

Presentation Outline

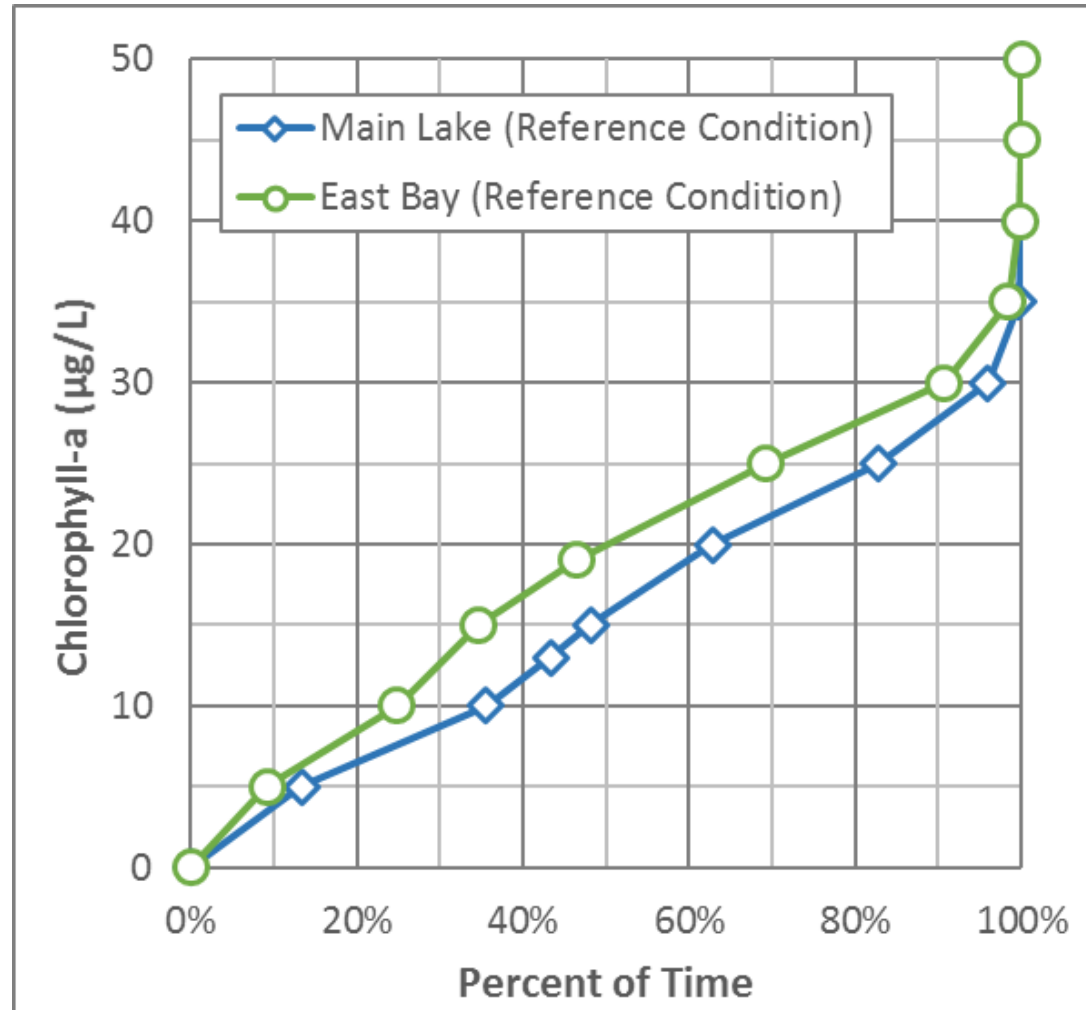
- Numeric Targets
- Allocations
- Other Items
- Path to Completion



