

Nutrient Phase 2 Subgroup

March 14, 2017 | Meeting #5

Discussion materials

Table of Contents

Areas of general agreement	1
Figures of statewide loading	2
Map of lakes/reservoirs prioritized for TN/TP criteria adoptio	8
List of direct use water supply lakes/reservoirs	9
List of lakes/reservoirs with high recreational use (swim beach)	12

Areas of general agreement

Criteria

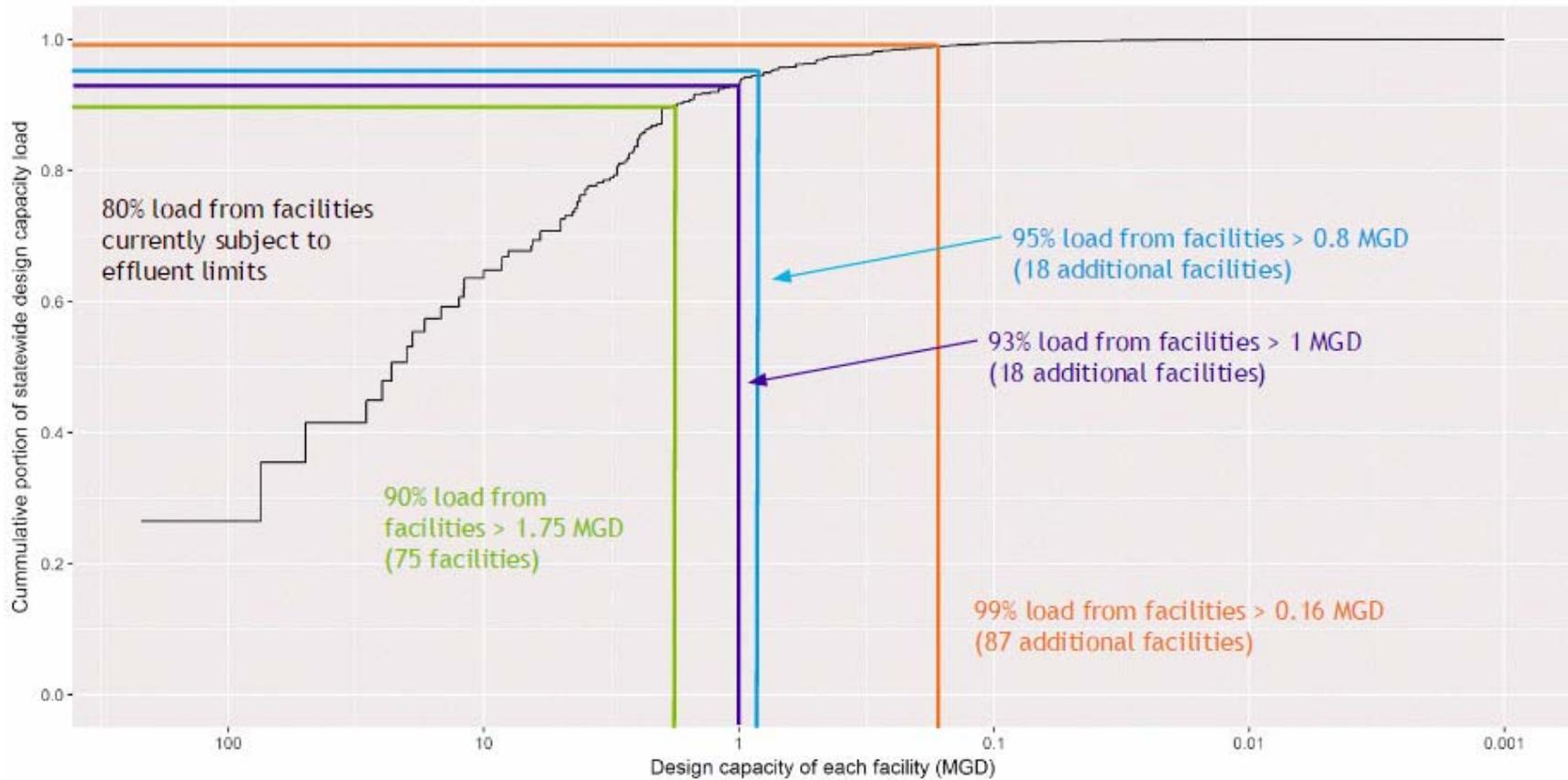
1. Prefer that Colorado delay adoption of Reg #31 numeric stream nitrogen and phosphorus criteria from 2022 to 2027 and instead make progress in reduction of nutrients through expansion of Reg #85. Agree that we do not yet know what that progress looks like.
2. Makes sense to work on standards for nutrients, selenium, and ammonia in conjunction with one another, in light of competing treatment challenges.
3. Agree it is important to develop feasibility studies in conjunction with standards development.
4. Should retain numeric interim values in Regulation #31, but should modify implementation dates to reflect the roadmap.

