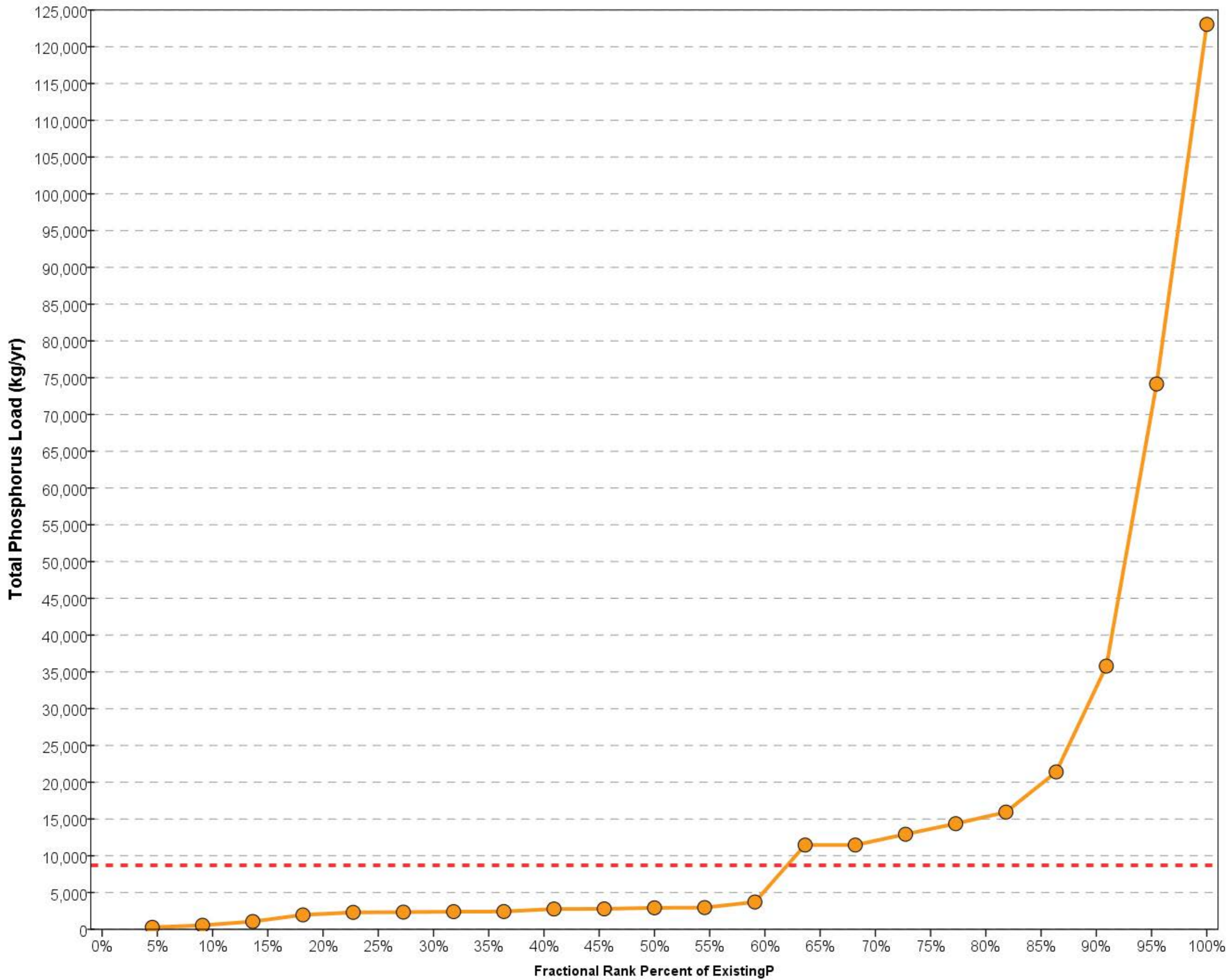
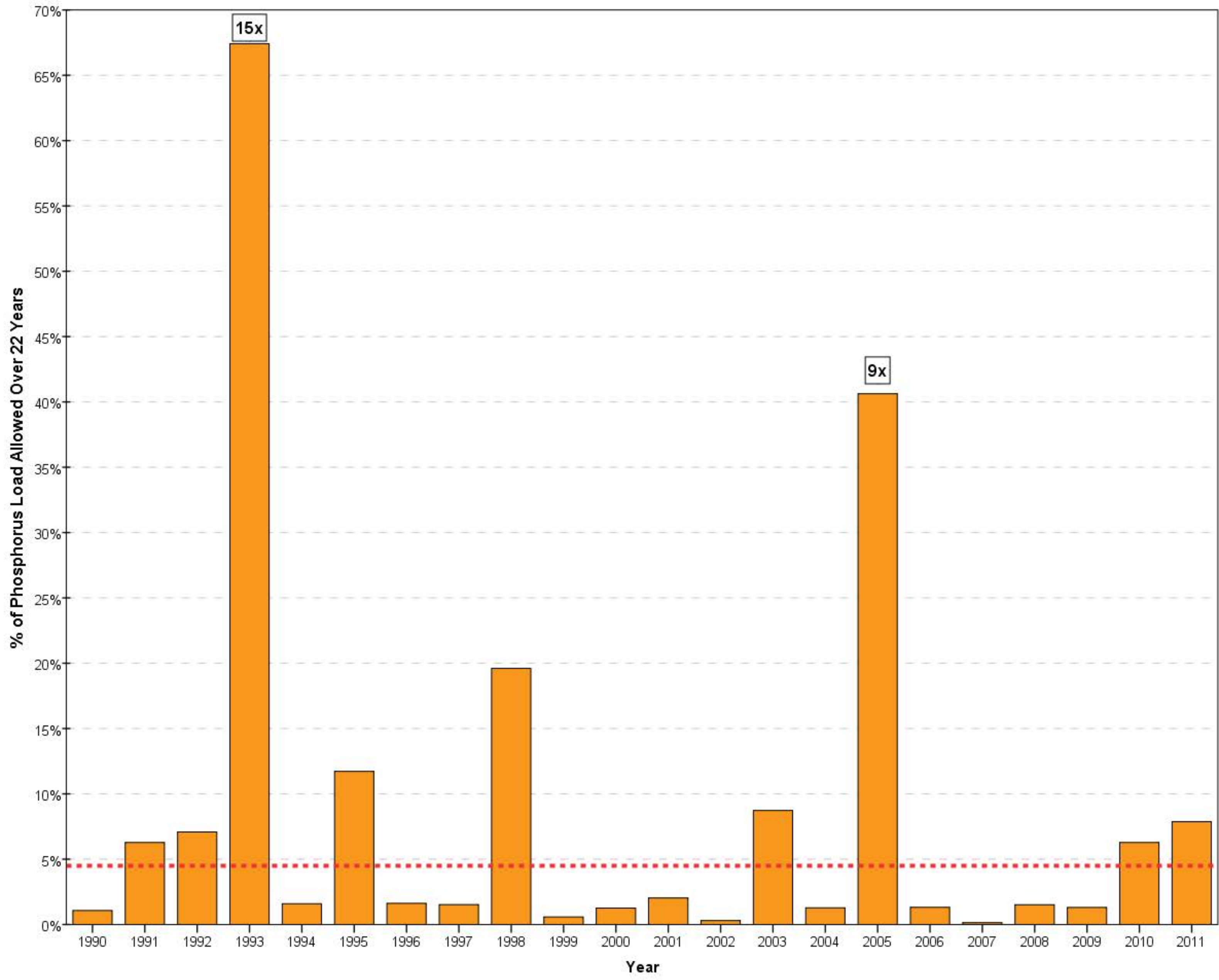
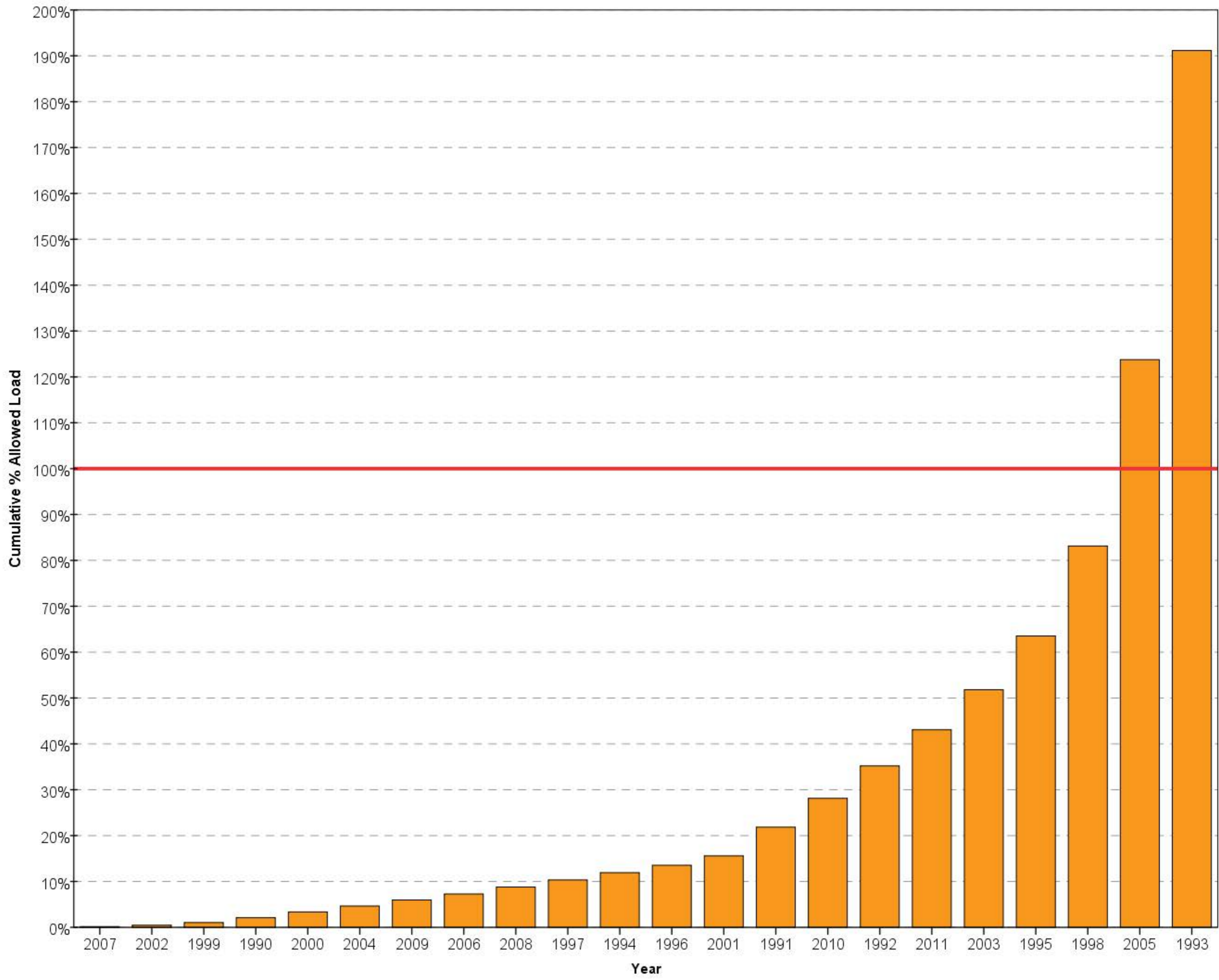




TMDL Chapter	TMDL Revision or Update Under Consideration
<p><b>1) Problem Statement</b></p>	<p>a) Add discussion of very long decay coefficient as related to asymmetric loading            b) Add discussion of TDS as a limiting factor for algae control by zooplankton            c) Add discussion of natural water quality factors/limitations</p>
<p><b>2) Water Quality Targets</b></p>	<p>a) Revise ammonia targets based on new (2013) 304a criteria            b) Establish elevation-based targets for Lake Elsinore            c) Specify appropriate averaging periods and methods for DO            d) Re-evaluate Chlorophyll-a targets for Canyon Lake</p>
<p><b>3) Source Assessment</b></p>	<p>a) Address de minimus discharges                * Subwatersheds 7, 8 &amp; 9 (above Mystic Lake)                * Dairies (current NPDES permit prohibits virtually all discharges)                * Caltrans (de minimus) &amp; USFS (natural)            b) Update all external load estimates based on best available land use data</p>
