

APPENDIX B

City of Lincoln NPDES Permit

APPENDIX C

**Department of Health Services Letter Regarding
Use of Disinfected Tertiary Effluent for Rice Irrigation**

APPENDIX D

**Non-Binding Letters of Interest to Utilize City of Lincoln
Reclaimed Water From Potential Industrial Users**

APPENDIX E

References / Contacts

Water Quality - Regulatory Issues

Richard McHenry, P.E., Senior Engineer, California Regional Water Quality Control Issues
Randy Bailey, Biologist, Bailey Environmental

Water Suppliers in the Area - Water Quality and Availability

Brad Arnold, South Sutter Water District
Mal Toy and Harley Lukenvill, Placer County Water Agency
Pamela Casselman, Department of Water Resources
Nevada Irrigation District

Water Rights and Water Brokers

Mark Stretas, Chief Petition and Transfer Unit, State Water Resources Control Board
Michael Heaton, Esq., Law Office of Michael Heaton
Daniel Gallery, Esq., Law Office of Daniel Gallery
Lance Johnson, broker, The Water Group

Environmental Impacts

Jay Pawleck, Project Manager, Jones and Stokes
Rod Cambell, Community Development, City of Lincoln

Mosquito and Health Issues Related to Rice Irrigation

Charlie Dill, Manager-Biologist, Placer Mosquito Abatement District
James Tucker, Associate Public Health Biologist, Department of Health Services
Vicki Kramer, Ph.D., Chief Vector-Borne Disease Section, Department of Health Services
William Walton, Ph.D., Department of Entomology, University of California Riverside

Project Funding Opportunities

Diana Robles, State Water Resources Control Board
Patrick Lam, Associate Engineer, State Water Resources Control Board
Corps of Engineers
Timothy Hayes, City Attorney – City of Lincoln, McDonough, Holland and Allen

Land Use and Farming

Kenneth Stark, Deputy Agricultural Commissioner, Placer County Agricultural Department
Yarda Hensen, Farm Services Bureau
University of California Cooperative Extension

Potential Agricultural Users and Agricultural Experts

Rick Nelson, Sutter County Farmer
Bert Lefty, Placer County Farmer
Joe and Francis Lastufka, Placer County Farmer
Western Placer Waste Management Authority, Placer County land owner
Dan Burgard, Cascade Earth Sciences, Recycled Water Irrigation Consultant

Golf Course Developers

Lewis Uhler, Golden State Golf Associates, Inc.
Ken Jeffries, Golden State Golf Associates, Inc.

Potential Industrial Users

Tony Wetzel and Randy Peterson, Rio Bravo Power Plant
Robert Mertz, Sierra Pacific Lumber Mill
Livingston Concrete (communications through Larry Buckle, P.E., International Engineering Services)
Formica Company (communications through Larry Buckle, P.E., International Engineering Services)

Potential Environmental Users

Wildland Inc.

Reclamation Facilities

Robert Holden, P.E., Water Recycling Project Coordinator, Monterey Regional Water Pollution Control Agency
Tim Sullivan, P.E., Senior Engineer, El Dorado Irrigation District

Regional Government Agencies

Placer County

Loren Clark, Senior Planner (Placer Legacy)
Robert Weygandt, County Board of Supervisors
Tom Miller, Director of Facility Services
Jim Durfee, Deputy Director of Facility Services

Placer Nevada Wastewater Authority (JPA)

Robert Watkins, Executive Director

Appendix D

Placer County Water Agency Supplies and Dry Year Forecast

CHAPTER 4

WATER SUPPLY QUANTITY

The Agency primarily uses surface water as its source of supply. A relatively small amount of groundwater is used. This chapter describes the water supplies, current and projected water supplies, water supply reliability, and water shortage expectations.

4.1 Surface Water

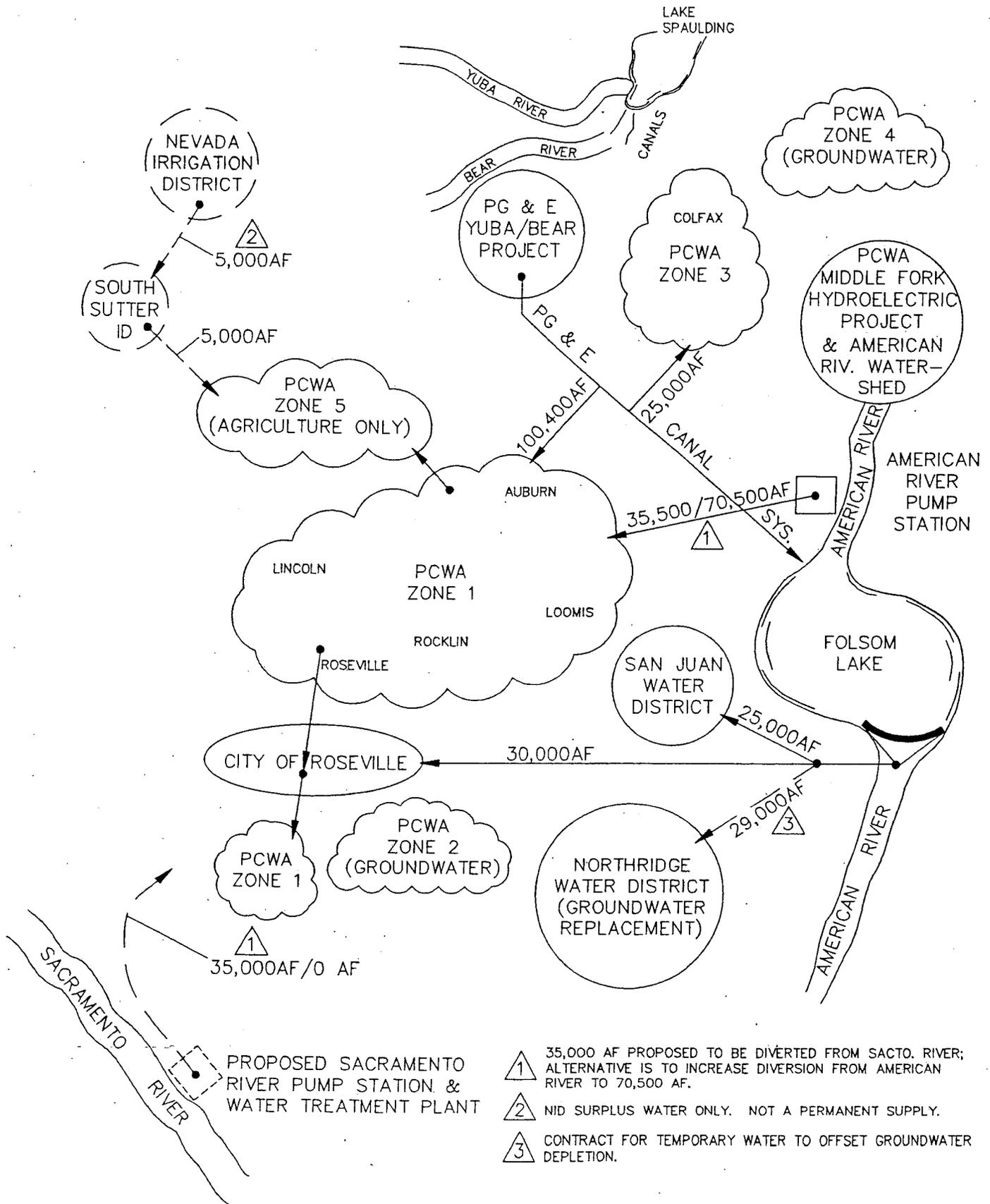
The Water Systems Division's current main source of water is from the Yuba and Bear Rivers. This supply comes from Lake Spaulding and is purchased from Pacific Gas and Electric Company. The American River provides a second source from appropriated water rights developed through construction of the Middle Fork Project. A third source is from the United States Bureau of Reclamation Central Valley Project (CVP). PCWA's fourth source of water is from wells. Figure 4-1 depicts schematically the Agency's water supply sources.