Regulation 85

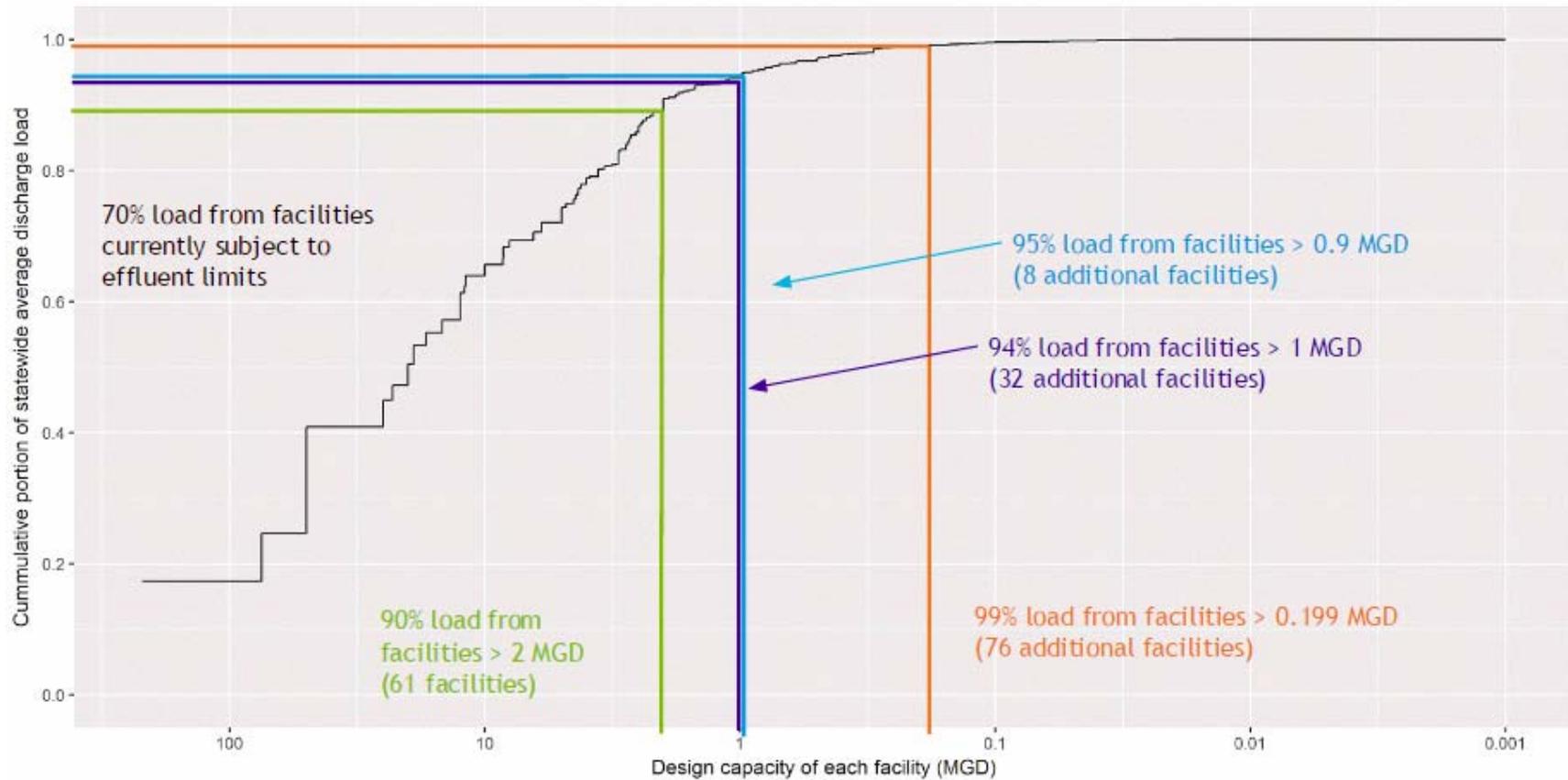
1. Agree we should add additional monitoring requirements in 2017 in order to help development of Colorado specific nutrient standards (need more discussion on specifically what data should be collected).
2. Like a toolbox approach for facilities that are newly brought into Regulation 85.
3. Like adding provisions with incentives for optimization, source reduction, and watershed trading (need more discussion on the specifics of these options).

