CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

BOARD ORDER NO. R6V-2007-0022

MASTER WATER RECYCLING REQUIREMENTS LAKE ARROWHEAD COMMUNITY SERVICES DISTRICT DISINFECTED TERTIARY RECYCLED WATER

San Bernardino County ____

The California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) finds:

1. <u>Recycled Water Report</u>

The Lake Arrowhead Community Services District (District) has filed an application with the Lahontan Water Board under California Water Code (Water Code) section 13522.5. Pursuant to Water Code section 13523.1, the District's application requests the Lahontan Water Board to issue Master Water Recycling Requirements to the District for Phase I of the District's recycled water plan. Phase I of the District's recycled water plan proposes supplying up to 1.0 million gallons per day (mgd) of disinfected, tertiary recycled water as defined in California Code of Regulations, title 22, section 60301.230 to the Lake Arrowhead Country Club Golf Course and potentially other unidentified users in the Lake Arrowhead area. The District submitted information on December 6, 2006 to complete the application. The documents that constitute the complete application under Water Code section 13522.5 are listed in Attachment H.

2. Facilities and Treatment Process

The District collects, treats and disposes of domestic wastewater generated in the Lake Arrowhead area, which is located in the San Bernardino Mountains (Attachments A & B). Boundaries of the District's sewer service area encompass an area of approximately 16 square miles.

The District owns and operates two wastewater treatment plants located at:

 Grass Valley Wastewater Treatment Facility (Grass Valley Facility) 27000 Pilot Rock Road Lake Arrowhead, CA 92352

The Grass Valley Facility currently provides advanced secondary wastewater treatment for up to 2.5 mgd (dry weather, maximum average 72-hour flow). Treatment includes primary (aerated grit removal, primary clarifiers), secondary (trickling filters, secondary clarifiers), nitrogen removal (deep-bed sand filters), and disinfection (chlorination). Treated effluent is transported via a 9.4-mile outfall

pipeline system to the Hesperia Disposal Site where the District is authorized to use effluent for crop irrigation and also to infiltrate effluent through percolation ponds.

 Willow Creek Wastewater Treatment Facility (Willow Creek Facility) Forestry Road 2N31.1 Lake Arrowhead, CA 92352

The Willow Creek Facility provides secondary treatment for up to 1.7 mgd (dry weather, maximum average 24-hour flow). Treatment includes primary (aerated grit chambers, primary clarifiers), secondary (activated sludge, secondary clarifiers), and disinfection (chlorination). Secondary treated effluent is either disinfected and discharged to the Willow Creek branch of the outfall pipeline system, or transported via an intertie pipeline to the Grass Valley Facility where it receives additional treatment (nitrogen removal) and is disinfected prior to discharge to the Grass Valley branch of the outfall pipeline system.

3. Current Board Orders

Board Order No. R6V-2002-0008 adopted on February 13, 2002, includes effluent limits, receiving water limitations for ground water, provisions, and monitoring requirements for the District's existing wastewater collection, treatment, and disposal facilities (Grass Valley Facility, Willow Creek Facility, Hesperia Disposal Site).

4. Reason for Action

The District is proposing to supply up to 1.0 mgd of Title 22-quality, disinfected, tertiary recycled water (hereinafter, recycled water) to the Lake Arrowhead Country Club Golf Course, the Lake Arrowhead Grass Valley Park Association, and potentially other unidentified users within the District's sanitation boundary. The District also plans implementing Phase II of its recycled water plan in the future, which would expand the supply of recycled water for the Lake Arrowhead area beyond the Phase I capacity of 1.0 mgd.

This Order includes master water recycling requirements for Phase I only. The master water recycling requirements require the District to regulate the users of the recycled water to ensure compliance with water recycling requirements contained in State of California laws and regulations.