4.1.1 PG&E (Yuba/Bear River System). The Agency has two water supply contracts with Pacific Gas & Electric Company (PG&E) providing options to purchase up to 125,400 acre-feet annually from PG&E's rights to water for consumptive purposes from the Yuba and Bear River systems. This water source is used to supply Zones 1 and 3. Zone 1 is supplied up to 100,400 ac-ft/yr and Zone 3 is supplied up to 25,000 ac-ft/yr.

The rights to this water were developed by PG&E and its predecessors by appropriation prior to 1914, with the place of use for this water being western Placer County and the Agency's Zone No. 3, which extends along the Colfax Ridge up to Alta, California. One of these contracts has no term limit and the other, for 100,400 acre-feet annually, terminates in 2013, at which time it will come up for renewal for an adjustment in the price to be paid for the water.

4.1.2 Middle Fork American River System. The Agency has permits obtained from the California State Water Resources Control Board allowing it to divert from the American River between Auburn and Folsom Reservoir up to 120,000 acre-feet of water annually for consumptive use. This water is available from releases from the Agency's Middle Fork American River Project, which was completed in 1967, and from direct diversions from the American River system. The place of use under those permits is western Placer County and a portion of northeastern Sacramento County. The Agency has entered into wholesale contracts to provide portions of the Middle Fork water to the San Juan Water District, the City of Roseville and the Northridge Water District. These contracts give the Agency the right to reduce supply in the event of water shortages. The contract between the Agency and San Juan Water District provide for a maximum of 25,000 ac-ft annually. San Juan Water District diverts this water at Folsom Lake and uses its own facilities to provide treatment and delivery. The contracts between the Agency and Roseville provide for a maximum of 30,000

FIGURE 4-1. PLACER COUNTY WATER AGENCY WATER SUPPLY SCHEMATIC



- 1 35,000 AF PROPOSED TO BE DIVERTED FROM SACTO. RIVER; ALTERNATIVE IS TO INCREASE DIVERSION FROM AMERICAN RIVER TO 70,500 AF.
- 2 NID SURPLUS WATER ONLY. NOT A PERMANENT SUPPLY.
- 3 CONTRACT FOR TEMPORARY WATER TO OFFSET GROUNDWATER DEPLETION.

NOTE:
 1. PCWA ZONES PROVIDE WATER TO VAST UNINCORPORATED AREAS OF THE COUNTY PLUS ALL SIX CITIES OF AUBURN, COLFAX, LINCOLN, LOOMIS, ROCKLIN & PORTIONS OF ROSEVILLE.

acre-feet annually. The City of Roseville diverts water at Folsom Lake and uses its own facilities to provide treatment and delivery.

The contract between the Agency and Northridge provides for a maximum of 29,000 acre-feet annually. No water is available for Northridge Water District in dry years. The agreement with Northridge Water District increases from 7,000 ac-ft per year in the year 2000 to 29,000 ac-ft per year in the fifteenth year. The 29,000 ac-ft per year will be maintained through the twenty-fifth year of the agreement. The term of the agreement can be extended by mutual consent of both parties. The Northridge-PCWA contract entitlement schedule is shown in Table 4-1. The water to Northridge Water District is diverted at Folsom Lake, wheeled through San Juan Water District's water treatment plant, and then delivered through the cooperative transmission pipeline.

Table 4-1. Northridge-PCWA Contract Water Entitlement Schedule

Year	Surface water entitlement (ac-ft)
June 1 through December 31, 2000 ^a	7,000
2001	11,000
2002	12,000
2003	14,000
2004	16,000
2005	18,000
2006	20,000
2007	22,000
2008	23,000
2009	24,000
2010	25,000
2011	26,000
2012	27,000
2013	28,000
2014 and each year thereafter	29,000

Note: Schedule based on June 1, 2000 amended water contract between PCWA and Northridge Water District. These annual amounts can be increased with the approval of Northridge Water District and PCWA.

^aDelivery of PCWA water began June 1, 2000 and has been pro-rated to 7,000 ac-ft for the year 2000.

4.1.3 Central Valley Project. The Agency has a contract with the United States Bureau of Reclamation (Bureau) for a maximum of 117,000 acre-feet of Central Valley Project (CVP) water annually to be available on a build-up schedule which began with 15,000 acre-feet in 1992, building up to the maximum of the 117,000 acre-feet in 2007. However, prior to delivering more than 35,000 ac-ft/yr, the Bureau and the Agency must meet to determine to what extent, if any, the Bureau is obligated to deliver more than 35,000 acre-feet annually to the Agency in the absence of an Auburn Dam. This supply is subject to water shortages in a manner similar to shortages imposed on other CVP contractors. The Agency does not anticipate using any of its CVP entitlement prior to putting to use the full amount of the 120,000 acre-feet available to it annually from the American River pursuant to the Agency's water right permits.

The recently signed Water Forum Agreement was the result of the efforts of a diverse group of community leaders formed in 1994 to formulate principles for a regional solution of future water supply. The Water Forum is a comprehensive package that will achieve two coequal objectives: Attempt to provide a reliable and safe water supply for the region's economic health and planned development to the year 2030; and preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River. The key water supply provisions in the specific agreement for the Agency are as follows.

1. Water that the Agency sells to Roseville, San Juan Water District, and Northridge Water District are not addressed in the Agency's specific agreement.
2. In most years, when the projected March through November unimpaired inflow to Folsom Reservoir is greater than 950,000 ac-ft, the Agency will divert and use 35,500 ac-ft from the American River and 35,000 ac-ft from the Sacramento and/or Feather Rivers with certain conditions. The 35,000 ac-ft limitation applies to the Agency's Middle Fork water supply.
3. In the drier years and driest years, when the Folsom Reservoir inflow is less than 950,000 ac-ft, the Agency will divert 35,500 ac-ft plus replace up to 27,000 ac-ft of water in the American River from reoperation of the Middle Fork Project reservoirs.

ARBCA was formed in April 1998 to sponsor a Regional Water Master Plan (RWMP). While still in progress, the RWMP will develop water resources management strategies to protect and enhance water supply availability, reliability, and quality for the water users of Folsom Lake, the American River, and the connected groundwater basin, while preserving the environmental and aesthetic values of the lower American River. The RWMP will define facilities that will facilitate the use of the American River water in wet years and the use of groundwater in dry years. The RWMP can be viewed as the mechanism for implementing elements of the Water Forum Agreement (ARBCA, Phase I Final Report, Executive Summary). It is possible that the Agency may eventually be able to either obtain water from others or supply water to others in dry and wet years.