Loading figures

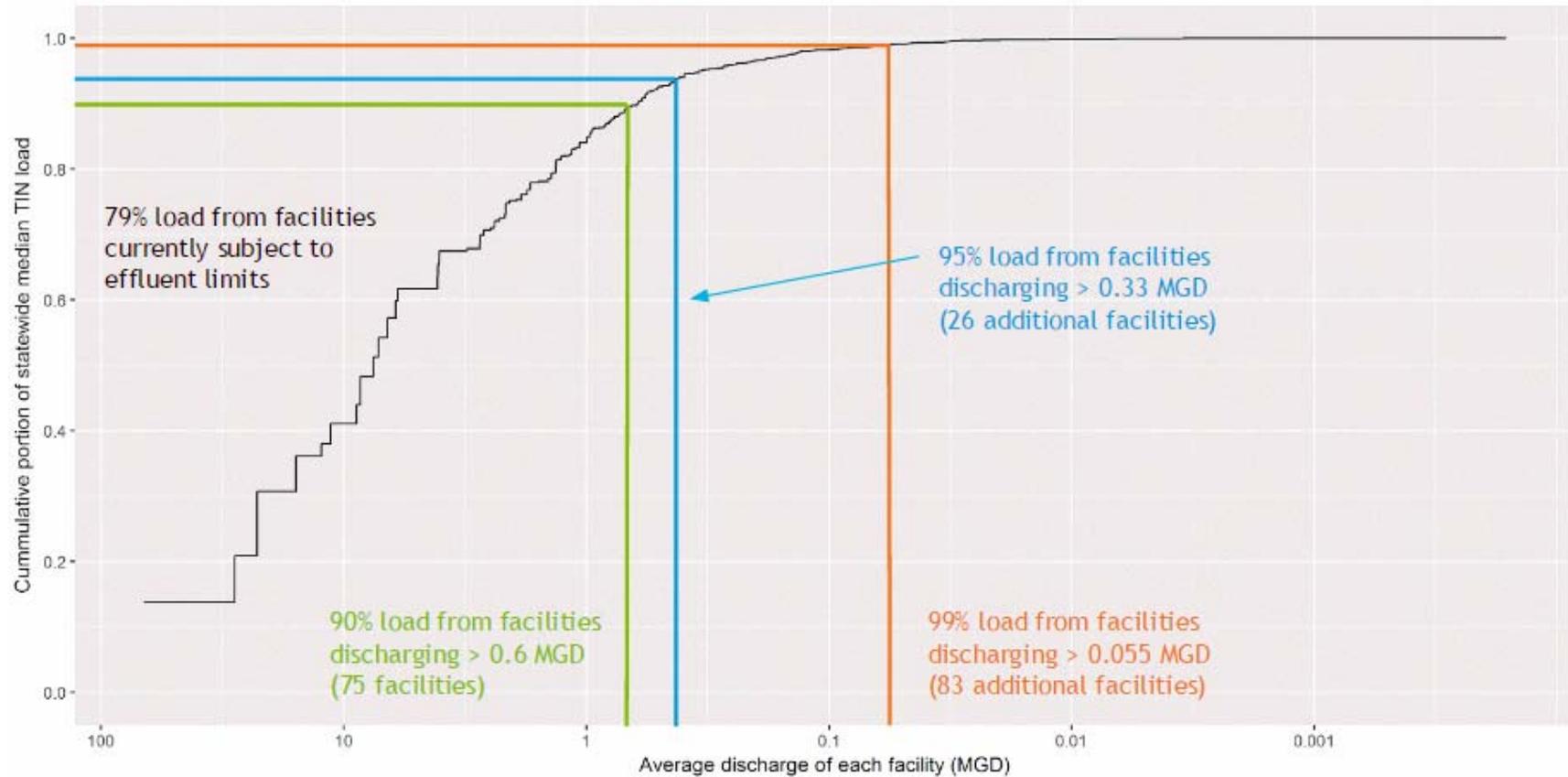
Statewide design capacity load from domestic WWTF