5. Source of Recycled Water

The District will produce recycled water at the Grass Valley Facility. The District is proposing to expand capacity to 3.75 mgd (dry weather, maximum average 72-hour flow) and upgrade its Grass Valley Facility to include the following new facilities:

- 3 -

Lake Arrowhead CSD Master Water Recycling Requirements San Bernardino County

Primary clarifier	Trickling filter
Secondary clarifier	Denitrification filter
Membrane filtration system	Ultraviolet light disinfection system
 Recycled water storage basin (converted flow equalization pond) 	Recycled water pump station

A site map illustrating the upgraded Grass Valley Facility is included in Attachment C of this Order. The upgrades are scheduled to be operational in 2009 or 2010.

The tertiary treatment facilities (membrane filtration, ultraviolet light disinfection) will receive wastewater that has undergone advanced secondary treatment (primary, secondary, and denitrification). The resulting recycled water will be distributed to recycled water users. Advanced secondary treated wastewater flows in excess of recycled water demand will be routed to the outfall pipeline system. The existing chlorination facilities will continue to be maintained to disinfect effluent sent to the Hesperia Disposal Site, and to provide a backup recycled water disinfection system. A flow diagram of the District's treatment facilities that incorporates Phase I treatment facilities is included in Attachment D of this Order.

6. <u>Producer, Distributor and Users</u>

Under this Order, the District is the producer and the distributor of recycled water. The District has identified the Lake Arrowhead Country Club Golf Course and the Lake Arrowhead Grass Valley Park Association as potential users. Other users under Phase I may include government agencies and private parties.

7. <u>Recycled Water Distribution System</u>

Delivery of recycled water from the Grass Valley Facility to the Lake Arrowhead Country Club Golf Course will be through a single 15,000-foot pipeline. The pipeline will be located through roadways and easements through residential areas. The pipeline will be 14 inches in diameter to accommodate up to 2,500 gallons per minute.

8. Permit Area

This Order authorizes use of recycled water at sites located within the District's sanitation boundary, which coincides with the Lake Arrowhead watershed boundary (Permit Area). The Permit Area includes the communities of Lake Arrowhead, Cedar Glen, Blue Jay, Twin Peaks, Deer Lodge Park, Rim Forest, Crest Park, and Sky Forest. The Permit Area is illustrated in Attachment B of this Order.

9. <u>Authorized Recycled Water Uses</u>

This Order authorizes recycled water use for construction dust control and soil compaction, and for landscape irrigation at parks, golf courses, schools, cemeteries, and greenbelts.

10. <u>Authorized Recycled Water Use Sites</u>

The sites authorized for use of recycled water under this Order (Authorized Recycled Water Use Sites) are those:

- a. Located within the Permit Area described in Finding No. 8, above; and
- b. Where the use is limited to those described in Finding No. 9, above.

11. Topography

The Permit Area includes the Lake Arrowhead, Grass Valley, Hooks Creek, Little Bear Creek, and Willow Creek hydrologic subunits, all of which are located in the San Bernardino Mountains in the Transverse Ranges province of Southern California. The five hydrologic subunits encompass an area of approximately 16 square miles. Land surface elevations in the area range from approximately 5,100 to more than 6,000 feet above mean sea level. The elevation of Lake Arrowhead is approximately 5,100 feet above mean sea level.

12. Geology and Hydrogeology

The Lake Arrowhead Country Club Golf Course and other future sites where recycled water will be used are located in the tectonically active San Bernardino Mountains. This area is underlain almost entirely by Mesozoic-aged granitic bedrock. Although no large-scale faulting exists in the immediate Grass Valley area, there are numerous fracture systems related to local and regional faults. The major trend of photolineaments (acquired through remote sensing) in the area is 300° to 340° (approximately NW to NNW). A secondary system trends 010° to 030° (approximately NNE to NE). A very thin alluvial deposit derived from the weathering and erosion of the surrounding mountains overlies the granitic bedrock in the area south of Grass Valley Lake in the lowest elevations of the valley. Drilling records show that the alluvium consists primarily of sand and occasional boulders with a thickness that generally does not exceed 30 feet. Between the shallow alluvium and competent granitic bedrock is a zone of weathered granite. Clay infilling of fractures, as noted on driller's logs for the District's production wells, is likely a result of weathering of feldspars in the granite. The thickness of this weathered zone ranges from approximately 40 to 180 feet.