Numeric Targets

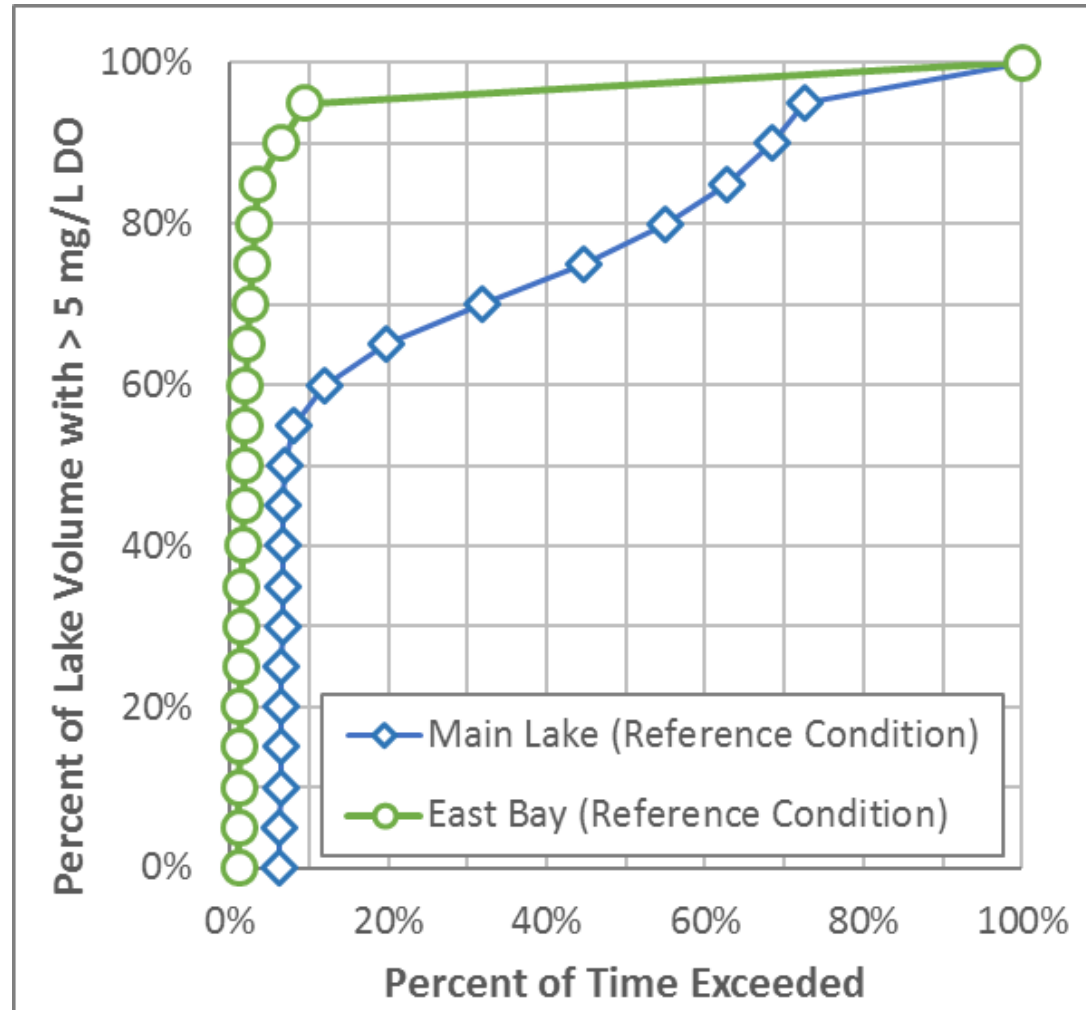
Canyon Lake – Chlorophyll-*a*

- ELCOM-CAEDYM reference scenario runs extended
 - Draft report based on 2007-11
 - Final targets based on 2001-16



