

Chapter 81

WATER QUALITY CONTROL

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81.0 Purpose: This chapter implements the Water Quality Subelement, Land Use Element of the Goals and Policies. This chapter also implements, in part, TRPA's programs to attain and maintain federal, state, and local water quality standards, under Article V(d) of the Compact.

81.1 Applicability: This chapter sets forth standards for the discharge of runoff water from parcels, and regulates the discharge of domestic, municipal, or industrial wastewaters. These standards and prohibitions apply to discharges to both surface waters and groundwaters.

81.2 Discharge Limits: Discharges shall not exceed the following standards:

81.2.A Surface Runoff: Pollutant concentrations in surface runoff shall not exceed the following readings at the 90th percentile:

Constituent	Maximum Concentration
Dissolved Inorganic Nitrogen as N	0.5 mg/l
Dissolved Phosphorus as P	0.1 mg/l
Dissolved Iron as Fe	0.5 mg/l
Grease and Oil	2.0 mg/l
Suspended Sediment	250 mg/l

- (1) If the constituent levels of water entering a site from upstream areas are of a superior or equal quality to the above, those waters shall meet the quality level listed above prior to discharge from the site.
- (2) If the constituent levels of waters entering a site do not meet the quality levels above, there shall be no increase in the concentrations of these constituents in water discharged from the site, based on a 24 hour average.

- 81.2.B Discharges To Groundwaters: Waters infiltrated into soils shall not exceed the following maximum constituent levels:

Constituent	Maximum Concentration
Total Nitrogen as N	5 mg/l
Total Phosphate as P	1 mg/l
Iron as Fe	4 mg/l
Turbidity	200 NTU [§]
Grease and Oil	40 mg/l

Where there is a direct hydrologic connection between ground and surface waters, discharges to groundwater shall meet the standards for surface runoff. A direct hydrologic connection is presumed to exist wherever, by virtue of proximity to a surface water body, nature of soils, or slope or gradient, and the residence time of runoff water discharged into the ground is too short to remove pollutants from the runoff. Sediment traps, consistent with the Handbook of Best Management Practices, shall be used to protect infiltration devices from excessive levels of siltation.

- 81.2.C Prohibition Of Wastewater Discharge: The discharge of domestic, municipal or industrial wastewater to Lake Tahoe, its tributaries, the groundwaters of the Tahoe Region, or the Truckee River within the Tahoe Region, is prohibited, except for existing discharges under alternative plans for wastewater disposal authorized by state law and approved by the state agency of appropriate jurisdiction; and for catastrophic fire protection of the STPUD Luther Pass Pump Station detailed in subparagraph (4) below.^{§§} California and Nevada prohibit wastewater discharge through the enactment of the Porter-Cologne Act, and an Executive Order by the Governor of Nevada dated January 27, 1971.

- (1) Holding Tanks And Other No Discharge Systems: To avoid a discharge of wastewater that is prohibited, holding tanks or other no discharge systems may be approved in the following instances:
- (a) As a temporary measure associated with a temporary use, including but not limited to, sporting events, community events, and construction.
 - (b) As a permanent measure associated with remote public or private recreation sites, including but not limited to, trailheads, and undeveloped walk-in campgrounds, and summer home tracts where connection to a sewer system is not feasible or would create excessive adverse environmental impacts.
- (2) To help prevent accidental releases of sewage, sewage collection and treatment districts including, but not limited to, the South Tahoe Public Utility District, the Tahoe City Public Utility District,

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the North Tahoe Public Utility District, the Incline Village General Improvement District, the Douglas County Sewer Improvement District, and the Tahoe Truckee Sanitation Agency, shall prepare and submit a report to TRPA within 120 days of a determination by the district that any unit treatment process, or major component of its collection system serving the Tahoe Region, has reached 85 percent of its design capacity. Such report shall identify what measures, if any, will be needed to accommodate projected population increases consistent with the Regional Plan, including capital improvements, operational changes, changes in discharge permits, and changes in financial programs.

- (3) In conjunction with TRPA project approvals for agencies which collect or transport sewage, including but not limited to the South Tahoe Public Utility District, the Tahoe City Public Utility District, the North Tahoe Public Utility District, the Incline Village General Improvement District, the Douglas County Sewer Improvement District, and the Tahoe Truckee Sanitation Agency, TRPA shall require that such agencies shall have in place and shall vigorously implement plans for detecting and correcting sewage exfiltration problems in their collection and transport facilities.
- (4) Recycled Wastewater Use for Catastrophic Fire Protection of the STPUD Luther Pass Pump Station: This exception allows for the use of recycled STPUD export line wastewater, as a last resort to protect the Luther Pass Pump Station from destruction, under catastrophic wildfire and all other conditions specified under Section 13952.1 of the California Water Code (September 2000). Such condition of catastrophic wildfire and authorization for recycled wastewater use to prevent the imminent destruction of the STPUD Luther Pass Pump Station shall be made and certified by the fire incident commander and reported to the TRPA Emergency Response Coordinator.^{§§}

81.2.D Prohibition of Toxic or Hazardous Waste Discharge: The discharge of toxic or hazardous waste to Lake Tahoe, other lakes in the Region, their tributaries, the groundwaters of the Tahoe Region, the lands of the Tahoe Region, or the Truckee River within the Tahoe Region, is prohibited.

