome plating Cromodo; Mineral natural
Chromium 6 (ppb) Cromo 6 (ppb)	10	0.02	ND	ND	ND-19	8.4	No	Naturally occurring mineral Mineral natural
Total Coliform[3] (% positive) Coliforme total[3] (% positivas)	5%	(0)	Highest Monthly % Positive Samples=1% Promedio mensual positivo más alto=1%				No	Naturally present in the environment Existe naturalmente
Copper in tap water (ppb)[1] Cobre en el agua de beber (ppb)[1]	AL= 1,300[1]	170	90th percentile=1030 ppb; 0 sites exceeded the AL 90[0] percentil=1030 ppb; 0 sitios excedieron el NAR				No	Corrosion of household plumbing Oxidación de la plomería del hogar
Fluoride (ppb) Fluoruro (ppb)	2,000	1,000	220-300	260	70-270	200	No	Naturally occurring mineral Mineral natural
Haloacetic Acids (ppb) Ácidos haloacécticos (ppb)	60	NA	Highest Average = 1.4, Range = 0-2.8 Promedio más alto = 1.4, margen = 0-2.8				No	By-product of drinking water chlorination Producto secundario del processo de cloración
Lead in tap water (ppb)[1] Plomo en el agua de beber (ppb)[1]	AL=15[1]	0.2	90th percentile=<2.7 ppb; 0 sites exceeded the AL 90[0] percentil=<2.7 ppb; 0 sitios excedieron el NAR				No	Corrosion of household plumbing Oxidación de la plomería del hogar
Nitrate (ppm as N) Nitrato (ppm como N)	10	10	ND	ND	4.7	2.3	No	Runoff/leaching from fertilizer/septic Escurrimiento/la lixiviación por el fertilizante/séptico
Selenium (ppb) Selenio (ppb)	50	30	ND	ND	0-5.6	0.8	No	Naturally occurring mineral Mineral natural
Total Trihalomethanes[4] (ppb) Trihalometano Total[4] (ppb	80	NA	Highest Average = 11.5, Range = 2.1-15.0 Promedio más alto = 11.5, margen = 2.1-15.0				No	By-product of drinking water chlorination Producto secundario del processo de cloración
Uranium(pCi/L) Uranio(pCi/L)	20	0.43	ND	ND	ND-1	0.143	No	Erosion of natural deposits Erosion de depositos naturales

Secondary (Non-Health Related) Drinking Water Standards - Aesthetic Qualities that can Affect Taste, Odor & Color [2]

Secundaria (no relación con la salud) Normas de agua potable - Calidades estéticas que puedan afectar el sabor, olor y color del agua [2]

Chloride (ppm) Cloruro (ppm)	500	NA	16-39	28	11-400	48	No	Naturally occurring mineral Mineral natural
Color (Units) Color (unidades)	15	NA	8-12	10	1-4	1.3	No	Naturally occurring organic materials Materiales organicos naturales
Conductivity (umhos) Conductividad (umhos)	1,600	NA	560-740	650	420-1700	655	No	Naturally occurring mineral Mineral natural
Dissolved Solids (ppm) Sólidos disueltos (ppm)	1,000	NA	370-460	415	220-860	378	No	Naturally occurring mineral Mineral natural
Hardness (ppm)[8] Agua dura (ppm)[8]	No limit No límite	NA	240-260	250	180-440	250	No	Naturally occurring mineral Mineral natural
Iron (ppb) Hierro (ppb)	300	NA	0-100	50	ND-260	33	No	Naturally occurring mineral Mineral natural
Manganese (ppb) Manganeso (ppb)	50	NA	14-18	16	0-28	3.7	No	Naturally occurring mineral Mineral natural
Sodium (ppm) Sodio (ppm)	No Limit No límite	NA	26-59	42	13-140	34	No	Naturally occurring mineral Mineral natural
Sulfate (ppm) Sulfato (ppm)	500	NA	47-57	52	13-99	52	No	Naturally occurring mineral Mineral natural

How We Get Our Water

When rainfall hits the ground in the Pajaro Valley, a portion of the water is absorbed into the ground and eventually reaches the groundwater table. City-owned and private wells then pump the water out for residential, agricultural, and business uses. About 80% of Watsonville's water supply is groundwater, primarily taken from the Aromas Red Sands Aquifer. The remainder is collected from Corralitos and Browns Creeks and treated at a plant in Corralitos.