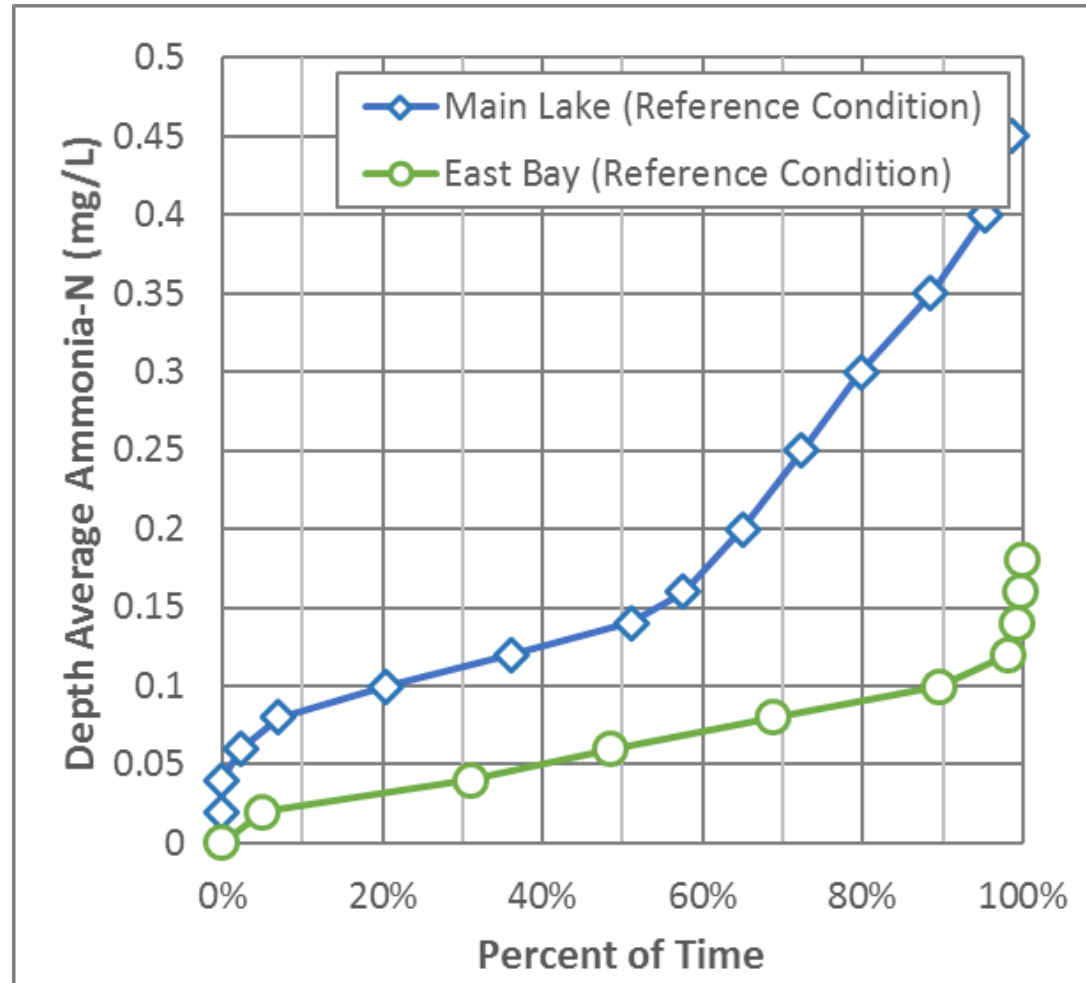
Canyon Lake – Dissolved Oxygen

- ELCOM-CAEDYM reference scenario runs extended
 - Draft report based on 2007-11
 - Final targets based on 2001-16