4.3 Ground Water

The Agency currently obtains about 64 acre-feet of water from two wells located in Zone 2 and about 927 acre-feet of water from two wells located in Zone 4. Water from these wells supplements the amount of water that is obtained under long-term water supply contracts.

Due to concerns about groundwater pumping exceeding groundwater recharge within the North American River Groundwater Basin, which underlies the western portion of Placer County, Placer County has established a policy that all urban and suburban development should rely on public water systems using a surface water supply. The Agency's water demand projections for western Placer County assume that surface water will be used to supply all new development. The Agency is currently looking into the possibility of supplying Zone 2 customers with surface water rather than groundwater. If this occurs, the two wells in Zone 2 would be used only under emergency conditions or if a surface water shortage was experienced.

Groundwater pumping in Zone 4 is anticipated to continue. Developments within Zone 4 will continue to utilize groundwater from the Martis Valley aquifer.

4.4 Current and Projected Water Supplies

Tables 4-2, 4-3, 4-4, and 4-5 present the water supply versus demand comparison for normal climate years for each of the zones. The available groundwater supply is estimated to be equivalent to 75 percent of the pumping capacity of the existing wells. Recycled water is addressed in Chapter 6. As shown in Tables 4-2, 4-3, 4-4, and 4-5, the supply is adequate to meet projected demands during normal climate years.

Table 4-2. Zones 1 and 5 Projected Water Supply and Demand Comparison¹

	Annual water supply/demand in ac-ft				
	2000	2005	2010	2015	2020
Water supply					
PG&E supply ²	100,400	100,400	100,400	100,400	100,400
Middle Fork American River supply	120,000	120,000	120,000	120,000	120,000
Central Valley Project supply	35,000	35,000	35,000	35,000	35,000
Recycled water ³	0	0	10,000	10,000	10,000
Subtotal	255,400	255,400	265,400	265,400	265,400
Projected water demands					
PCWA	106,300	123,100	133,000	145,500	162,500
City of Roseville ⁴	30,000	30,000	30,000	30,000	30,000
San Juan Water District ⁴	25,000	25,000	25,000	25,000	25,000
Northridge Water District ⁴	29,000	29,000	29,000	29,000	29,000
Subtotal	190,300	207,100	217,000	229,500	246,500
Surplus or (Deficit)	65,100	48,300	48,400	35,900	18,900

Notes:

¹ Zones 1 and 5 are combined into a single table due to having a common water supply.

² Current contract amount is assumed beyond contract term of 2013.

³ Assumed amount. Final evaluation of this supply to be completed at a later date.

⁴ Full contract deliveries are shown. See each suppliers Urban Water Management Plan for their projected demands.

Table 4-3. Zone 2 Projected Water Supply and Demand Comparison, ac-ft/yr

	2000	2005	2010	2015	2020
Water supply					
Groundwater ¹	1,330	1,330	1,330	1,330	1,330
Subtotal	1,330	1,330	1,330	1,330	1,330
Demands	64	64	64	64	64
Surplus or (Deficit)	1,266	1,266	1,266	1,266	1,266

Notes:

¹ Based on 75% of well capacity.

Table 4-4. Zone 3 Projected Water Supply and Demand Comparison, ac-ft/yr

	2000	2005	2010	2015	2020
Water supply					
PG&E supply ¹	25,000	25,000	25,000	25,000	25,000
Subtotal	25,000	25,000	25,000	25,000	25,000
Demands	7,340	7,670	7,740	7,820	7,900
Surplus or (Deficit)	17,660	17,330	17,260	17,180	17,100

Notes:

¹ Current contract amount is assumed beyond contract term of 2013.**Table 4-5. Zone 4 Projected Water Supply and Demand Comparison, ac-ft/yr**

	2000	2005	2010	2015	2020
Water supply					
Groundwater ¹	1,815	1,815	1,815	1,815	1,815
Subtotal	1,815	1,815	1,815	1,815	1,815
Demands	821	1,057	1,108	1,108	1,108
Surplus or (Deficit)	495	758	707	707	707

Notes:

¹ Based on 75% of well capacity.

4.5 Water Supply Reliability

The surface water supply could be reduced during a multiple dry year scenario. The Agency, during normal supply years, applies BMP's to conserve water. In any dry or critically dry year, however, the Agency will carefully manage its water supply by activating our water shortage response stages defined in the water shortage contingency plan, which is presented in Appendix C. In addition to the drought condition, physical restriction in the system infrastructure due to acts of God could reduce supplies from either the Yuba/Bear Rivers or the American River systems.

4.5.1 Previous Drought Experience. In 1977 California experienced a severe drought. At the time the Agency's zone systems relied exclusively on the Agency's PG&E contract supply. In 1977, a resolution was adopted by the Agency to restrict certain canal water deliveries up to 50% and suspend all landscape watering. Also, some mandatory and voluntary water conservation measures were placed on all customers. These measures continued through all of 1977.

The Agency again experienced shortages in its PG&E supply in 1988. The same steps that were placed in effect in 1977 were adopted in 1988. A late spring rain and water saved through conservation in March, April, and May allowed the Agency to receive normal deliveries from PG&E during the remainder of 1988. The same scenario as 1988 occurred again in 1991. The same conservation steps were approved in February 1991 that was adopted in 1977 and 1988. Toward the end of March 1991, significant rainfall relieved the drought conditions and normal deliveries were restored.

4.5.2 PG&E and Central Valley Project. The PG&E supply is subject to shortages due to drought as well as infrastructure problems. PG&E estimates that it can make full deliveries of the

100,400 acre feet to Zone 1 and 25,000 acre feet to Zone 3 that it has under contract to the Agency with only 60% of average precipitation. The worst case drought assumption for planning purposes for the PG&E supply would be a repeat of the 1977 event, with a 50% reduction in supply. It is assumed that CVP supplies would be similarly reduced.

4.5.3 Middle Fork American River System. There were no shortages in Middle Fork deliveries to Roseville and San Juan during the late 1980's and early 1990's drought years.

The Agency has recently completed computer modeling of the Middle Fork Project to determine the reliability of its water supply under the 70 years of available hydrologic record. That report concluded the Middle Fork Project would have supplied the full 120,000 acre feet of consumptive water rights in all the years of record, and could provide full deliveries even in the worst case 3 year consecutive event. For example, 1976, 1977, and a repeat of 1977.

Deliveries of the Middle Fork water to the Agency's zone systems (which exclude San Juan Water District, Northridge Water District, and the City of Roseville) are through pumping facilities at Auburn. Currently those facilities are of a temporary nature, installed each spring and removed each fall by the Bureau of Reclamation pursuant to agreements intertwined with the construction of the Auburn Dam. During high flow events extensive damage has occurred to the temporary pump station infrastructure. Under normal circumstances the pump station has the capability to deliver to the Agency's zone systems during summer seasons. In a worst case event between now and 2004, it would be reasonable to assume that zero delivery of Middle Fork water due to the Bureau inability to swiftly respond administratively or financially to changing circumstances on the ground. The Agency expects to complete a permanent 100 cfs capacity pump station by 2004.