The City's water meets the strict standards set by the State. However, each year more water is pumped out of the groundwater supplies than is replaced by rainfall. Over-pumping causes saltwater intrusion, the process where ocean water seeps underground into wells, rendering them useless. The City is working with the Pajaro Valley Water Management Agency on water conservation efforts and on projects to increase water supplies in the Pajaro Valley.

While the City of Watsonville uses only 10% of the groundwater pumped in the Pajaro Valley, we must all begin to deal with the challenges created by this shortage. Let's all maintain our precious resources for future generations by continuing to practice water conservation.

¿De dónde proviene el agua potable?

Cuando la lluvia cae en el suelo del Valle del Pájaro, una porción de la lluvia es absorbida por el suelo y ésta a la larga llega al subsuelo. Los pozos municipales y privados bombean el agua para los usos residenciales, agrícolas y comerciales. Cerca del 80% del suministro del agua del subsuelo proviene del acuífero *Aromas Red Sands*. El agua restante proviene de los arroyos Corralitos y el arroyo Browns y pasa por un tratamiento en la planta de filtración de Corralitos.

El agua potable de la Ciudad excede las normas estrictas establecidas por el estado. Sin embargo, hay una escasez de agua en el Valle del Pájaro: cada año se bombea más agua del subsuelo de la que es reemplazada por la lluvia. El bombeo demás causa la intrusión de agua salada (es cuando el agua del océano se filtra por el subsuelo a los pozos convirtiéndolos inservibles y los echa a perder.

Mientras que Watsonville usa solamente el 10% de todo el agua subterránea en el Valle del Pájaro, todos debemos empezar a afrontar los retos ocasionados por la escasez de agua. Hay que mantener nuestros recursos para las generaciones futuras, y así hemos de continuar con el ahorro de agua.

For more information about your water, call Beau Kayser at 768-3193. Additional copies of this report are available at City Hall, or online at www.cityofwatsonville.org/public-works-utilities/water, or call 768-3133. The City Council is the governing body for the City water system. The City Council meets on the second and fourth Tuesday of each month at 4:00 p.m. and 6:30 p.m. in the Council Chambers, 275 Main Street, Fourth Floor. The City welcomes your participation in these meetings.

2013-2015 Unregulated Contaminant Monitoring Rule (UCMR3)*
Monitoreo de los Contaminantes no Regulados del 2013-2015 (UCMR3)*

Substance (units) / Sustancia (unidad)	Ideal Goals: PHG or (MCLG) / MSP o (MMNC)	Treated Groundwater / Agua subterránea Range / Limites	Average / Promedio	Violation? / ¿violación?	Major Sources / Origen
Chlorodifluoromethane (ppt) / Clorodifluorometano (ppt)	NA	0 - 120	4	No	Industrial sources / Quimicas industriales
Molybdenum (ppb) / Molibdeno (ppb)	NA	0 - 4.6	2.0	No	Leaching from natural deposits / Lixiviacion de depositos naturales
Strontium (ppb) / Estroncio (ppb)	NA	220 - 530	333	No	Leaching from natural deposits / Lixiviacion de depositos naturales
Vanadium (ppb) / Vanadio (ppb)	NA	0.52 - 5.8	3.4	No	Leaching from natural deposits / Lixiviacion de depositos naturales

* Unregulated contaminants are those that don't yet have a drinking water standard set by USEPA. The purpose of monitoring for these contaminants is to help USEPA decide whether the contaminants should have a standard. For general information on UCMR3, visit http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3 or contact EPA's Safe Drinking Water Hotline at 1-800-426-4791.