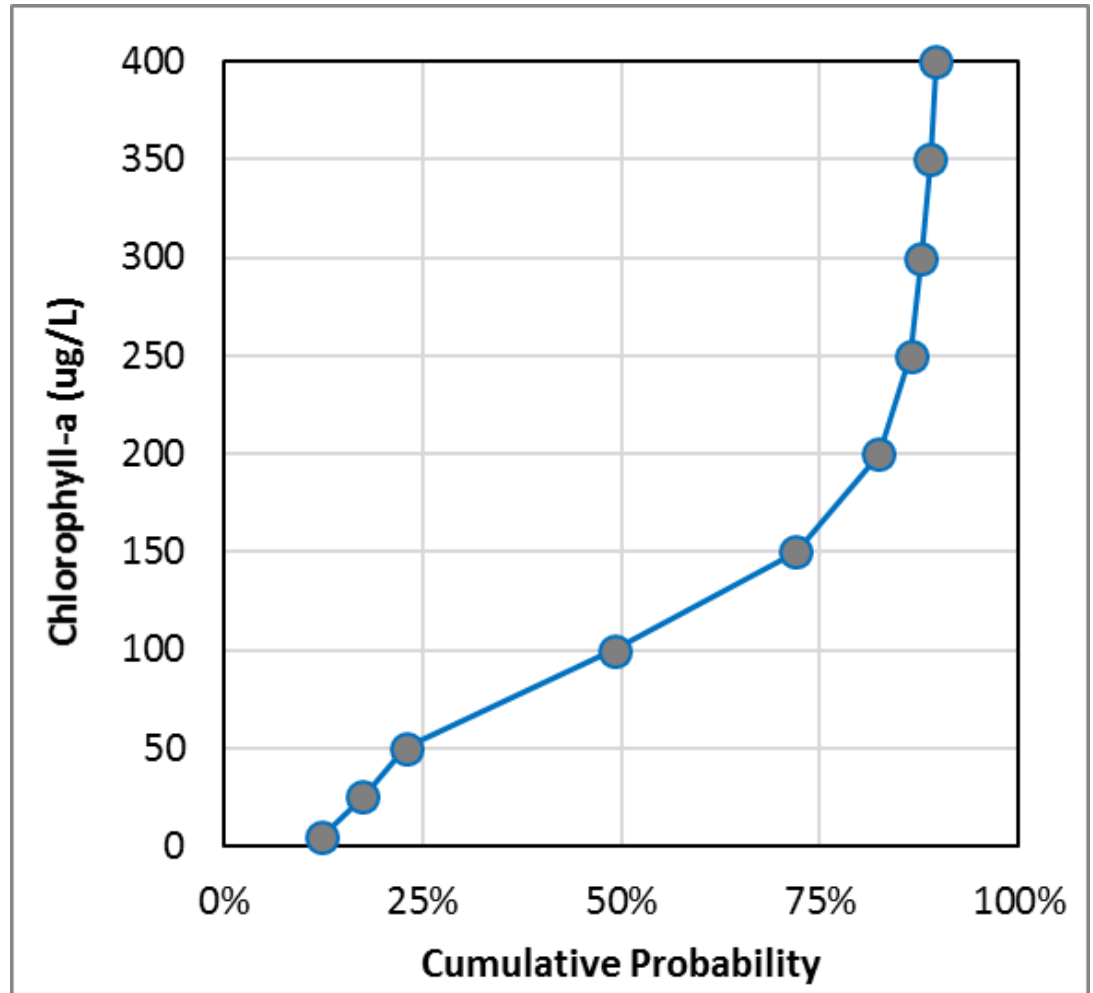
Canyon Lake – Total Ammonia

- ELCOM-CAEDYM reference scenario runs extended
 - Draft report based on 2007-11
 - Final targets based on 2001-16