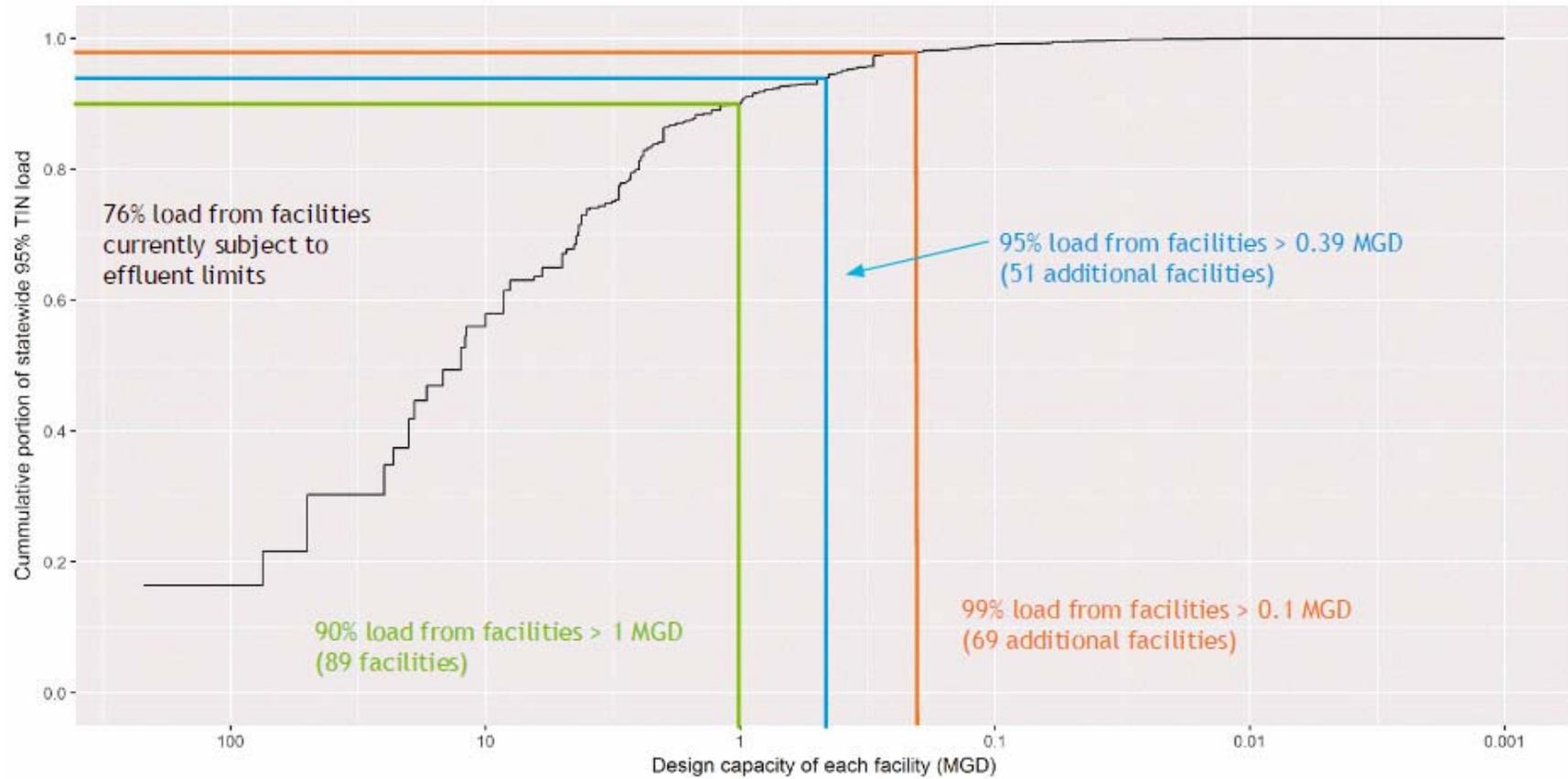
Statewide average discharge load from domestic WWTF