4.6 Water Shortage Expectations

Tables 4-6, 4-7, 4-8, and 4-9 present the projected year 2020 water supply and demand comparison for normal, single, and multiple dry water years for each of the Agency's zones. No water supply deficit is projected to occur in any zone except in Zones 1 and 5. Within Zones 1 and 5, a deficit is projected at 2020 under year two and three of a multiple dry water year event, which would require supply cutbacks and corresponding demand reductions. Under these conditions, it is anticipated that the Agency would make cutbacks equally between the City of Roseville, San Juan Water District, and customers within Zones 1 and 5. The water shortage contingency plan in Appendix C defines procedures for accomplishing short term demand reductions for the Agency's customers.

Table 4-6. Zones 1 and 5 Supply Reliability and Demand Comparison, 2020, ac-ft/yr

	Average/normal water year	Single dry water year	Multiple dry water years		
			Year 1	Year 2	Year 3
Water Supply					
PG&E Supply ¹	100,400	75,300	75,300	65,260	50,200
Middle Fork American River Supply ²	120,000	120,000	120,000	120,000	120,000
Central Valley Project Supply ¹	35,000	26,250	26,250	22,750	17,500
Recycled Water ³	10,000	10,000	10,000	10,000	10,000
Subtotal	265,400	221,550	221,550	208,010	187,700
Projected Water Demands, 2020					
PCWA ⁴	162,500	162,500	162,500	154,000	138,000
City of Roseville ⁴	30,000	30,000	30,000	30,000	30,000
San Juan Water District ⁴	25,000	25,000	25,000	25,000	25,000
Northridge Water District ⁵	29,000	0	0	0	0
Subtotal	246,500	217,500	217,500	217,500	217,500
Surplus or (Deficit)	18,900	4,050	4,050	(9,490)	(29,800)

Notes:

1. A supply reduction of 25%, 35%, and 50% for years 1 through 3 respectively is assumed.
2. It is assumed that multiple dry water years will have no impact on supply due to the amount of upstream storage.
3. Assumed amount.
4. Full contract amount is shown for 2020. Actual amount to be delivered during dry water supply years will be determined by the Agency.
5. Based on the Northridge Water Supply Contract, no amount will be supplied during dry water supply years.

Table 4-7. Zone 2 Supply Reliability and Demand Comparison, 2020, ac-ft/yr

	Average/normal water year	Single dry water year	Multiple dry water years		
			Year 1	Year 2	Year 3
Water supply					
Groundwater ¹	1,330	1,330	1,330	1,330	1,330
2020 demand	64	64	64	64	64
Surplus or (Deficit)	1,266	1,266	1,266	1,266	1,266

Notes:

- ¹ It is assumed that multiple dry water years will have no impact on supply due to the size of the aquifer relative to projected demands. Based on 75% of well capacity.

Table 4-8. Zones 3 Supply Reliability and Demand Comparison, 2020, ac-ft/yr

	Average/normal water year	Single dry water year	Multiple dry water years		
			Year 1	Year 2	Year 3
Water supply					
PG&E supply ¹	25,000	18,750	18,750	16,250	12,500
Subtotal	25,000	18,750	18,750	16,250	12,500
2020 demand	7,900	7,900	7,900	7,900	7,900
Surplus or (Deficit)	17,100	10,850	10,850	8,350	4,600

Notes:

- ¹ A supply reduction of 25%, 35%, and 50% for years 1 through 3 respectively is assumed.

Table 4-9. Zone 4 Supply Reliability and Demand Comparison, 2020, ac-ft/yr

	Average/normal water year	Single dry water year	Multiple dry water years		
			Year 1	Year 2	Year 3
Water supply Groundwater ¹	1,815	1,815	1,815	1,815	1,815
2020 demand	1,108	1,108	1,108	1,108	1,108
Surplus or (Deficit)	707	707	707	707	707

Notes:

¹ It is assumed that multiple dry water years will have no impact on supply due to the size of the aquifer relative to projected demands. Based on 75% of well capacity.

Appendix E

Surface Water Quality

City of Lincoln Surface Water Quality Data from PCWA Foothill Treatment Facility							
		Year	1997	1998	1999	2000	2001
		Location	Foothill	Foothill	Foothill	Foothill	Foothill
Units	Constituent	MCL					
mg/L	Hardness (CaCO ₃)	NS	19	19	18	19	26
mg/L	Calcium	NS	6.1	6.2	5.2	6.2	8.8
mg/L	Magnesium	NS	0.99	ND	0.71	0.78	1
mg/L	Sodium	NS	0.99	1.4	1.1	1.3	3.1
mg/L	Potassium	NS		ND	ND	<5.0	<5.0
mg/L	Alkalinity (Total)	NS	28	16	23	28	20
mg/L	Alkalinity (Hydroxide)	NS	<1.0	ND	<1.0	<1.0	<1.0
mg/L	Alkalinity (Carbonate)	NS	<1.6	ND	<1.0	<1.0	8
mg/L	Alkalinity (Bicarbonate)	NS	26	16	22	28	12
mg/L	Sulfate	250	5	4.2	3.3	5.5	4.8
mg/L	Chloride	250	2.5	2.6	1.9	2.1	5.3
mg/L	Nitrate (NO ₃)	45	ND	ND	ND	ND	ND
mg/L	Fluoride	1.4-2.4	ND	ND	ND	ND	ND
Units	pH	NS	8.8	8.3	8.3	7.9	9.2
mg/L	TDS	500	ND	37	35	34	36
NTU	Turbidity	5	<0.05	<1.0	0.25	0.58	0.32
Units	Color	15	<3.0	0	<3.0	<3.0	<3.0
TON	Odor Threshold	3	<1.0	0	<1.0	<1.0	<1.0
mg/L	MBAS	0.5	<0.20	ND	<.05	<.05	<.05
mg/L	Aluminum	1	ND	ND	ND	ND	ND
mg/L	Antimony	0.006					
mg/L	Arsenic	0.01	ND	ND	ND	ND	ND
mg/L	Barium	1	ND	ND	ND	ND	ND
mg/L	Beryllium	0.004					
mg/L	Boron	NS					
mg/L	Cadmium	0.005	ND	ND	ND	ND	ND
mg/L	Chromium	0.05	ND	ND	ND	ND	ND
mg/L	Copper	1	ND	ND	ND	ND	ND
mg/L	Iron	0.3	ND	ND	ND	ND	ND
mg/L	Lead	0.05	ND	ND	ND	ND	ND
mg/L	Manganese	0.05	ND	0.02	ND	ND	ND
mg/L	Mercury	0.002	ND	ND	ND	ND	ND
mg/L	Nickel	0.1					
mg/L	Selenium	0.05	ND	ND	ND	ND	ND
mg/L	Silver	0.1	ND	ND	ND	ND	ND
mg/L	Thallium	0.002					
mg/L	Zinc	5	ND	ND	ND	ND	ND
mg/L	Nitrite as (N)	1		ND	ND	ND	ND
mg/L	Cyanide	0.2		ND			
	All regulated & unregulated organics	varies	ND	ND	ND	ND	ND
ug/L	Total Trihalomethanes	100	23-54	38-43	34-49	30-42	24-44
pCi/L	Alpha activity	15					
ug/L	MtBE	13					
ug/L	Total Haloacetic Acids	60			27-31	33-35	26-27
	NS =	no standard					
	ND =	none detected					
	mg/L =	milligrams per liter					
	ug/L =	micrograms per liter					
	pCi/L =	picoCuries per liter					
	NTU =	Nephelometric Turbidity Units					