Ground water in the Lake Arrowhead area occurs primarily in the secondary porosity features of the fractured granitic bedrock. Although, the depth of the bedrock aquifer extends to at least 500 feet below ground surface, in parts of Grass Valley, the lateral and vertical extent of the aquifer is unknown. The aquifers are semi-confined to confined, and some of the recently drilled wells in Grass Valley are flowing artesian. The amount of ground water storage capacity on fractured bedrock systems are difficult to quantify due to the heterogeneous nature of the fractures. The thin unconsolidated alluvial deposits around the lake and in the bottom of the valley area are not viable ground water resources due to their shallow depth and limited lateral extent.

13. Ground Water Quality

The District has recently completed five new ground water production wells (No. 1, 2, 3, 4, 5) for irrigation and drinking water purposes on Lake Arrowhead Country Club property in Grass Valley. An example of the ground water quality within a portion of the Permit Area is provided in Tables No. 1 and 2. The wells from which the ground water samples were taken are screened in the productive fractured aquifer.

Parameter (units)	DHS Maximum Contaminant Level (MCL)	Results
Nitrate as Nitrogen (mg/L)	10	1.80
Total Kjeldahl Nitrogen (mg/L)	Not established	0.10
Total Nitrogen (mg/L)	Not established	1.90
Total Dissolved Solids (mg/L)	500-1,500	240
Hexavalent Chromium (mg/L)	Not established	0.0042
Zinc (mg/L)	5	0.061
Dichloroacetic Acid (mg/L)	Not established	1.05
Total Coliform/E. Coli	0 per 100 mL of water	Absent

Table No. 1¹ – Ground Water Sampling Results Composite Sample from Well Nos. 1 and 5 Sampling Date – March 7, 2006

Absent: not detected

¹ March 2006. Surface and Ground Water Sampling Grass Valley. Lake Arrowhead Community District.

Wells Name	Well 1	Well 2	Well 3	Well 4	Well 5
(all concentrations in mg/L					
unless otherwise noted)					
Gross Alpha					
(pCi/L)	140	35.1	49.1	19.3	14
Uranium (pci/L)	140	82.8	N/A	16	N/A
Radium 226 & 229 (pCi/L)	ND	0.352	N/A	ND	N/A
Toluene µg/L	0.6	N/A	2.6	2.5	N/A
Fe (µg/L)	N/A	400	4,000	730	N/A
AI (µg/L)	N/A	N/A	1,700	1,700	N/A
Mn (µg/L)	N/A	N/A	N/A	59	N/A
Total Coliform/ E. Coli	Absent	Absent	N/A	Absent	Absent
Heterotrophic Plate Counts					
(Colonies/mL)	2	434	N/A	8	17
Total Dissolved Solids (mg/L)	160	N/A	130	140	N/A

Table No. 2² – Ground Water Sampling ResultsIndividual Ground Water Wells

Absent: not detected

14. <u>Receiving Waters</u>

The receiving waters are the ground waters located within the Alto subarea of the Upper Mojave River Valley ground water basin, and the surface waters of the Upper Mojave Hydrologic Area.

15. Lahontan Basin Plan

The Water Board adopted a Water Quality Control Plan for the Lahontan Region (Basin Plan), which became effective on March 31, 1995. This Order implements the Basin Plan as amended.

16. <u>Beneficial Uses – Ground Water</u>

The beneficial uses of the ground waters of the Upper Mojave River Valley ground water basin, as set forth and defined in the Basin Plan, are:

- a. Municipal and Domestic Supply (MUN);
- b. Agricultural Supply (AGR);
- c. Industrial Service Supply (IND); and
- d. Freshwater Replenishment (FRSH).
- e. Aquaculture (AQUA)

² September 27, 2005. Supplemental Engineering Report for Consideration of the Permit Amendment Application from the Lake Arrowhead Community Services District. Department of Health Services, State of California.