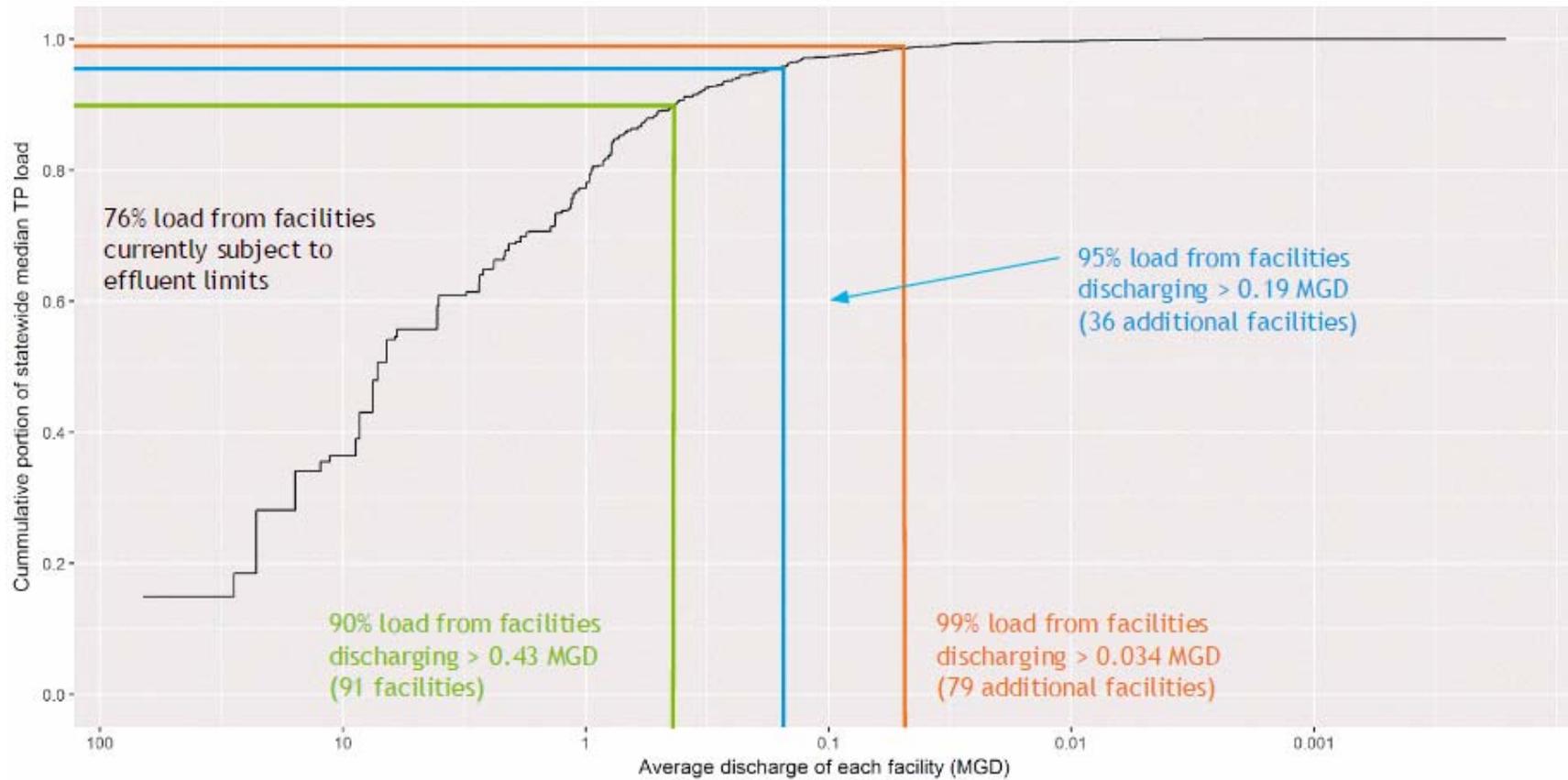
Statewide median TIN load from domestic WWTF