81.2.E Prohibition of Certain Watercraft: Commencing June 1, 1999, the launching, mooring, or operation of all two-stroke engine powered watercraft within the Region is prohibited, except:

- (1) Any two-stroke engine powered watercraft whose fuel is directly injected into the cylinder shall be exempt from the prohibition;
- (2) injected in to the crankcase prior to entering the cylinder and the fuel injection engine was purchased before January 27, 1999, shall be prohibited commencing October 1, 2001;[§]

^{§§} Amended 06/27/01

[§]Amended 1/27/99

- (3) Any watercraft powered by a two-stroke engine whose engine is certified as meeting the U.S. EPA 2006 standard or the CARB 2001 standard shall be exempt from the prohibition; or
- (4) Sailboats utilizing two stroke engines as auxiliary power shall be prohibited commencing October 1, 2001.^{§§}
- (5) Any watercraft powered by a two-stroke engine rated at 10 horsepower or less shall be prohibited commencing October 1, 1999; or
- (6) Any watercraft powered by an engine that has been that has been certified as meeting EPA's 2001-2005 emission standard shall be prohibited commencing October 1, 2001.^{§§§}

81.3 Snow Disposal: All persons conducting public, commercial or private snow removal or disposal operations shall dispose of snow in accordance with site criteria and management standards in the Handbook of Best Management Practices, the Design Review Guidelines, and the criteria below:

81.3.A Requirements For Individual Parcels: Removal of snow from individual parcels shall be limited to structures, paved areas, and unpaved areas necessary to safely park or provide safe pedestrian access.

81.3.B Requirements For Dirt Roads: Snow removal from dirt roads is subject to regulation pursuant to Chapter 9. When TRPA approves snow removal from a dirt road, pursuant to project approval or in accord with provisions of Chapter 9, it shall specify required winterization practices, BMPs, the specific means of snow removal, and a schedule for either paving the dirt road or ceasing snow removal.

81.4 Salt And Abrasive Control: Salt and abrasives used to control ice on streets, highways, and parking areas shall be regulated in accordance with the following standards:

81.4.A Storage Areas: Storage areas for deicing salt and abrasives shall be in conformance with the TRPA Handbook of Best Management Practices.

81.4.B Reporting: The state highway departments, and other large users of salt and abrasives identified by TRPA, shall initiate a tracking program to monitor the use of deicing salt in their respective jurisdictions. Annual reports shall be presented to TRPA on June 1 of each year and shall include information on the rate, amount, and distribution of use. This information shall be presented in a format developed by TRPA and shall be verifiable. TRPA shall incorporate this information into its annual monitoring report in accordance with Chapter 32.

81.4.C Restrictions: The use of deicing salt and abrasives may be restricted where damage to vegetation in specific areas may be linked to their use, or where their use would result in a violation of water quality standards. Mitigation for the use of road deicing salt or abrasives may

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^{§§§} Amended 3/24/99

be required and may include requirements to use alternative substances or change distribution patterns, frequency of application, and amount of application. Revegetation of parcels may be required where evidence indicates deicing salts or abrasives have caused vegetation mortality. Memorandums of understanding may be entered into with highway and street maintenance organizations to address use of salts or abrasives in relation to safety requirements.

81.5 Spill Control: All persons handling, transporting, using, or storing toxic or hazardous substances shall comply with the applicable requirements of state and federal law regarding spill prevention, reporting, recovery, and clean-up. Sewage collection, conveyance, and treatment districts shall have sewage spill contingency, prevention, and detection plans approved by the state agency of appropriate jurisdiction and submitted to TRPA for review and approval, within three years of the effective date of the Regional Plan.

81.5.A Cooperative Sewage Spill Plans: Sewage collection, conveyance, and treatment districts may join together to develop cooperative plans, provided that the plans clearly identify those agencies covered by the plan, are agreed to by each agency, and are consistent with applicable state and federal laws.

81.5.B Sewage Spill Plan Criteria: Sewage spill contingency, prevention, and detection plans shall comply with the criteria set forth by the state agencies of appropriate jurisdiction and TRPA. Such plans shall include provisions for detecting and eliminating sewage exfiltration and stormwater infiltration from sewer lines and facilities.

81.6 Pesticide Use: The use of insecticides, fungicides and herbicides shall be consistent with the Handbook of Best Management Practices. TRPA shall discourage pesticide use for pest management. Prior to applying any pesticide, potential users of pesticides shall consider integrated pest management practices including alternatives to chemical applications, management of forest resources in a manner less conducive to pests, reduced reliance on potentially hazardous chemicals, and additional environmentally sound pest management tactics.

81.6.A Criteria For Use: The following criteria for use apply:

- (1) Only chemicals registered with the Environmental Protection Agency and the state agency of appropriate jurisdiction shall be used and only for their registered application.
- (2) Alternatives to chemical application shall be employed where practical.
- (3) No detectable concentration of any pesticide shall be allowed to enter any stream environment zone unless TRPA finds that application of the pesticide is necessary to attain or maintain the environmental threshold standards.