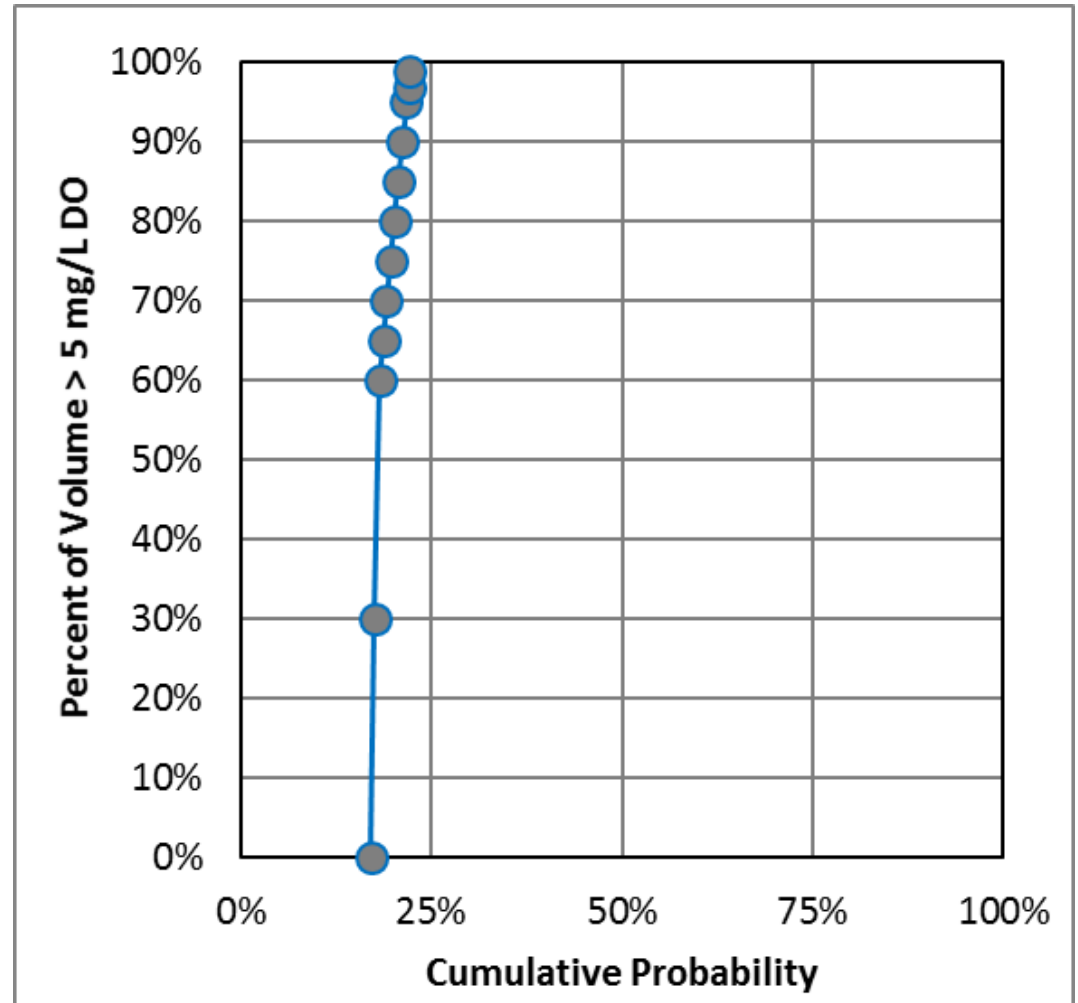
Lake Elsinore – Chlorophyll-*a*

- DYRESM-CAEDYM reference scenario runs (1916-2016)