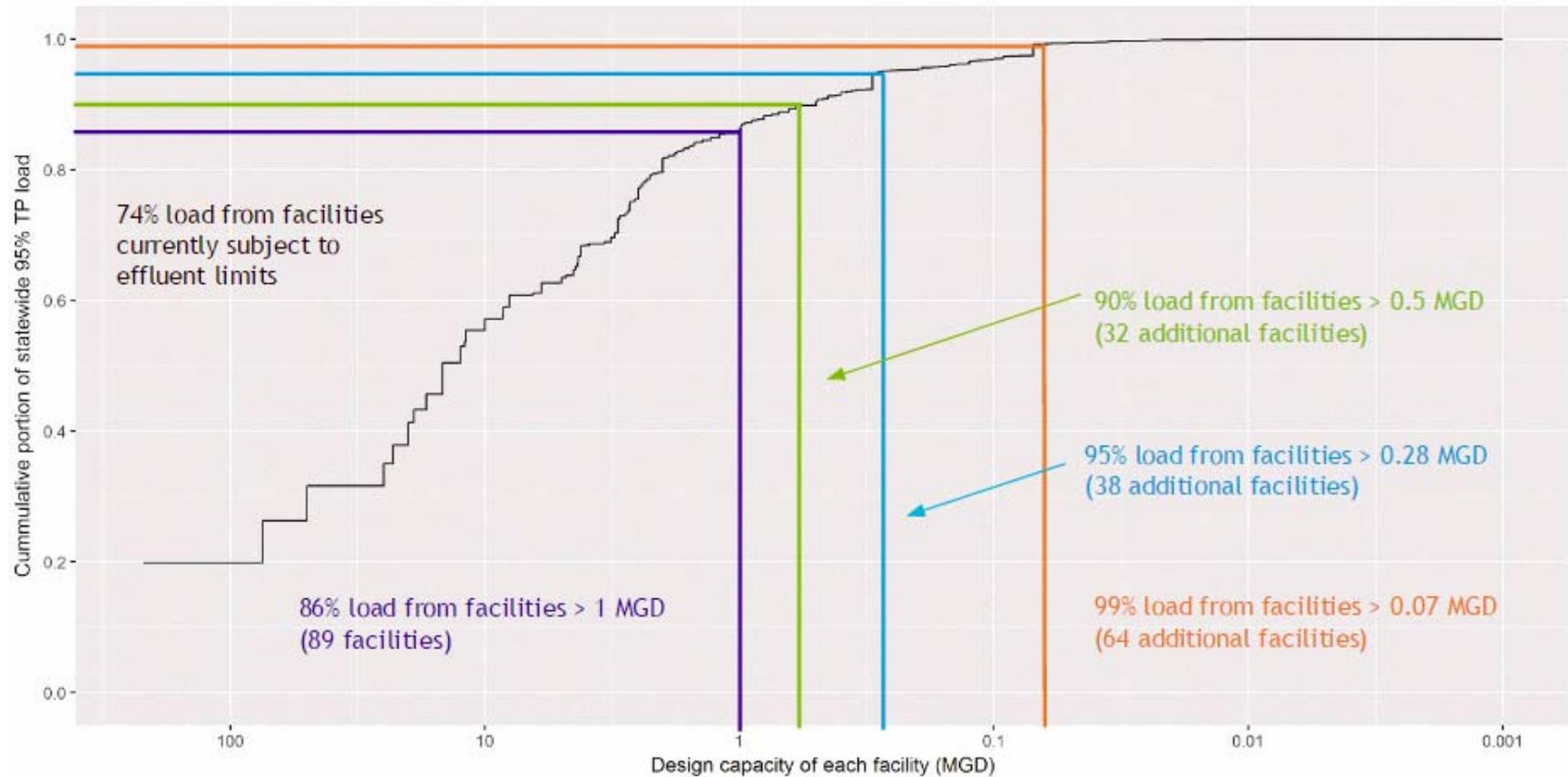
Statewide 95% TIN load from domestic WWTF