*Los contaminantes no regulados son aquellos que aún no tienen un estándar de agua potable establecidos por la USEPA. El objetivo de la vigilancia de estos contaminantes es ayudar a USEPA decidir si los contaminantes deben tener un estándar. Para obtener más información acerca del monitoreo del UCMR visita http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/ o llama a la Línea Telefónica de Agua Potable al (800) 426-4791.

Ciudad de Watsonville

Reporte de la calidad del agua del 2015

La Ciudad de Watsonville está orgullosa de informarle que el agua suministrada por nuestro Departamento de Utilidades cumplió con todas las normas federales y estatales para el agua potable durante 2015.

Información para Personas con Problemas de Salud

Algunas personas pueden ser más susceptibles a los contaminantes en el agua potable que la población en general. Por ejemplo, las más susceptibles a infecciones son aquellas con un sistema inmune delicado, incluso las personas con cáncer y en tratamiento de quimioterapia, las personas que se les hizo un transplante de un órgano, las personas con VIH o SIDA o algún otro problema médico del sistema inmune, algunas personas ancianas y bebes.

Estas personas deben consultar con su médico si tienen dudas. Usted puede obtener las normas para reducir el peligro de infección por Cryptosporidium u otros contaminantes microbianos de la USEPA y el Centro para el Control de Enfermedades (sus siglas en inglés CDC) llamando a la Línea Telefónica de Agua Potable al (800-426-4791). Recuerde que el agua de la Ciudad cumplió con todas las normas federales y estatales para el año 2015.

¿Por qué analizamos el agua potable?

Las fuentes de agua potable (tanto el agua corriente como el agua embotellada) incluyen ríos, lagos, arroyos, lagunas, reservorios, manantiales y pozos. Al corer el agua sobre la superficie de la tierra o por debajo del suelo, disuelve los minerales presentes naturalmente y puede arrastrar sustancias originadas por la presencia de animales o de la actividad humana. Los agentes contaminantes que pueden encontrarse en el agua antes del tratamiento de ésta, incluyen:

- **Agentes contaminantes microbianos,** como virus y bacterias, que pueden provenir de plantas depuradoras de aguas residuales, sistemas sépticos, operaciones agropecuarias, y fauna y flora silvestre.
- **Agentes contaminantes inorgánicos,** como sales y metales, que pueden estar presents naturalmente o pueden surgir como consecuencia de la escorrentía pluvial de las zonas urbanas, descargas de aguas residuales industrials o domésticas, producción de petróleo y gas, y actividades de minería o agricultura.
- **Pesticidas y herbicidas,** que pueden provenir de diversas fuentes, por ejemplo, agricultura, escorrentía pluvial de las zonas urbanas y usos residenciales.
- **Agentes contaminantes químicos orgánicos,** incluidos productos químicos orgánicos sintéticos y volátiles, que son subproductos de procesos industriales y de la producción petrolera, y también pueden provenir de estaciones de servicio, escorrentía pluvial de las zonas urbanas, uso agrícola y sistemas sépticos.
- **Agentes contaminantes radiactivos,** que pueden estar presentes naturalmente o que pueden surgir como resultado de la producción de petróleo y gas, y actividades de minería.

Para garantizar que el agua corriente sea saludable para el consumo, la Agencia de Protección Ambiental de los EE. UU. (U.S. Environmental Protection Agency, USEPA) y el State Water Resources Control Board prescriben reglamentaciones que limitan la cantidad de ciertos agentes contaminantes en el agua suministrada por los sistemas públicos de abastecimiento de agua. Las regulaciones estatales también establecen límites para los agentes contaminantes del agua embotellada ya que deberán proveer el mismo nivel de protección a la salud pública.

Es rasonable que el agua potable, incluso la embotellada, contenga por lo menos cantidades pequeñas de algunos contaminantes. La presencia de contaminantes no significa un peligro para la salud. Puede obtener más información tocante los contaminantes y los posibles efectos a la salud llamando a la Línea Telefónica de Agua Potable de la USEPA al (1-800-426-4791).