Appendix F

Groundwater Quality

City of Lincoln Groundwater Quality Data									
		Year	1998	1998	2000	2001	2001	2001	2001
		Well no./name	2	4	Westwood	2	4	Westwood	Moore Road
Units	Constituent	MCL							
mg/L	Hardness (CaCO ₃)	NS	109	64	120	120	70	130	90
mg/L	Calcium	NS	19	13.3	24	22	14	26	16
mg/L	Magnesium	NS	14.3	8.4	16	16	8.6	17	12
mg/L	Sodium	NS	35.3	53.2	64	38	45	54	35
mg/L	Potassium	NS	0.6	1	ND	ND	ND	ND	ND
mg/L	Alkalinity (Total)	NS			140	96	94	130	100
mg/L	Alkalinity (Hydroxide)	NS	<1.0	<1.0	ND	ND	ND	ND	ND
mg/L	Alkalinity (Carbonate)	NS	<1.0	<1.0	ND	ND	ND	ND	ND
mg/L	Alkalinity (Bicarbonate)	NS	126	123	140	96	94	130	100
mg/L	Sulfate	250	16.1	18.7	8.5	17	16	13	8.9
mg/L	Chloride	250	41.5	30.4	70	40	27	53	25
mg/L	Nitrate (NO ₃)	45	14.6	3.55	8	15	5	8	5.7
mg/L	Fluoride	1.4-2.4	0.1	0.2	ND	0.4	0.4	0.2	ND
Units	pH	NS	7.1	7.5	7.3	6.9	7.4	7	7.3
mg/L	TDS	500	331	297	320	270	230	310	220
NTU	Turbidity	5	<0.10	0.75	ND	ND	5.4	0.2	<0.5
Units	Color	15	<3	4	ND	ND	10	ND	0
TON	Odor Threshold	3	<1	1	ND	1	1	1	0
mg/L	MBAS	0.5	<0.05	<0.05	ND				ND
mg/L	Aluminum	1	<0.05	0.24	ND	ND	0.63	ND	ND
mg/L	Antimony	0.006	0.006	<0.006	ND	ND	ND	ND	ND
mg/L	Arsenic	0.01	<0.002	0.0048	ND	0.002	0.004	0.002	ND
mg/L	Barium	1	0.109	<0.14	ND	0.06	0.06	0.05	ND
mg/L	Beryllium	0.004	0.001	<0.001	ND	ND	ND	ND	ND
mg/L	Boron	NS			0.65				
mg/L	Cadmium	0.005	<0.001	<0.001	ND	ND	ND	ND	ND
mg/L	Chromium	0.05	<0.01	<0.01	ND	0.007	ND	0.005	ND
mg/L	Copper	1	<0.05	<0.05	ND	ND	0.16	ND	ND
mg/L	Iron	0.3	<0.1	0.179	ND	ND	1.8	ND	ND
mg/L	Lead	0.05	<0.005	0.009	ND	ND	0.015	ND	ND
mg/L	Manganese	0.05	<0.03	0.031	ND	ND	0.07	ND	ND
mg/L	Mercury	0.002	<0.001	<0.001	ND	ND	ND	ND	ND
mg/L	Nickel	0.1	0.01	<0.01	ND	ND	ND	ND	ND
mg/L	Selenium	0.05	<0.005	<0.005	ND	ND	ND	ND	ND
mg/L	Silver	0.1	<0.01	<0.01	ND	ND	ND	ND	ND
mg/L	Thallium	0.002	0.001	<0.001	ND	ND	ND	ND	ND
mg/L	Zinc	5	0.05	<0.02	ND	ND	ND	ND	ND
mg/L	Nitrite as (N)	1	<0.05	<0.05	ND	ND	ND	ND	ND
mg/L	Cyanide	0.2	0.002	<0.002	ND	ND	ND	ND	ND
ug/L	Methylene chloride	5							2.0
	All other regulated & unregulated organics	varies	ND	ND	ND	ND	ND	ND	ND
mg/L	Total Trihalomethanes	0.1	ND	ND	0.0073	ND	0.0022	ND	
pCi/L	Alpha activity	15	<1.0	<1.0	ND	<1.0	0.15	<1.0	
ug/L	MtBE	13			ND				ND
NS = no standard									
ND = none detected									
mg/L = milligrams per liter									
ug/L = micrograms per liter									
pCi/L = picoCuries per liter									
NTU = Nephelometric Turbidity Units									
MCL = Maximum contaminant level									

Appendix G

Water Shortage Resolution

RESOLUTION 2002-

A RESOLUTION OF THE CITY COUNCIL OF THE
CITY OF LINCOLN ESTABLISHING A
WATER SHORTAGE CONTINGENCY PLAN
IN THE EVENT OF SHORTFALLS IN THE WATER SUPPLY SYSTEM

WHEREAS the City of Lincoln depends on treated surface water from the Placer County Water Agency (PCWA) and local groundwater to meet the its water supply needs:

WHEREAS the PCWA has prepared an Urban Water Management Plan that states water shortages may occur; and

WHEREAS a multiple stage Water Shortage Contingency Plan has been prepared that prescribes appropriate responses to projected water supply deficiencies; and

WHEREAS the City is the water purveyor for the property owners and inhabitants of Lincoln; and

WHEREAS the demand for water service is not expected to lessen; and

WHEREAS when the combined total amount of water supply available to the City from all sources falls at or below the Stage II triggering levels described in the 2002 Urban Water Management Plan, the City will declare a water shortage emergency. The water supply would not be adequate to meet the ordinary demands and requirements of water consumers without depleting the City's water supply to the extent that there may be insufficient water for human consumption, sanitation, fire protection, and environmental requirements. This condition is likely to exist until precipitation and inflow dramatically increases or until water system damage resulting from a disaster are repaired and normal water service is restored.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Lincoln hereby directs the Mayor to determine and declare that a water shortage emergency condition exists that threatens the adequacy of water supply, until the City's water supply is deemed adequate. After the declaration of a water shortage emergency, the Mayor is directed to determine the appropriate Rationing Stage and implement the Reduction Methods described in the Water Shortage Contingency Plan section of the City's Urban Water Management Plan.

PASSED AND ADOPTED on the ____ day of XXXX, by the following roll call vote:

AYES: COUNCILMEMBERS:
NOES: COUNCILMEMBERS:
ABSENT: COUNCILMEMBERS:

MAYOR

ATTEST:

CITY CLERK

Appendix H

Lincoln Municipal Code Prohibiting Waste

B. Upon request for disconnection, an applicant shall make a refundable cash deposit. This fee shall be refunded, less unpaid charges, upon dismantling and removal of the connection.