81.7 Fertilizer Management: The following criteria apply to fertilizer management: §

81.7.A Fertilizer management allowing for site specific management approaches shall be consistent with the Handbook of Best Management Practices. The recommended approaches for landscaping are found in the Home Landscaping Guide for Lake Tahoe and Vicinity or its approved equivalent or superior. Chapter 77 contains requirements for revegetation approaches. Fertilizers shall not be used except as described below in or near stream and drainage channels, or in stream environment zones, including setbacks determined under Section 37.3, and in shorezone areas except as otherwise provided in this subsection (see Chapter 2, and Section 55.2). Fertilizer use for maintenance of preexisting landscaping according to Subparagraph 74.2.A.(2) shall be minimized in stream environment zones and adjusted or prohibited if found, through evaluation of continuing monitoring results, to be in violation of applicable strictest water quality discharge and receiving water standards. These ordinances are applicable to both inorganic and organic fertilizer applications. Fertilizer management involves use and application approaches to achieve management standards and shall include the following considerations where appropriate:

- (1) The appropriate type of fertilizer to avoid release of excess nutrients; fertilizer management programs proposing Phosphorus use shall demonstrate the need for the particular site conditions and vegetation to be maintained or established; consider the use of slow release and Phosphorus free fertilizer;
- (2) The rate and means of application to avoid excessive application or application to non-target areas or native vegetation;
- (3) The timing and frequency of application to minimize the use of fertilizer, avoid early and late season fertilizer use when vegetation growth is not active;
- (4) Appropriate watering schedules and efficient irrigation systems to avoid excessive leaching and runoff of nutrients;
- (5) Preferred plant materials for the intended use and site conditions to minimize the need of fertilizer;
- (6) Landscape design that minimizes the use and impacts of fertilizer application;
- (7) Critical areas such as shorezone areas and setbacks in close proximity to Lake Tahoe and other bodies of water, or water quality treatment basins where the use of fertilizer shall be avoided;
- (8) Design and maintenance of drainage control systems including holding ponds where necessary;

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- (9) Surface and groundwater monitoring programs to determine compliance with existing Nitrogen and Phosphorus standards; any required monitoring will be at owners expense, where annual reporting is required in critical areas and as determined in program review or compliance determination;
- (10) If appropriate, public outreach through public programs, fliers for utility district and other organization distribution, workshops, etc.; or affiliate membership outreach on fertilizer management shall be included in fertilizer management plans. Public outreach applies in particular to small residential users for agency outreach programs, owners associations, condominiums, property and landscape managers, and landscapers;
- (11) For large users (defined under 81.7.C) and large turf projects, a soil testing program may be appropriate to assess the required concentrations of nitrogen and phosphorus in the soil for vegetation use, adjusting for Tahoe Basin growing conditions. This may mean no or low application rates of phosphorus-containing fertilizer for some sites and uses will be required.

81.7.B Fertilizer Management Programs: Projects that include landscaping or revegetation shall include, as a condition of approval, a fertilizer management program that addresses each of the considerations set forth in Subsection 81.7.A, as appropriate to the size of the project.

81.7.C Existing Uses: At the request of TRPA and for large users in particular as defined below, existing uses that require regular fertilizer maintenance, including but not limited to, golf courses, parks, cemeteries, plant nurseries, recreational ball fields, and large residential yards with an acre or more of turf, shall be required to submit fertilizer management programs for review and approval by TRPA. Review criteria shall include the considerations listed in Subsection 81.7.A. Failure to comply with the request, or to provide a program satisfactory to TRPA, may result in an enforcement action.

Following the first growing season after the approval of fertilizer management programs large users of fertilizers such as plant nurseries and those managing more than one acre of turf, or as otherwise identified by TRPA under an existing large user survey, shall initiate a tracking program to monitor fertilizer use on lands under their control. Such users shall review fertilizer management programs with TRPA or Lahontan RWQCB staff and present annual reports for the prior season's use and monitoring if required to TRPA by June 1 (or as required by Lahontan) of each year. The report shall include information on the rate, amount, and location of use. This information shall be presented in a format developed by TRPA consistent with the reporting requirements of other agencies to eliminate duplication, and shall be verifiable. TRPA shall include this information in its annual monitoring report under Chapter 32 including such measures of progress as numbers of approved programs, annual fertilizer use reports received, and reported reductions in fertilizer use or monitored parameter improvement.

- 81.7.D Requirements for Fertilizer Sales: Public outreach, including seller fertilizer recommendations consistent with Subsection 81.7.A, and provision of agency-developed fliers, and brochures of user information and recommended fertilizer rates from the Home Landscaping Guide for Lake Tahoe and Vicinity or its authorized equivalent shall be required in conjunction with fertilizer sales in the Tahoe Basin. Outlying fertilizer retailers with potential purchases from the Tahoe Basin will be requested to provide the same public outreach.
- 81.7.E Snow Hardeners: The use of ammonium nitrate, or other substances containing nitrogen or phosphorus, to harden snow is prohibited.