17. Beneficial Uses - Surface Waters

The beneficial uses of the surface waters of the Upper Mojave Hydrologic Area, as set forth and defined in the Basin Plan, are:

- a. Municipal and Domestic Supply (MUN);
- b. Agricultural Supply (AGR);
- c. Freshwater Replenishment (FRSH);
- d. Ground Water Recharge (GWR);
- e. Navigation (NAV);
- f. Hydropower Generation (POW);
- g. Water Contact Recreation (REC-1);
- h. Non-Contact Recreation (REC-2);
- i. Commercial and Sportfishing (COMM);
- j. Warm Freshwater Habitat (WARM);
- k. Cold Freshwater Habitat (COLD);
- I. Wildlife Habitat (WILD);
- m. Rare, Threatened, or Endangered Species (RARE);
- n. Water Quality Enhancement (WQE); and
- o. Flood Peak Attenuation/Flood Water Storage (FLD)
- 18. Basin Plan Prohibitions

To protect beneficial uses and achieve water quality objectives for the waters of the Mojave Hydrologic Unit, which includes the Upper Mojave Hydrologic Area, the Basin Plan specifies the following discharge prohibitions.

- "1. The discharge of waste to surface water in the Mojave Hydrologic Unit that is tributary to the West Fork Mojave River or Deep Creek, above elevation 3,200 feet (approximate elevation of Mojave Forks Dam), is prohibited. This prohibition does not apply to stormwater discharges unless such discharges create a condition of pollution or nuisance. (Figure 4.1-23)"
- "2. The discharge of waste to land or water within the following areas is prohibited (Figure 4.1-23):
 - i. The Silverwood Lake watershed
 - ii. The Deep Creek watershed above elevation 3,200 feet
 - iii. The Grass Valley Creek watershed above elevation 3,200 feet

This prohibition does not apply to stormwater discharges unless such discharges create a condition of pollution or nuisance."

"4. The discharge of wastes of sewage-bearing origin to surface waters in the Mojave Hydrologic Unit upstream of the Lower Narrows at Victorville is prohibited. (Figure 4.1-24)" The Permit Area as defined in Finding No. 8 above, is located within the areas subject to the three above-referenced discharge prohibitions. The discharge of recycled water is therefore subject to the above-referenced discharge prohibitions.

19. Basin Plan Prohibition Exemption

The Basin Plan specifies the following exemption criteria for each of the three discharge prohibitions identified in Finding No. 18 above.

"An exemption to this prohibition may be granted by the Regional Board whenever the Regional Board finds that the discharge of waste will not, individually or collectively, directly or indirectly, result in exceeding the water quality objectives or unreasonably affect the waters for its beneficial uses."

The Water Board finds the use of recycled water as authorized by this Order will not individually or collectively, directly or indirectly, result in exceeding the water quality objectives specified by the Basin Plan or unreasonably affect the waters for its beneficial uses, as defined by the Basin Plan. This finding is based upon the high quality of the recycled water, and compliance with the requirements set forth by this Order. This Order includes a provision that grants an exemption to the above-referenced prohibitions.

20. State Water Board Water Reclamation Policy

State Water Board Resolution No. 77-1, ("Policy with Respect to Water Reclamation in California"), includes policy statements directing the State Water Board and regional boards to encourage and recommend funding for water recycling and its use in water-short areas of the State. This Order supports implementation of applicable elements of State Water Board Resolution No. 77-1.