Para recibir más información sobre el agua potable, llame a Beau Kayser al 768-3193. Las copias adicionales de este informe están disponibles en las oficinas municipales o llamando al 768-3133 o en linea a **www.cityofwatsonville.org/public-works-utilities/water**. El Concilio Municipal es el cuerpo legislativo del sistema del agua potable de la Ciudad. El Concilio Municipal se reúne el segundo y cuarto martes de cada mes a las 4:00 p.m. y 6:30 p.m. en la Cámara del Concilio, ubicada en 275 Main Street, cuarto piso. La Ciudad les invita a que asistan a estas juntas.

Información de la calidad del agua del 2015

Esta tabla enumera las sustancias detectadas de las mas que 2,000 muestras que se efectuaron durante el año 2015.

Arsénico. Aunque el agua potable cumple con las normas federales y estatales de arsénico, ésta contiene niveles bajos de arsénico. Las normas buscan un equilibrio entre lo que se conoce hasta ahora sobre los efectos posibles del arsénico en la salud y los costos de remover el arsénico del agua potable. USEPA continua con las investigaciones de los niveles bajos del arsénico en la salud, el cual es un mineral conocido como causante de cáncer en altas concentraciones y se vincula con otros efectos a la salud tales como daños a la piel y problemas circulatorios.

Plomo. Si está presente, el plomo en niveles elevados puede causar problemas serios a la salud, especialmente a mujeres embarazadas y niños pequeños. El plomo que se encuentra en el agua potable proviene de la tubería y plomería de su casa. La Ciudad de Watsonville es responsable por proveer agua potable de la más alta calidad, pero no puede controlar la variedad de materiales que se utilizan en la plomería. Si no habré las llaves de su casa por varias horas, puede minimizar el riesgo de exponerse al plomo dejando correr el agua entre 30 segundos a 2 minutos antes de tomar o usar el agua para cocinar. Si está preocupado por el nivel de plomo en su agua puede hacer una prueba. Para información sobre el plomo en el agua potable, tipos de pruebas disponibles, y sugerencias en cómo minimizar su exposición hable a Safe Drinking Water Hotline (línea telefónica de agua potable segura) o visite el sitio **http://www.epa.gov/safewater/lead.**

Nitratos: El nitrato en el agua potable a un nivel de más de 10 mg/L es un riesgo para la salud en los niños menores de 6 meses de edad. Tales niveles de nitrato en el agua potable puede interferir con la capacidad de la sangre de portar el oxigeno, que resultaría que la piel se pusiera azul. Los niveles de nitrato de más de 10 mg/L pueden también afectar la habilidad de la sangre de portar el oxigeno en otros individuos, así como las mujeres embarazadas y aquellos con ciertas deficiencias de enzimas específicas. Si está cuidando a un niño o si esta embarazada, debe consultar su proveedor de cuidado de salud. Los niveles de nitrato pueden subir rápidamente por intervalos cortos de tiempo a causa de la lluvia o la actividad agrícola.

Términos y abreviaciones usadas en la tabla a la izquierda

Meta de la Salud Pública (MSP): El nivel más bajo de un contaminante en el agua potable bajo el cual no se conoce o se espera que haya peligro a la salud. El MSP se calcula por la Agencia de la Protección del Medio Ambiente de California.

Meta Máxima Del Nivel de Contaminación (MMNC): El nivel más bajo de un contaminante en el agua potable bajo el cual no se conoce o se espera que haya peligro a la salud. El MMNC es calculado por la Agencia de la Protección del Medio Ambiente.

Nivel Máximo de Contaminación (NMC): El nivel más alto de un contaminante que se permite en el agua potable. El NMC primario se establece lo más cerca de los MSP's (o MMNC's) como sea práctico económicamente y tecnológicamente. Los MCLs secundarios se establecieron para proteger el olor, sabor y apariencia del agua.

Nivel máximo de desinfectante residual (MRDL): El nivel más alto de desinfectante permitido en el agua potable. Existe evidencia que indica que es necesario añadir un desinfectante para el control de contaminantes microbianos.