C. Monthly charges for water usage shall be assessed in accordance with the provisions of Resolution No. 79-64.

D. Temporary connections shall be five-eighths-inch metered connections unless otherwise approved by the city. Fees for any other type or size of temporary connection shall be determined by the city. (Ord. 364B §4.4, 1979)

13.04.405 Connection fee due for reapplication. If a reapplication is made pursuant to Section 13.04.075, the person desiring water service must pay the new water connection fee due at the time reapplication is made with credit being given for any previously paid connection fees. (Ord. 501B §2, 1988)

ARTICLE VI. CONSERVATION

13.04.410 Condition of plumbing. All consumers, whether owners or not, shall maintain and keep in good repair the water pipes on the interior and exterior of the property served. Such persons shall not allow faucets or water closets to leak, and such fixtures must not be left running. (Ord. 364B §5.1, 1979)

13.04.420 Watering spray or nozzle required. Watering of lawns and gardens from an open hose is prohibited. A spray or nozzle must, in all cases, be used. (Ord. 364B §5.2(A), 1979)

13.04.430 Irrigation hours. Irrigation of lawns or gardens is restricted to the hours of five a.m. to ten p.m. unless written permission from the water department is obtained. (Ord. 364B §5.2(B), 1979)

13.04.440 Gross waste. It is unlawful and an infraction for any person to cause or allow any water received by such person to flow away in unreasonable amounts, from property owned or occupied by such persons, in any gutter, ditch or other manner over the surface of the ground. (Ord. 364B §5.2(C), 1979)

ARTICLE VII. WELLS

13.04.450 Permit requirements. No person shall drill for water without first obtaining a permit from the director of public works and from the county health officer. The director of public works may deny the issuance of a permit if, in his opinion, the premises where the well is to be

Appendix I

Lincoln Municipal Code Penalties for Waste

against possible contamination or pollution and to eliminate a potential hazard to public health and safety. (Ord. 364B §6.5, 1979)

13.04.499 Potable wells prohibited. Connection to the city water system is required for all drinking water. Potable water wells are prohibited within the city unless owned and operated by the city and incorporated as part of the city's water system. (Ord. 492B §3, 1987)

ARTICLE VIII. PROHIBITIONS AND VIOLATIONS

13.04.500 Use in violation. It is unlawful for any person to use, turn on or tap water except in accord with this chapter and without obtaining a permit as required by Article I. (Ord. 364B §7.1, 1979)

13.04.510 Heating and cooling devices. It is unlawful for any heating or cooling device to use water that is not recirculated. The only water added to such systems shall be limited to the purposes of making up losses in the process. Under no circumstances shall water be returned to the distribution system of the city. This prohibition shall apply to all devices for heating or cooling, whether used for residential, commercial, industrial or manufacturing purposes. (Ord. 364B §7.2, 1979)

13.04.530 Fluoridation. It is unlawful for any agent or employee of the city or any person, firm or corporation acting in behalf of the city under a contract with the city or otherwise, to mingle or combine any fluorides in any form or in any quantity or in any manner with the public water supply of the city. (Ord. 213B, 1965)

13.04.540 Penalties for violation. A. A first violation of any provision of Article VI is an infraction

punishable as provided in the general state law for infractions. A second or subsequent violation of a provision of Article VI during any calendar year is a misdemeanor as provided in subsection B of this section.

B. Any violation of this chapter, except as provided in subsection A of this section, is a misdemeanor. Each day that a violation exists constitutes a separate and distinct offense.

C. In addition to a prosecution for a violation of this chapter, a consumer or occupant, or owner of property served by the city with water may have such service discontinued if, after a noticed hearing, the public works superintendent determines that such person wilfully wastes water on a continuing basis. The determination of the public works superintendent may be appealed to the city council if a notice of appeal has been filed with the city clerk within ten days after the determination of the public works superintendent to discontinue service has been delivered in writing to the person whose service is being discontinued. During the pendency of an appeal to the council, whose decision shall be final, water service shall be maintained in effect. (Ord. 364B §7.4, 1979)

Chapter 13.05

CROSS-CONNECTION CONTROL

Sections:

- 13.05.010 Purpose.
- 13.05.020 Definitions.
- 13.05.030 Protection required.
- 13.05.040 Type of protection.
- 13.05.050 Customer responsibility.
- 13.05.060 Authority to inspect.
- 13.05.070 Testing, maintenance, and reporting.
- 13.05.080 Backflow prevention device removal.
- 13.05.090 User supervisor.
- 13.05.100 Review proposed new services.
- 13.05.110 Water system survey.
- 13.05.120 Customer notification--Device installation.
- 13.05.130 Customer notification--Testing and maintenance.
- 13.05.140 Water service termination.
- 13.05.150 Basis for termination.
- 13.05.160 Termination procedures.
- 13.05.170 Certification as a backflow prevention device tester.
- 13.05.180 Minimum requirements for certification.
- 13.05.190 Length of certification.
- 13.05.200 Rules and regulations.

Appendix J

Lincoln Municipal Code Landscaping

Chapter 15.28LANDSCAPING REGULATIONSSections:

- 15.28.010 Title for citation.
- 15.28.020 Intent.
- 15.28.030 Applicability.
- 15.28.040 Authority of public works director.
- 15.28.050 Definitions.
- 15.28.060 Landscape plan--Required--Submittal.
- 15.28.070 Landscape and irrigation development standards.
- 15.28.080 Installation.
- 15.28.090 Final landscape inspection.
- 15.28.100 Tree preservation and removal.
- 15.28.110 Planting establishment.
- 15.28.120 Maintenance.
- 15.28.130 Water waste.
- 15.28.140 Installation of trees and planter boxes.
- 15.28.150 Screening.
- 15.28.160 Parking lot landscaping.
- 15.28.170 Preservation of granite curbs and hitching posts.
- 15.28.180 Public information.
- 15.28.190 Appeals.

15.28.010 Title for citation. The ordinance codified in this chapter shall be known and referred to as the "Wa-

ter efficient landscaping ordinance for the city of Lincoln." (Ord. 586B §2(part), 1992)

15.28.020 Intent. The intent of this chapter is to establish rules and regulations relating to tree planting and landscaping within all districts of the city in compliance with the Water Conservation In Landscaping Act beginning with Section 65591 of the Government Code for the state of California. Said legislation requires that steps be taken by city and county agencies to assure that water conservation methods are incorporated in landscape standards throughout California. This chapter serves to establish water efficiency standards for design, installation and maintenance of landscaping and irrigation systems to assure avoidance of excessive water use and to maintain healthy plant growth in new development projects. (Ord. 586B §2(part), 1992)

15.28.030 Applicability. These standards shall apply to all required landscaping proposed as part of projects that are subject to review by the design review board in accordance with Chapter 18.64 of this code, except for projects which meet the following criteria:

A. Single-family dwellings built on lands subdivided pursuant to a final or parcel map approved by the city council prior to July 1, 1979;

B. Any single-family residential project with a landscaped area containing less than two thousand five hundred square feet in planted and landscaped coverage;

C. Existing public parks and school grounds unless there is an alteration to planting or irrigation systems requiring obtaining a building permit from the Lincoln building department;

D. Cemeteries;

E. Registered historical sites;

F. Ecological restoration projects that do not require a permanent irrigation system; or

G. Mined-land reclamation projects that do not require a permanent irrigation system. (Ord. 586B §2(part), 1992)

15.28.040 Authority of public works director. The public works director shall have the jurisdiction and control of the design and extent of all irrigation, planting, setting out, location and placement of all trees and landscaping in the street rights-of-way of the city. The public works director shall also have the supervision, direction and control of the care, trimming, removal, relocation and replacement thereof and may require a permit for any or all of the above areas. (Ord. 586B §2(part), 1992)

15.28.050 Definitions. The words used in this chapter shall have the meaning set forth below:

"Anti-drain valve" or "check valve" means a valve located under a sprinkler head to hold water in the system so it minimizes drainage from the lower elevation sprinkler heads.