21. Incidental Runoff of Recycled Water

The State Legislature established the California Recycled Water Task Force (Task Force) in 2001 to evaluate the current framework of State and local rules, regulations, ordinances and permits to identify opportunities for and obstacles to the same use of recycled water in California. In June 2003, the Task Force completed its review and issued its final report, titled "Water Recycling 2030, Recommendations of California's Recycled Water Task Force." Recommendation 4.2.1 of the report states that the State Water Board should convene a committee to review the legal requirements of Federal and State statutes and regulations that relate to the regulation of incidental runoff of recycled water to determine the regulatory and enforcement options that are available to the regional boards. Following a stakeholder process and internal review, on February 24, 2004, the State Water Board's Executive Director issued a memorandum providing guidance on regulation of incidental runoff of recycled water. The memorandum states, in part:

"Recycled water use facilities should be designed and operated to avoid runoff to waters of the State. The regional boards should work with recycled water users to help them achieve this goal. Nonetheless, incidental runoff is likely to occur at many facilities. Consequently, regional boards should include the following language in water recycling requirements.

'The incidental discharge of recycled water to waters of the State is not a violation of these requirements if the incidental discharge does not unreasonably affect the beneficial uses of the water, and does not result in exceeding an applicable water quality objective in the receiving water.'"

This Order includes a prohibition against recycled water discharges to surface waters, unless the discharge is of an incidental nature, as defined in the February 24, 2004 memorandum³.

22. Discharges of Recycled Water from Surface Impoundments

The State Board's Executive Director's February 24, 2004 memorandum also addresses permitting and enforcement regarding recycled water discharges from surface impoundments (ponds) to waters of the State. The memorandum states, in part:

"Recycled water ponds should be designed and operated not to spill during the dry months. Spills should be prohibited during these times. Generally, wet weather regulatory strategies that do not require individual NPDES Permits fall within the following categories:

- 1. The recycled water pond is designed not to spill during wet months. Under this circumstance, spills that occur under extreme weather conditions or emergencies should not be considered for enforcement.
- 2. Recycled water ponds can be drained and refilled with potable water or flushed with potable water prior to the onset of the wet season. Flushing will not displace all of the recycled water but the water quality threat is minimal.
- 3. Recycled water ponds designed to spill recycled water during the wet season can be regulated under Phase I municipal storm water permits or under a general storm water permit. These permits require reduction of pollutants to the maximum extent practicable. The permit also incorporates receiving water limitations requiring the implementation of an iterative process for addressing any exceeding of water quality objectives."

³ "Incidental runoff" is defined within the February 24, 2004 memorandum as "…small amounts of runoff from intended recycle water use areas, over-spray from sprinklers that drifts out of the intended use area, and overflow from ponds that contain recycled water during storms." This definition is limited to recycled water that has received tertiary filtration for pathogen removal as specified under Title 22.

This Order allows recycled water discharges from impoundments provided that such discharges comply with the above-referenced requirements specified in the February 24, 2004 memorandum.

23. <u>Regulation of Recycled Water</u>

a. California Code of Regulations, Title 22, State Department of Health Services

The State Department of Health Services established criteria for using recycled water. These criteria are codified in California Code of Regulations, title 22, chapter 3, Water Recycling Criteria, and include such requirements as Sources of Recycled Water, Uses of Recycled Water, and Use Area Requirements. The State Department of Health Services adopted revised Water Recycling Criteria that became effective on March 20, 2001. Applicable criteria are prescribed in this Order.

b. Engineering Reports

As required under California Code of Regulations, title 22, section 60323, the District has submitted its Title 22 Basis of Design and Engineering Report dated August 2006, for production of recycled water at its Grass Valley Facility. On December 6, 2006, the District submitted a stamped and signed copy of the Addendum to the District's Title 22 Basis of Design and Engineering Report. The District submitted the engineering report and its addendum to the Lahontan Water Board and State Department of Health Services. The engineering report describes how the District will operate the treatment facilities and reclamation system to comply with all applicable rules and regulations, including title 22 and this Order. The engineering report meets the requirements stipulated in title 22.

c. Regulation

Water Code section 13523, subdivision (a) states that:

"Each regional board, after consulting with, and receiving the recommendations of, the State Department of Health Services and any party who has requested in writing to be consulted, with the consent of the proposed permittee, and after any necessary hearing, may, in lieu of issuing waste discharge requirements pursuant to Section 13263 or water reclamation requirements pursuant to Section 13523 for a user of reclaimed water, issue a master reclamation permit to a supplier or distributor, or both, of reclaimed water.