Meta para nivel máximo de desinfectante residual (MRDLG): El nivel de desinfectante de agua potable por debajo de la cantidad que no se reconoce o se espera riesgo alguno para la salud. Los estándares de MRDLGs no reflejan los beneficios del uso de desinfectantes para el control de contaminantes microbianos.

Norma Primaria del Agua Potable (NPAP): NMC para los contaminantes que afectan la salud junto con los requisitos en materia de informes e inspecciones.

Nivel de Acción Reglamentaria (NAR): La concentración de un contaminante, que cuando es excedida, causa que se efectúen tratamientos u otros requerimientos al sistema del agua.

Técnica de Tratamiento (TT): Un proceso que es requerido con el propósito de reducir el nivel de un contaminante en el agua potable.

NA: no es pertinente

ND: no es detectable

ppb: partes por mil millones o microgramos por litro

ppm: partes por millón o milegramos por litro

ppm: partes por trillón o nanogramos por litro

pCi/l: una medida de radiación

La Evaluación Fuentes del Agua

La Evaluación Fuentes del Agua es un instrumento utilizado para identificar potenciales de contaminación en nuestros suministros de agua potable. **Es muy importante señalar que la Ciudad de Watsonville cumple con todos las leyes establecidas para la provisión de agua potable del Estado de California.** Durante de marzo del 2013 se desarrollo una evaluación sobre el sistema de agua potable de la Ciudad. La evaluación concluyo que nuestras fuentes de agua son vulnerables a las actividades relacionadas con nitratos, tales como: canales de desagüe agrícola, fertilizantes y aplicar pesticidas en cultivos de riego. Asimismo, nuestras fuentes de agua son más vulnerables a gasolineras, tanques de combustible que históricamente han demostrado fugas de gases contaminantes, instalaciones de empresas de servicios públicos, fosas sépticas, e áreas recreativas.

La Ciudad trabaja conjuntamente con las agencias del Estado para garantizar que se toman las medidas adecuadas y rápidas para la limpieza de las posibles fuentes de contaminantes tales como terrenos donde existen tanques subterráneos con fugas. Consecuentemente, nuestro programa ha protegido muy eficazmente las fuentes de agua municipal. Puede encontrar una copia de la evaluación total en la Biblioteca Principal de la Ciudad, ubicada en el 275 de la calle Main Street. Si gusta puede solicitar una copia del resumen de la evaluación por correo comunicándose con Beau Kayser a 768-3193.

Notas al pie de la tabla

1. El límite de 1,300 ppb (cobre) & 15 ppb (plomo) están en el 90^{avo} percentil después de clasificar la información. El cobre y plomo no se han detectado en los sistemas de agua, pero pudiera ocurrir a causa de la oxidación de la plomería de las casas. En 2013 se tomaron muestras de 30 lugares.
2. El Estado nos permite monitorear ciertos contaminantes menos de una vez por año porque las concentraciones de estos contaminantes no cambian con frecuencia. Algunos de nuestros datos, aunque representativa, tienen más de un año.
3. El acatamiento basado en la presencia de la bacteria de coliforme debe ser menos del 5% de la distribución de las muestras colectadas en un mes.
4. El total de los trihalometanos son la suma de cloroformo, bromodichlorometano, dibromochlorometano y bromoform.
5. Turbidez es la medida de la nubedad del agua. La monitoreamos ya que es un buen indicador de la eficacia de nuestro sistema de filtración. La turbidez se mide en unidades de turbidez nefelométricas (UTN).
6. La Norma de Cumplimiento de la Técnica de Tratamiento: 0.5 UTN en el agua filtrada en 95% de las medidas que se examinan cada mes y no deberá en ningún tiempo exceder el 5.0 UTN.
7. La Norma de Cumplimiento de la Técnica de Tratamiento: 5.0 UTN para agua que no ha sido filtrada nunca.
8. Divider por 17.12 para convertir ppm a los granos como $CaCO_3$.