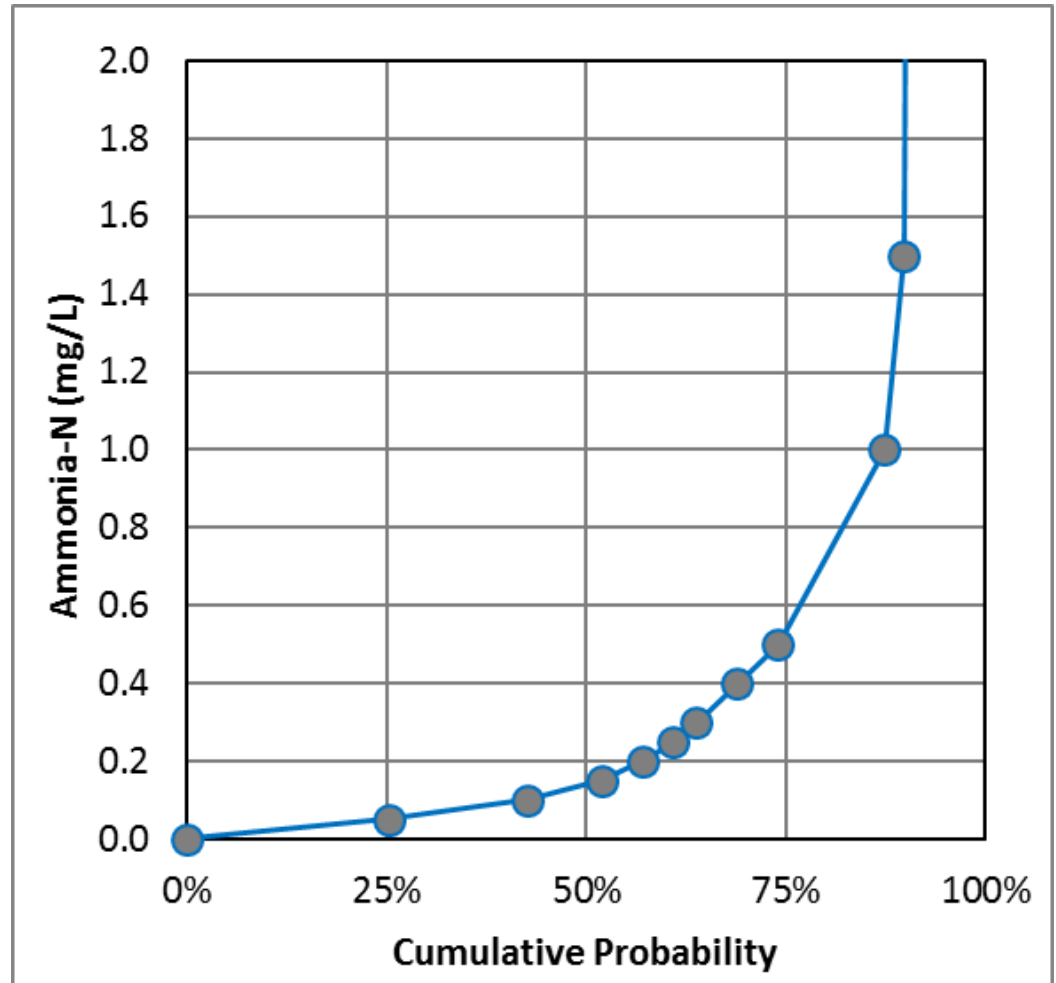
Lake Elsinore – Dissolved Oxygen

- DYRESM-CAEDYM reference scenario runs (1916-2016)



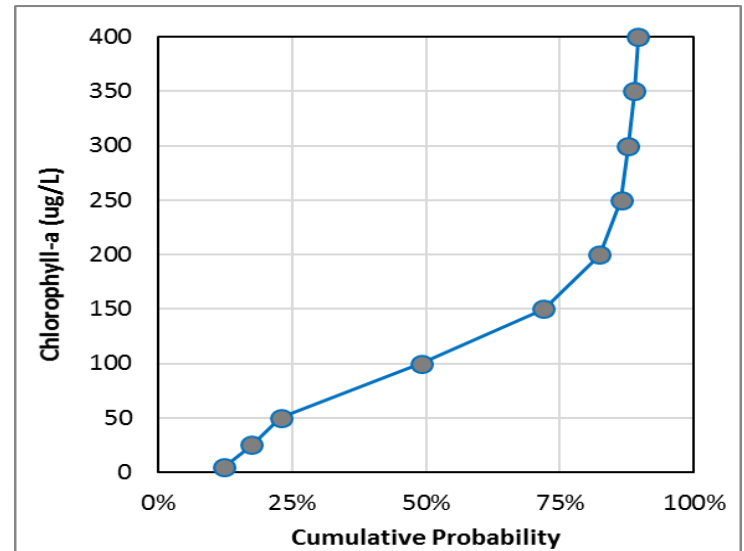
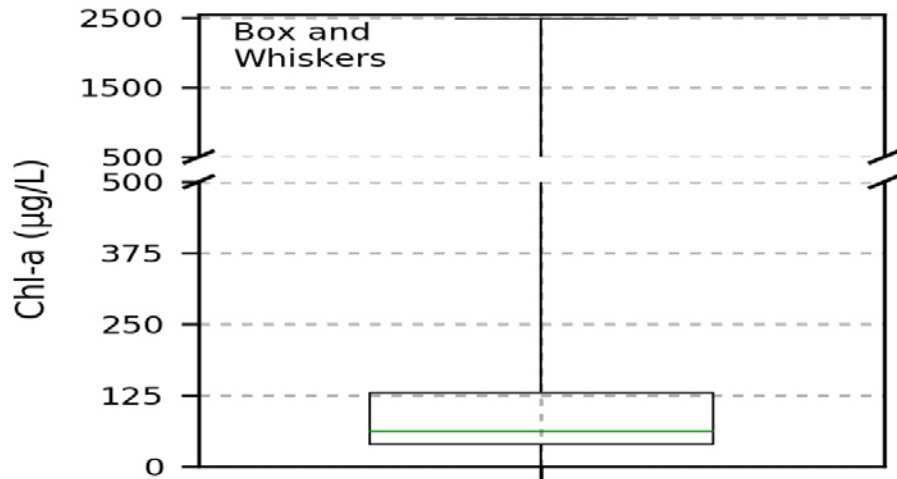
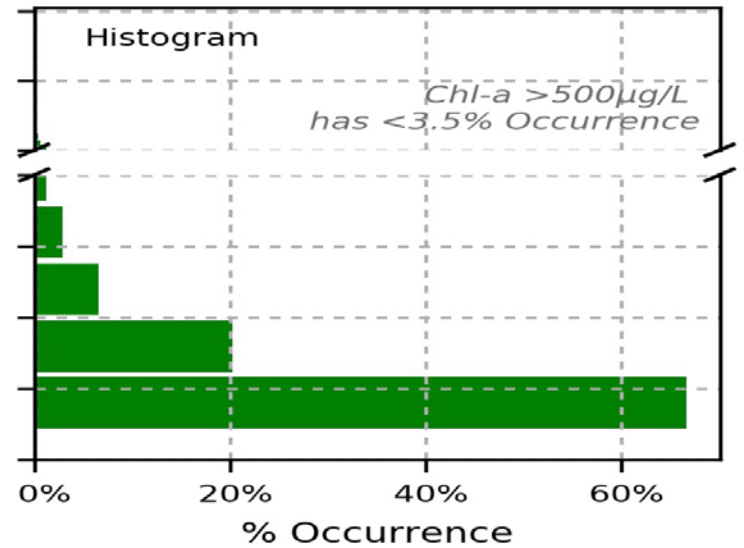
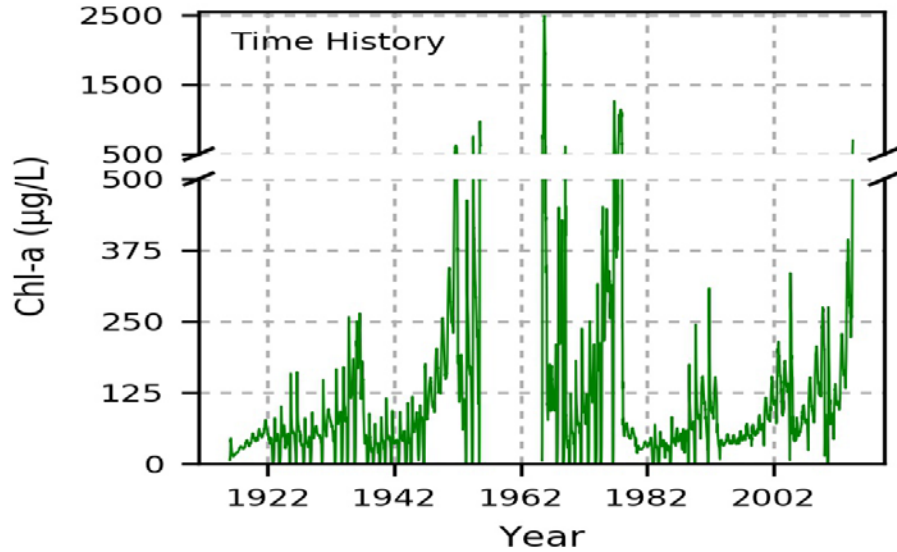
Lake Elsinore – Total Ammonia