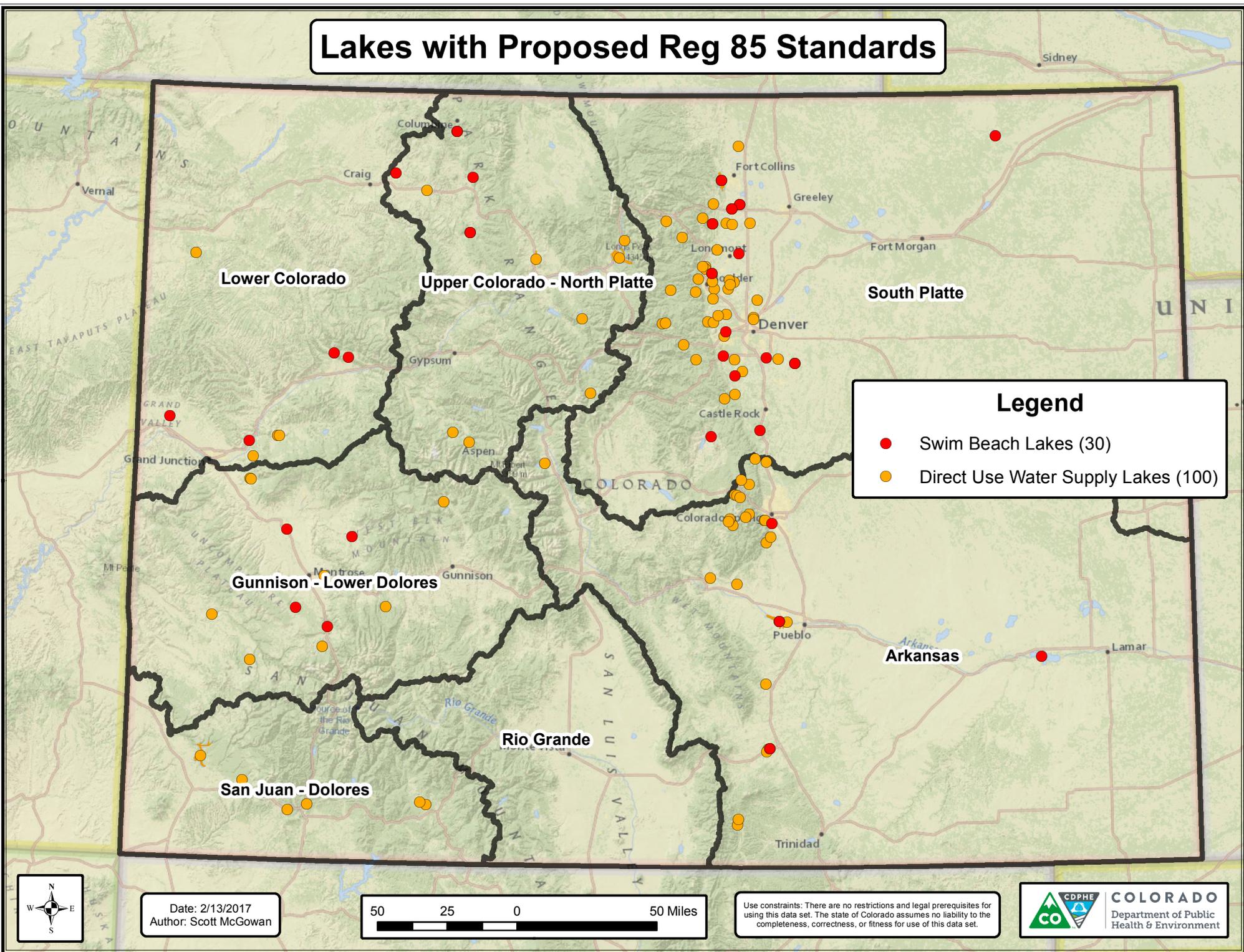
Statewide median TP load from domestic WWTF



Statewide 95% TIN load from domestic WWTF



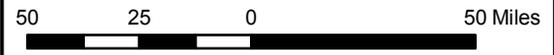
Lakes with Proposed Reg 85 Standards



Legend

- Swim Beach Lakes (30)
- Direct Use Water Supply Lakes (100)

Date: 2/13/2017
 Author: Scott McGowan



Use constraints: There are no restrictions and legal prerequisites for using this data set. The state of Colorado assumes no liability to the completeness, correctness, or fitness for use of this data set.



Lakes with Direct Use Water Supply

LakeName	AUID	Standards
Aurora Rampart Reservoir	COSPUS19_A	Yes
Aurora Reservoir	COSPUS16b_A	Yes
Base Line Reservoir	COSPBO17_A	Yes
Beckwith Reservoir	COARMA23_A	Yes
Berthoud Reservoir	COSPBT13_A	Yes
Bison Park Reservoir	COARUA38_A	Yes
Blunn Reservoir	COSPCL17a_A	Yes
Boulder Reservoir	COSPSV07_B	Yes
Boyd Lake	COSPBT12_B	Yes
Burch Lake	COSPSV13_A	Yes
Cabin Reservoir	COLCLC21_A	Yes
Carter Lake Reservoir	COSPBT11_A	Yes
Crystal Creek Reservoir	COARFO09_A	Yes
Evergreen Lake	COSPBE01d_A	Yes
Goose Pasture Tarn	COUCBL22_A	Yes
Grand Lake	COUCUC12_A	Yes
Home Supply Reservoir	COSPBT14_B	Yes
Horseshoe Lake Reservoir	COARMA26_B	Yes
Horsetooth Reservoir	COSPCP14_A	Yes
Jerry Creek Reservoir No. 1	COLCLC19_A	Yes
Jerry Creek Reservoir No. 2	COLCLC19_A	Yes
Joder Reservoir	COSPSV10_A	Yes