This Order includes water recycling requirements. It requires the District to:

- 11 -

Lake Arrowhead CSD Master Water Recycling Requirements San Bernardino County

- i. Comply with Uniform Statewide Reclamation Criteria (California Code of Regulations, title 22, sections 60301 through 60355) established pursuant to Water Code section 13521;
- ii. Establish and enforce *Requirements for Recycled Water Users* (Attachment F), which govern the design and construction of facilities located at use sites and the use of recycled water at those sites;
- iii. Conduct periodic inspections of recycled water use sites to monitor compliance by users with the Uniform Statewide Reclamation Criteria, the *Requirements for Recycled Water Users;* and the requirements of this Order; and
- iv. Submit quarterly reports that include the results of the District's compliance monitoring and the information required by Water Code section 13521.

Provisions No. II.A and II.B of this Order require the District demonstrates there will be compliance with recycled water use requirements before supplying recycled water to a user, including recycled water use requirements contained in this Order and in all applicable laws and regulations.

24. Environmental Analysis

The District completed an environmental analysis for the project. The Total Dissolved Solids (TDS) in the recycled water will average approximately 300 mg/L. The average TDS concentration of water provided through water supply wells is 168 mg/L. The TDS concentration in Lake Arrowhead was calculated between 50 and 85 mg/L. The recycled water may percolate to ground water when applied for reuse at the Lake Arrowhead Country Club Golf Course or at other sites. Due to the difference in TDS concentration of 132 mg/L between recycled water and ground water, the project has the potential to degrade ground water for TDS, although such degradation is expected to be minor. The TDS concentration in the ground water of the Lake Arrowhead area could potentially increase to 208 mg/L following the use of recycled water.

The recycled water project may also result in percolation of nitrate-nitrogen to ground water in concentrations above the estimated background concentration of 2 mg/L in the receiving water. The District is required to ensure that best management practices (BMPs) are implemented to prevent changes in ground water quality that would unreasonably affect the beneficial uses of the receiving water. Such BMPs will need to integrate other contributions of nitrogen, such as fertilizers, in addition to that of recycled water application. BMPs designed to protect surface and ground water quality and to prevent human contact from unauthorized exposure are stipulated in Attachment F of this Order, sections I.D.6 through I.D.9.

25. Maintenance of High Quality Waters in California

State Water Board Resolution No. 68-16 ("Statement of Policy with Respect to Maintaining High Quality of Waters in California") states,

- "1. Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with the maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.
- 2. Any activity which produces or may produce a waste ...and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained."

This Order is consistent with Resolution No. 68-16 for the following reasons.

- a. State Water Board through Resolution No. 77-1 has identified the beneficial use of recycled water for the people of the State, and directs regional boards to encourage the use of recycled water in water-short areas of the State. The Lake Arrowhead area is located in a water-short area of the State. The people of the State will benefit from the use of recycled water in the Lake Arrowhead area, where recycled water will supplement and/or replace existing water supplies (e.g., surface waters, ground waters).
- b. This Order prohibits the use of recycled water that causes a pollution or nuisance.
- c. This Order requires the District to establish and administer (1) *Requirements* for Recycled Water Users, and (2) a Compliance Inspection and Enforcement Program, as accepted by the Water Board's Executive Officer. The requirements and compliance program are the mechanisms for ensuring that appropriate waste treatment and control measures are identified, implemented, and maintained in a manner that protects existing high quality waters and prevents unreasonable effects to beneficial uses of waters of the State.
- d. The use of recycled water as authorized by this Order will not result in water quality less than that prescribed in applicable policies.