"Automatic controller" means a mechanical or solid state timer capable of operating valve stations to set the days and length of time of a water application.

"Backflow prevention device" means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

"Emitter" means a drip irrigation fitting that delivers water slowly from the system to the soil.

"Establishment period" means the period at which the plant has established itself where the plant can live without supplemental watering, usually within one or two years of planting.

"Hydrozone" means a portion of the landscaped area having plants with similar water needs that are served by a valve or set of valves with the same schedule. A hydrozone may be irrigated or nonirrigated. For example, a naturalized area planted with native vegetation that will not need supplemental irrigation once established is a nonirrigated hydrozone.

"Irrigated landscaping" means an irrigated surface layer of earth containing landscaping composed of groundcover, shrubs, trees and other plants. Areas dedicated to edible plants, such as orchards or vegetable gardens are not included.

"Mined-land reclamation projects" means any surface mining operation with reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.

"Moisture sensor" connects to the automatic controller, to signal irrigation only when the sensor detects low moisture in the plant root zone.

"Mulch" means any organic material such as leaves, bark or straw left loose and applied to the soil surface for the beneficial purpose of reducing evaporation and erosion.

"Runoff" means water which is not absorbed by the soil or landscape to which it is applied and flows from the area and across property lines or into the public right-of-way.

"Single-family development" means a dwelling unit consisting of a building or mobile home on a permanent foundation with provisions for sleeping, cooking and sanitation, and with permanent connections to utilities, providing living space for one family.

"Station" means a planted area served by one valve or by a set of valves simultaneously.

"Turf" means a surface layer of earth containing grass with its roots. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermudagrass, Kikuyugrass, Seashore paspalum, St. Augustinegrasses, Zoysiagrass and Buffalo grass are warm-season grasses.

"Valve" means a device used to control the flow of water in the irrigation system. (Ord. 586B §2(part), 1992)

15.28.060 Landscape plan--Required--Submittal. Prior to installing landscaping and irrigation, final landscape plans, prepared by a licensed landscape architect or licensed landscape contractor shall be submitted for review and approval in accordance with Chapter 18.68 of this code. Final plans shall include details consistent with the submittal requirements indicated in Chapter 18.68; including, but not limited to, plant materials set in a logical, orderly manner, in scale and relation with the building and neighborhood; and other structural features such as fountains, artworks, screens, walls, berms, benches or fences. Plans shall incorporate the minimum requirements regarding percentage of irrigated landscape coverage, percentage of turf coverage, percentage drought tolerant plants proposed and details on irrigation systems to assure efficient use of water. (Ord. 586B §2(part), 1992)

15.28.070 Landscape and irrigation development standards. Development standards for projects which qualify pursuant to Section 15.28.030 of this chapter are as follows:

A. Landscape Coverage. Except where additional turf area is determined needed for passive or active recreational use by the design review board, no more than twenty-five percent of the project site covered by irrigated landscaping shall be devoted to turf. At least fifty percent of the project site covered by irrigated landscaping shall be drought tolerant/low water use plants, as suggested by the Sunset Western Garden Book or equivalent publication. The remaining nonturf plants which are nondrought tolerant variety, shall be grouped together by hydrozone and shall be irrigated separately.

B. Use of Turf. Turf shall be discouraged in median areas, in parkway areas less than six feet in width and on slopes of ten percent or greater. Turf shall be prohibited within the dripline of native oak trees. Turf areas exceeding one thousand square feet or used as an essential part of development, such as golf courses or playing fields, shall utilize soil moisture sensors as part of their irrigation system.

C. Mulch Coverage. All planted areas, except those with lawns, native forested areas, established groundcover or other low lying shrub areas shall include mulch material

to an average thickness of at least two inches throughout, except in the immediate vicinity of plant stems.

D. Permanent Irrigation System Design. Irrigation systems shall be designed to prevent over-spray, run-off, low-head drainage or other similar conditions where water flows onto adjacent property, nonirrigated areas, walks, roadways or structures. Drip, trickle or other low volume irrigation methods are encouraged. All irrigation systems shall incorporate automatic controllers and be designed such that there are separate valves serving each of the following areas:

1. Turf areas;
2. Areas planted with drought tolerant/low water use plants;
3. Areas planted with nondrought tolerant plants.

E. Temporary Irrigation System Design. Use of temporary irrigation for open space or hydroseeded areas shall be removed after the establishment period. (Ord. 586B §2(part), 1992)

15.28.080 Installation. All landscaping and irrigation shall be installed under the supervision and inspection of a qualified professional. Prior to final building inspection, landscaping and irrigation systems shall be installed according to the approved plans. An extension of time for completion of landscaping and irrigation system installation may be granted by the public works director if implementation is secured by an agreement or posting of adequate bond or cash deposit to guarantee performance under the agreement as required by the public works director. Prior to final inspection and issuance of a certificate of occupancy by the building official, a letter signed by a licensed landscape architect, or the landscape contractor who performed the installation, shall be submitted to the public works director and the building official certifying that landscaping and irrigation for the project has been installed in accordance with the approved plan. (Ord. 586B §2(part), 1992)

15.28.090 Final landscape inspection. Final landscaping approval must be received from the public works director prior to issuance of a certificate of occupancy or release of the bond or cash deposit which guarantees completion of landscaping. (Ord. 586B §2(part), 1992)

15.28.100 Tree preservation and removal. Projects involving any preservation or removal of existing trees on the project site shall comply with Chapter 18.69 of this code. (Ord. 586B §2(part), 1992)

15.28.110 Planting establishment. To establish planting and assure proper operation of the irrigation system the developer/owner shall either:

A. Enter into a minimum ninety-day maintenance contract between the developer/owner and a licensed landscape contractor. A copy of the contract shall be submitted for review and approval by the public works director pursuant to Section 15.28.090 of this chapter before final landscape approval is granted by the public works director. Criteria in the maintenance contract should contain the following minimum provisions:

1. Erosion and sedimentation control;
2. Establishment of healthy plants or replacement of dead or injured plants;
3. Maintenance of tree staking;
4. Weed abatement;
5. Irrigation maintenance of all valves and heads to remain in satisfactory operational condition for the life of the contract; or

B. Post a bond or cash security with the public works director at the value of the landscape and irrigation installations for a minimum of ninety days. Bond or security may be released upon inspection and approval by the public works director. (Ord. 586B §2(part), 1992)

15.28.120 Maintenance. All woody plants within the city right-of-way shall be the responsibility of the city to prune, spray, brace, remove or replace. All landscaping and irrigation on private property shall be maintained by the developer and any subsequent owners of such real property. Landscaped areas shall be kept free of weeds, litter and debris. All pruning maintenance shall be in accordance with acceptable horticultural practices and in any case where a required planting has not survived, said planting shall be replaced within thirty days upon notice of the public works director. If landscaping and irrigation has not been improved to proper standards within the time specified in the notice, the developer and any subsequent owners of such real property shall be subject to an infraction or penalties or other actions pursuant to Chapter 1.16 of this code. (Ord. 586B §2(part), 1992)