- DYRESM-CAEDYM reference scenario runs (1916-2016)



Section 3 – Example from Report

Phytoplankton as Chlorophyll-a - Lake Elsinore



Allocations



Updated Allocation Tables

Group	WLA/LAs for Canyon Lake Main Lake		WLA/LAs for Canyon Lake East Bay		WLA/LAs for Local Lake Elsinore		LA for Canyon Lake Overflow to Lake Elsinore	
	TP (kg/yr)	TN (kg/yr)	TP (kg/yr)	TN (kg/yr)	TP (kg/yr)	TN (kg/yr)	TP (kg/yr)	TN (kg/yr)
Ag-CWAD	108	312	51	146	0.4	1.2	258	743
Ag-Small	16	47	9	26	1	4	39	113
MS4 Permittees	725	2,085	365	1,049	605	1,739	1,781	5,119
Federal	37	105	5	16	125	359	348	1,000
State	63	182	5	15	6	17	146	419
March JPA	18	52	-	-	-	-	27	77
Tribal	-	-	-	-	-	-	12	35
CAFO	3	9	1	3	0.2	0.5	9	25
CR&R	-	-	-	-	-	-	0.3	0.8
Total Allowable Load (TMDL)	971	2,791	437	1,255	738	2,121	2,620	7,533