<p><b>4) Linkage Analysis</b></p>	<p>a) Replace static models w/ dynamic, long-term models for lakes and watershed            b) Evaluate in-lake exceedance frequency under pre-development conditions            c) Evaluate loading capacity w/ &amp; w/o recycled water additions (@ 1240' &amp; 1247' lake levels)            d) Consider developing separate TMDLs for Main Body and East Bay of Canyon Lake</p>
<p><b>5) TMDL Allocations</b></p>	<p>a) Calculate default allocations without an assumed aeration/mixing system            b) Integrate proposed waiver for Ag-zoned lands &lt;20 acres into TMDL            c) Recognize partial exemption for recycled water and adjust TMDL accordingly            d) Acknowledge and account for load reductions from prior BMPs</p>
<p><b>6) Implementation Plan</b></p>	<p>a) Explicitly authorize compliance through offset and trading programs            b) Explicitly define attainment of response targets as "de facto" compliance            c) Authorize compliance "credits" for providing additional recycled water            d) Explicitly authorize in-lake remediation projects                (to address nutrient cycling and increase available assimilative capacity)</p>
<p><b>7) Monitoring Requirements</b></p>	<p>a) Specify appropriate spatial and temporal averaging methods (2D &amp; 3D)            b) Authorize use of satellite-based monitoring technologies</p>







## Santa Ana Watershed Task Forces

#	Task Force	Notable Achievements
1	Nitrogen-TDS #1 (1989-90)	First watershed-wide Wasteload Allocation (well before anyone had ever heard of TMDLs)