LakeName	AUID	Standards
Johnstown Reservoir	COSPBT13_A	Yes
Kenney Reservoir	COLCWH11_A	Yes
Kossler Lake	COSPBO15_A	Yes
Lake Loveland	COSPBT12_A	Yes
Lakewood Reservoir	COSPBO14_A	Yes
Left Hand Valley Reservoir	COSPSV07_A	Yes
Maple Grove Reservoir	COSPCL24_A	Yes
Margaret Spurgeon Reservoir No. 1	COSPSV07_A	Yes
Marshall Lake	COSPBO17_A	Yes
Martin Lake Reservoir	COARMA26_A	Yes
Marys Lake	COSPBT16_A	Yes
McLellan Reservoir	COSPUS22a_A	Yes
Monument Lake	COARLA15_A	Yes
North Catamount Reservoir	COARFO09_A	Yes
North Lake	COARLA15_A	Yes
North Poudre Reservoir No. 3	COSPCP21_A	Yes
Pueblo Reservoir	COARMA20_A	Yes
	COARMA20_A	Yes
Quincy Reservoir	COSPUS22a_A	Yes
Ralston Reservoir	COSPCL23_A	Yes
Rampart Reservoir	COARFO08_A	Yes
South Catamount Reservoir	COARFO09_A	Yes
Stagecoach Reservoir	COUCYA22_A	Yes
Standley Lake		

LakeName	AUID	Standards
Steamboat Lake	COSPBD02_A	Yes
Strontia Springs Reservoir	COUCYA22_A	Yes
Thomas Reservoir	COSPUS19_A	Yes
Ute Creek Reservoir	COSPBO16_A	Yes
Walsenburg Water System Reservoir	COUCUC13_A	Yes
Waneka Reservoir	COARMA26_A	Yes
Wildcat Reservoir	COSPBO16_A	Yes
	COUCRF12_A	Yes

Swim Beach Lakes

LakeName	BeachName	Historic_A
Aurora Reservoir	Aurora Reservoir Recreation Area	COSPUS16b_A
Bear Creek Reservoir	Bear Creek Lake Park	COSPBE01c_A
Boulder Reservoir	Boulder Reservoir Regional Park	COSPSV07_B
Boyd Lake	Boyd Lake State Park	COSPBT12_B
Carter Lake	Carter Lake State Park	COSPBT11_A
Chatfield Reservoir	Chatfield State Park	COSPUS06b_A
Cherry Creek Reservoir	Cherry Creek State Park	COSPCH02_A
Crawford Reservoir	Crawford State Park	COGULG13_A
Elkhead Reservoir	Elkhead State Park	COUCYA23_A
Garnet Mesa Reservoir	Sweitzer State Park	COGUUN20_A
Grass Valley Reservoir	Harvey Gap State Park	COLCLC20_A
Highline Lake	Highline State Park	COLCLC19_A
Horsetooth Reservoir	Hosetooth Reservoir State Park	COSPCP14_A
John Martin Reservoir	John Martin Reservoir State Park	COARLA11_A
Lake Loveland	North Lake Park	COSPBT12_A
Lake Oehm	Lathrop State Park	COARMA26_A
North Sterling Reservoir	North Sterling State Park	COSPLS03_B
Private Pond	Country Club of Colorado James M. Robb, Colorado River State Park - Island Acres Mountaintop Retreat Strawberry Park Hot Springs Camp Shady Brook (YMCA) Yogi Bear's Jellystone Park	COARFO11_A
Prospect Lake	Prospect Park	COSPCL24_A

LakeName	BeachName	Historic_A
Pueblo Reservoir	Lake Pueblo State Park	COARMA20_A
Ridgway Reservoir	Ridgway State Park	COGUUN19_A
Rifle Gap Reservoir	Rifle Gap State Park	COLCLC20_B
Stagecoach Reservoir	Stagecoach State Park	COUCYA22_A
Steamboat Lake	Steamboat Lake State Park	COUCYA22_A
Union Reservoir	Union Reservoir Recreation Area	COSPSV09_A