Other Items

Agricultural EMCs

- Determines the amount of reduction that must be achieved by agricultural operators to return to reference condition
- To date, estimates based on based on UC Riverside field experimental data
 - Previous Section 4 draft had results but included note that these EMCs could be updated
- WRCAC implemented a soil health study that can provide better estimates of nutrient export
- Working with principals to incorporate those findings into the final numbers used in TMDL

Climate Change Impacts

- Lake Elsinore is managed to protect the recreational use regardless of wet/dry cycles, i.e., keep the lake wet
- Encouraging supplemental water addition to Lake Elsinore addresses potential impacts of climate change
 - Supplemental water addition already gives us more water than we would have under existing conditions - offsets potential increase in evaporative losses relative to reference condition
 - Potential for increased supplemental water additions in the future
- Incorporating a discussion of this item into Section 7 - Implementation



Path to Completion

Path to Completion

- Preparation of complete Technical Document
 - Incorporate final modeling results, allocations, etc.
 - Final revisions based on comments on previous drafts
 - Addressing “placeholder” issues, e.g., Ag EMCs, cyanotoxins
 - Incorporate Executive Summary
- Administrative Record
- Support Santa Ana Water Board preparation of a Staff Report and Basin Plan Amendment package
- Submit Technical Document by end of June

Final Document Content

- Executive Summary
- Section 1 – Introduction
- Section 2 – Problem Statement
- Section 3 – Numeric Targets
- Section 4 – Source Assessment
- Section 5 – Linkage Analysis
- Section 6 – Allocations
- Section 7 - Implementation
- Section 8 – Monitoring
- Section 9 – Demonstrating Compliance
- Section 10 – CEQA/ Environmental Analysis
- Section 11 – Economic Analysis
- Section 12 – References
- Appendices

Responsible Agency	Canyon Lake Main Lake		Canyon Lake East Bay		Local Lake Elsinore ¹		Canyon Lake Overflow to Lake Elsinore ¹	
	TP (kg/yr)	TN (kg/yr)	TP (kg/yr)	TN (kg/yr)	TP (kg/yr)	TN (kg/yr)	TP (kg/yr)	TN (kg/yr)
Banning	-	-	-	-	-	-	0	1
Beaumont	-	-	-	-	-	-	6	17
CAFO	3	9	1	3	0	0	9	25
Caltrans	7	19	2	7	6	17	16	47
Canyon Lake	8	22	9	26	8	22	25	72
Federal – Dept. of Defense	16	47	-	-	-	-	25	71
Hemet	-	-	31	88	-	-	51	148
Lake Elsinore	9	27	4	11	327	940	20	57
March Joint Powers Authority	18	52	-	-	-	-	27	77
Menifee	47	135	177	509	10	29	336	967
Moreno Valley	176	507	-	-	-	-	265	763
Murrieta	-	-	3	10	-	-	5	14
Perris	126	362	0	1	-	-	190	545
Riverside	4	10	-	-	-	-	5	16
Riverside County	355	1,020	140	402	144	414	858	2,468
San Jacinto	0	1	1	1	-	-	18	51
Wildomar	-	-	0	0	116	335	0	0

Responsible Agency	Canyon Lake Main Lake		Canyon Lake East Bay		Local Lake Elsinore ¹		Canyon Lake Overflow to Lake Elsinore ¹	
	TP (kg/yr)	TN (kg/yr)	TP (kg/yr)	TN (kg/yr)	TP (kg/yr)	TN (kg/yr)	TP (kg/yr)	TN (kg/yr)
Agriculture (CWAD - Irrigated)	67	193	22	64	-	-	149	427
Agriculture (CWAD - Non-irrigated)	41	119	28	82	0	1	110	316
Agriculture (Small)	16	47	9	26	1	4	39	113
CA Dept. of Fish and Wildlife	28	80	-	-	-	-	63	180
Federal - National Forest	-	-	1	3	125	359	222	639
Federal – Other	20	58	4	13	-	-	58	167
Federal – Wilderness	-	-	-	-	-	-	43	124
State Land	24	69	-	-	-	-	53	153
Tribal Reservations	-	-	-	-	-	-	12	35
Western Riv. Co. Reg. Con.	5	14	3	8	-	-	13	39
CR&R	-	-	-	-	-	-	0.3	0.8