26. <u>California Environmental Quality Act Compliance (CEQA)</u>

Tom Dodson & Associates prepared for the District an initial environmental study⁴ in October 2004 focused on construction and operation of Phase I of the proposed recycled water project. The District adopted a negative declaration on January 11, 2005 for Phase I of the project.

The Water Board, acting as a CEQA Responsible Agency in compliance with California Code of Regulations, title 14, section 15096, evaluated the impacts to water quality addressed in the initial environmental study and associated negative declaration for Phase I of the District's recycled water project. As a result of the analysis, the Water Board finds the mitigation measures in the final negative declaration, combined with compliance with the requirements specified by this Order, to be adequate to reduce water quality impacts to less than significant levels.

27. Notification of Interested Parties

The Lahontan Water Board has notified the District and interested persons of its intent to prescribe master water recycling requirements.

28. Consideration of Public Comments

The Lahontan Water Board, in a public meeting, heard and considered all comments pertaining to the use of recycled water.

IT IS HEREBY ORDERED that the District must comply with the following:

I. WATER RECYCLING SPECIFICATIONS

A. <u>Effluent Limitations</u>

Recycled water production at the Grass Valley Facility shall not exceed 1.0 mgd (maximum average 24-hour flow) and 1.3 mgd (maximum instantaneous flow).

B. <u>Regulation and Enforcement</u>

 Pursuant to Water Code section 13523.1, subdivision (b)(2), the District must comply with the Uniform Statewide Reclamation Criteria, which are contained in California Code of Regulations, title 22, sections 60301 through 60355 and are established pursuant to Water Code section 13521.

⁴ October 2004. Initial Study for the Recycled Water Program Improvements, Prepared for Lake Arrowhead Community Services District, Tom Dodson & Associates.

Lake Arrowhead CSD Master Water Recycling Requirements San Bernardino County

- Pursuant to Water Code section 13523.1, subdivision (b)(3), the District must establish *Requirements for Recycled Water Users* governing the design and construction of recycled water use facilities and the use of recycled water, in accordance with the Uniform Statewide Reclamation Criteria. Attachment F of this Order identifies what constitutes acceptable *Requirements for Recycled Water Users*.
- 3. The District must establish a *Compliance Inspection and Enforcement Program* describing its programs for conducting periodic inspections required under Water Code section 13523.1, subdivision (b)(5) and its enforcement program to address user violations of the Uniform Statewide Reclamation Criteria and the District's *Requirements for Recycled Water Users*.
- 4. Pursuant to Water Code section 13523.1, subdivisions (b)(3) and (b)(5), the District must conduct periodic inspections of the facilities of recycled water users to monitor compliance by the users with the Uniform Statewide Reclamation Criteria and the District's *Requirements for Recycled Water Users*. During the inspections, the District must also monitor compliance with Water Recycling Specifications No. I.C.1 through I.C.18 of this Order.
- 5. Pursuant to Water Code section 13523.1, subdivision (b)(3), the District must enforce the Uniform Statewide Reclamation Criteria and the District's *Requirements for Recycled Water Users*.
- 6. The District is responsible for processing individual users' applications, inspecting recycled water use facilities, and ensuring users' compliance with this these master water recycling requirements. For new users, the use of recycled water shall only commence after the California Department of Health Services (CDHS) grants final approval for such use. The District must provide the Lahontan Water Board with a copy of the CDHS approval letter within 30 days of the approval notice.
- 7. The District must not supply recycled water to parties who distribute, store or use recycled water in a manner that is in violation of the Uniform Statewide Reclamation Criteria, *Requirements for Recycled Water Users*, and these master water recycling requirements.

C. <u>General Requirements and Prohibitions</u>

1. The discharge of recycled water to surface water is prohibited. However, the incidental discharge of recycled water to waters of the State is not a violation of this Order if the incidental discharge does not unreasonably affect the beneficial uses of the receiving water, and does not result in exceeding an applicable water quality objective in the receiving water.