2	Use-Attainability Analysis (1990-93)	Water quality objectives & SSOs for heavy metals (long before California Toxics Rule was enacted)
3	Category-A Assessment (1991-92)	Prepared studies to qualify streams as Category-A under the ISWP; approved by Regional Board.
4	Regional PQL (1992-3)	Conducted large-scale, blind laboratory study to develop PQLs (per ISWP); remains in use today.
5	Triennial Review - 1994	Stakeholders commit significant long-term resources to support expanded watershed planning efforts.
6	Nitrogen-TDS #2 (1996-2003)	Watershed-wide Salt & Nitrate Management Plan (new objectives, new WLA, long-term monitoring)
7	Chino Groundwater Basin (2000-2004)	Large-scale groundwater management plan w/ signif. desalting projects and recycled water recharges.
8	Hydro-Power Relicensing (1999-2004)	Relicensed hydroelectric dams, assured minimum instream flows, preserved multiple use strategy.
9	Big Bear Lake TMDL (2001-2012)	First TMDL developed thru collaborative process; first of in-lake remediation as nutrient offsets
10	Bacteria Standards (2004-2014)	High-flow suspension, redesignated some inappropriate uses, deleted invalid REC2 objectives.
11	Middle Santa Ana TMDL (2006-present)	Collaborative source identification studies, developed performance-based permit compliance alternatives.
12	Lake Elsinore TMDL (2006-present)	First use of pollutant trading to achieve compliance with nutrient TMDL requirements.
13	Selenium TMDL (2004-present)	First third-party TMDL (developed thru public collaborative process); Se offset & trading program.
14	303(d) Assessment (2008-10)	Avoided several unnecessary listings by providing resources to gather and analyze additional data.
15	San Bernardino Watermaster (2010-present)	Collaborative groundwater management in an unadjudicated basin; large-scale conservation project.
16	Basin Monitoring Program (2004-present)	Calculates current water quality in all groundwater basins every 3 years; new WLA every 10 years.
17	Imported Water Recharge (2006-2009)	Agreed to model groundwater quality throughout watershed and reassess trends every 6 years.
18	Emerging Constituents (CECs) (2008-2013)	Watershed-wide monitoring program for CECs in surface waters, imported waters, and POTW effluent.
19	OWOW (20?? - present)	Collaborative process to apply for and allocate grant funds to encourage multi-benefit regional projects.
20	Regional Monitoring Program (2014 - ∞)	Multiagency partnership (stormwater, wastewater, & water supply) to coordinate weekly water quality monitoring in high priority receiving waters.