15.28.130 Water waste. Operation of landscape irrigation system which is broken or for other reason wasting water is prohibited pursuant to Section 13.04.440 of this code. The owner of the property shall repair or correct the irrigation system within five days of written notice by the public works director. (Ord. 586B §2(part), 1992)

15.28.140 Installation of trees and planter boxes. The installation of trees and planter boxes on street frontages are required no more than thirty feet apart at

15.28.150--15.28.190

existing and proposed sidewalks of at least ten feet in width. The location of trees shall be coordinated with all existing utility poles, drains, signs, fire hydrants, etc. Tree species shall be approved from the master tree list. (Ord. 586B §2(part), 1992)

15.28.150 Screening. Open loading areas and outdoor storage facilities shall be screened from all abutting parcels by dense planting at least six feet in height and not less than three feet wide or by a solid lumber fence, masonry wall or cyclone fence with wood slats at least six feet in height. In no case shall such buffering create safety hazard to oncoming traffic. (Ord. 586B §2(part), 1992)

15.28.160 Parking lot landscaping. Within a parking lot there shall be at least five percent of the parking area landscaped. All planting materials and their height at maturity shall be designated on the plan. Any unused space resulting from the design of the parking lot shall be used for landscaping purposes. (Ord. 586B §2(part), 1992)

15.28.170 Preservation of granite curbs and hitching posts. Granite curbs and hitching posts shall be preserved or reset unless reasons are submitted for removing certain sections to facilitate access for handicapped ramps, driveways, drainage considerations or the like. (Ord. 586B §2(part), 1992)

15.28.180 Public information. The public works director shall make information available to the public on this chapter. The public works director shall also prepare and distribute guidelines and information on water-saving landscaped design techniques on an ongoing basis. Ord. 586B §2(part), 1992)

15.28.190 Appeals. Any person aggrieved by an act or determination of the public works director in exercise of the authority granted him or her in this chapter has the right of appeal to the city council, whose decision, after a public hearing of the matter, shall be final and conclusive. (Ord. 586B §2(part), 1992)

Appendix K

Water Rates

ORDINANCE NO. 759B

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LINCOLN
 AMENDING SECTIONS 13.04.200 AND 13.04.205 OF THE
 LINCOLN MUNICIPAL CODE
 REGARDING WATER USER RATES

THE CITY COUNCIL OF THE CITY OF LINCOLN DOES HEREBY ORDAIN AS
 FOLLOWS:

Section 1. Section 13.04.200 of the Lincoln Municipal Code is hereby amended to read as follows:

Section 13.04.200 Rate Classification.

A. It is the intent and policy of the city that water user rates reflect the city's costs in providing water. The city council will immediately adjust water rates to reflect increased (or decreased) costs for infrastructure and/or operating costs, including, but not limited to, wage increases, utility rate increases, chemical cost increases, and increases in the cost of water purchased from wholesale suppliers.

B. Water user rates shall be of two types, flat rate and metered rate, and shall be set by the city council, as provided in this chapter.

C. Different rates shall be established for water service outside the city but within Placer County Water Agency Zone No. 1.

Section 2. Section 13.04.205 of the Lincoln Municipal Code is hereby amended to read as follows:

Section 13.04.205 Water Use Rates. The monthly charge for water use shall be as follows:

“Effective July 2004 through June 2005:

Water Rate	From:	To:	Base Rate	Step Increase
Base Rate	0	10,000	\$13.00	N/A
Step 1	11,000	20,000	\$13.00	\$1.87
Step 2	21,000	60,000	\$13.00	\$1.88
Step 3	61,000	350,000	\$13.00	\$1.89
Step 4	351,000+		\$13.00	\$1.90

Effective July 2005 through June 2006:

Water Rate	From:	To:	Base Rate	Step Increase
Base Rate	0	10,000	\$13.09	N/A
Step 1	11,000	20,000	\$13.09	\$1.96
Step 2	21,000	60,000	\$13.09	\$1.97
Step 3	61,000	350,000	\$13.09	\$1.98
Step 4	351,000+		\$13.09	\$1.99

Effective July 2006 through June 2007:

Water Rate	From:	To:	Base Rate	Step Increase
Base Rate	0	10,000	\$13.15	N/A
Step 1	11,000	20,000	\$13.15	\$2.02
Step 2	21,000	60,000	\$13.15	\$2.03
Step 3	61,000	350,000	\$13.15	\$2.04
Step 4	351,000+		\$13.15	\$2.05

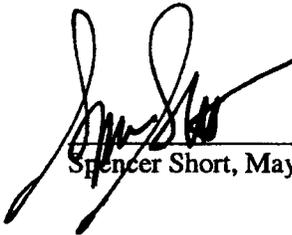
Section 3. Within fifteen (15) days of the passage of this ordinance, a copy shall be published once in the News Messenger, a newspaper of general circulation within the City.

PASSED AND ADOPTED this 25day of May , 2004, by the following roll call vote:

AYES: COUNCILMEMBERS: Santini, Nakata, Sprague, Cosgrove, Short

NOES: COUNCILMEMBERS: none

ABSENT: COUNCILMEMBERS: none



Spencer Short, Mayor

ATTEST:



Linda Stackpoole, City Clerk

APPROVED AS TO FORM:

Tim Hayes, City Attorney

EXHIBIT A

**10-YEAR CHRONOLOGY OF CITY OF LINCOLN
WATER RATE INCREASES**

Year	Month	Ordinance	% Increase
1994	---	---	---
1995	---	---	---
1996	---	---	---
1997	---	---	---
1998	---	---	---
1999	---	---	---
2000	---	---	---
2001	February	694B	10.80
2002	February	712B	9.80
2003	January	727B	3.50

In addition to the data above, rate increases were approved as follows:
22.2% in April 1993; 10.5% in July 1991; 14.0% in July 1990.

EXHIBIT B

COMPARATIVE WATER RATES ¹

City	Monthly Base Rate ²	Monthly Quantity Rates	Monthly Average Cost ³
Lincoln ⁴	\$13.00	11 – 20,000 Gallons: \$1.87 21 – 60,000 Gallons: \$1.88 61 – 350,000 Gallons: \$1.98 351,000 Gallons +: \$1.99	\$33.58
Rocklin	\$24.11	First 400 C.F.: \$0.74/100 C.F. Next 1,600 C.F. \$0.82/100 C.F. Next 2,000 C.F.: \$0.88/100 C.F Next 2,000 C.F.: \$1.02/100 C.F Next 2,000 C.F.: \$1.20/100 C.F Next 8,000 C.F.: \$1.36/100 C.F	\$47.24
Roseville	\$10.35	First 1,200 C.F.: \$0.22/100 C.F. Next 3,800 C.F.: \$0.44 /100 C.F. Over 5,000 C.F.: \$0.66/100 C.F.	\$20.03

Footnotes:

1 - Rocklin water is distributed and managed by PCWA. Roseville owns and operates its own water utility obtaining water from Folsom Lake.

2 - The Rocklin base rate includes a \$15.35 service charge, \$5.53 State & Federally Mandated Programs charge and a \$3.23 Renewal and Replacement charge. All base rates assume residential service from a ¾ inch meter.

3 - Average monthly cost based on residential usage of 21,000 gallons (summer month average).

4 – Assumes new water rates are adopted as recommended.