- 15 -

- 2. The discharge of recycled water from impoundment areas (e.g., ponds) to surface waters is not a violation of this Order if the irrigation system is operated in accordance with one of the operational strategies described in Finding No. 22, above.
- 3. Bypass or overflow of untreated or partially treated recycled water from the wastewater treatment facility, any intermediate unit processes, or the recycled water distribution system, to the point of use is prohibited.
- 4. The use of recycled water must not cause a pollution as defined in Water Code section 13050, or a threatened pollution.
- 5. Neither the treatment of wastewater nor the use of recycled water can cause a nuisance as defined in Water Code section 13050.
- 6. The use of recycled water under this Order must be limited to the Authorized Recycled Water Use Sites defined in Finding No. 10 of this Order.
- 7. The uses of recycled water authorized under this Order are limited to those described in Finding No. 9 of this Order.
- 8. The source of recycled water must be limited to that described in Finding No. 5 of this Order.
- 9. Recycled water used to irrigate landscape areas must be applied at a rate and amount that does not exceed the irrigation and nitrogen needs of the vegetation.
- 10. Recycled water must be applied at a rate and amount that does not cause ponding or runoff that is other than "incidental" in nature.
- 11. Pipelines must be maintained so as to prevent leakage.
- 12. The discharge of recycled water, which causes violation of any narrative water quality objective (WQO) contained in the Basin Plan, is prohibited.
- 13. The discharge of recycled water, which causes violation of any numeric WQO contained in the Basin Plan, is prohibited.
- 14. Where any numeric or narrative WQO contained in the Basin Plan is already being violated, the discharge of recycled water, which causes further degradation or pollution, is prohibited.

Lake Arrowhead CSD Master Water Recycling Requirements San Bernardino County

> 15. All facilities used to transport and store recycled water must be adequately protected against overflow, structural damage, or a significant reduction in efficiency resulting from a 100-year, 24-hour storm or flood.

II. **PROVISIONS**

- A. <u>Before supplying recycled water under this Order, the District must:</u>
 - Complete and submit a report to both offices of the Lahontan Water Board containing its proposed *Requirements for Recycled Water Users*, and its *Compliance Inspection and Enforcement Program* required under Water Recycling Specifications No. I.B.2 and I.B.3, above, and obtain acceptance of the report from the Lahontan Water Board Executive Officer. For the report to be accepted it must include the elements listed in Attachment F and comply with the Uniform Reclamation Criteria.
 - 2. Have received, reviewed, and approved a completed *Report of Proposed Recycled Water Use*, which contains information demonstrating the user will comply with the Uniform Statewide Reclamation Criteria and the District's *Requirements for Recycled Water Users*. Copies of all approved *Reports of Proposed Recycled Water Use* and approval letters shall be maintained on file by the District.
- B. The use of recycled water as authorized by this Order is hereby exempt from the Basin Plan prohibitions identified in Finding No. 18 above.
- C. Pursuant to California Code of Regulations, title 22, section 60316, subdivision (b), the District must notify the Lahontan Water Board, State Department of Health Services and County of San Bernardino Department of Health Services of any incidence of backflow from a recycled water system into the potable water system within 24 hours of discovery of the incident.
- D. Pursuant to Water Code section 13267, subdivision (b), the District must comply with Monitoring and Reporting Program R6V-2007-(PROPOSED) as specified by the Executive Officer.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on June 13, 2007.

HAROLD J. SINGER EXECUTIVE OFFICER Lake Arrowhead CSD Master Water Recycling Requirements San Bernardino County

Attachments: A. Location Map

- Permit Area Β.
- C. Phase I Projected Wastewater Grass Valley Treatment Plant Site Plan
- D. Grass Valley Treatment Plant Phase I Proposed Process Flow Diagram
- E. F. WDR Bibliographic References
- Requirements For Recycled Water Users
- G.
- Standard Provisions for Waste Discharge Requirements Master Water Recycling Application Materials (List Only) H.

Monitoring and Reporting Program Ι.