

US EPA ARCHIVE DOCUMENT

Appendix H-1. Trophic Status of Assessed Significant Publicly Owned Lakes

Jurisdiction	Assessed		Oligotrophic		Mesotrophic		Eutrophic		HyperEutrophic	
	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes
Alabama	33	276,436	3	585	8	54,077	21	210,539	1	11,235
Alaska										
Arizona	11		0		3		8			
Arkansas										
California										
Colorado	38	47,530	7	5,272	14	15,722	13	15,957	4	10,579
Connecticut										
<i>Cortina Rancheria</i>										
Delaware										
District of Columbia										
Florida	262	1,571	191	604	51	802	13	71	7	94
Georgia										
Hawaii										
Idaho										
Illinois	329	157,408	6	180	30	3,912	159	79,398	134	73,918
Indiana	164	54,153	42	4,761	62	37,389	41	10,205	19	1,798
Iowa	115	41,190					115	41,190		
Kansas	240	123,632	3	140	36	22,052	129	98,521	64	2,919
Kentucky	105	217,480	15	72,143	33	42,972	54	102,237	3	128
Louisiana										
Maine										
<i>Manzanita Band</i>										
Maryland	58	21,010	0	0	16	15,172	42	5,838	0	0
Massachusetts	593	64,688	8	25,790	150	17,057	380	18,912	54	2,892
Michigan	730	491,931	115	172,591	375	175,307	207	124,881	33	19,152
Minnesota	1,984	2,131,026	309	210,108	723	1,099,929	667	645,241	285	175,748
Mississippi										
Missouri	145		8		37		89		11	
Montana	177	797,184	49	289,569	71	425,599	46	81,495	1	500
Nebraska	81	121,610	2	1,601	3	3,023	29	94,393	47	22,593
Nevada	17	319,946	3	133,230	12	133,116	2	53,600		
New Hampshire	671	155,773	199	115,924	315	31,672	157	8,177		
New Jersey	116	10,462			3	111	113	10,351		
New Mexico										

Appendix H-1. Trophic Status of Assessed Significant Publicly Owned Lakes

Jurisdiction	Dystrophic		Comment
	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes	
Alabama	0	0	
Alaska			
Arizona			
Arkansas			All of the state's significant publicly owned lakes are ranked based on a combination of total phosphorus, secchi visibility, and chlorophyll a value of each lake.
California			
Colorado			
Connecticut			
<i>Cortina Rancheria</i>			
Delaware			
District of Columbia			
Florida			
Georgia			
Hawaii			
Idaho			
Illinois			
Indiana	0	0	
Iowa			All Iowa lakes are relatively shallow and highly productive, and all can be considered eutrophic.
Kansas	0	0	Kansas assessed an additional 8 lakes (50,018 acres) with extreme turbidity conditions and 67 lakes (7,687 lakes) with unknown trophic status.
Kentucky	0	0	
Louisiana			
Maine			
<i>Manzanita Band</i>			
Maryland	0	0	Lakes assessed as having a split trophic condition are included in the higher trophic category. Source: MD Lake Water Quality Assessment Report, 1997.
Massachusetts	1	37	
Michigan			
Minnesota	0	0	
Mississippi			
Missouri			
Montana	10	22	
Nebraska			
Nevada			Nevada also assessed an additional 2 lakes (960 acres) for which trophic status was not determined.
New Hampshire			
New Jersey			
New Mexico			

Appendix H-1. Trophic Status of Assessed Significant Publicly Owned Lakes

Jurisdiction	Assessed		Oligotrophic		Mesotrophic		Eutrophic		HyperEutrophic	
	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes
New York										
North Carolina	161	311,236	44	103,130	29	75,898	70	112,820	4	404
North Dakota	124	617,330	0	0	20	503,386	49	19,152	55	94,792
Ohio										
Oklahoma	199	624,343	14	10,568	69	105,325	77	342,706	39	165,744
Oregon	201	491,255	58	35,280	72	75,212	60	191,310	11	189,453
Pennsylvania	66	76,122			13	6,268	39	44,630	14	25,224
Puerto Rico	18		3		3		12			
Rhode Island	62	7,307	21	1,900	28	4,089	10	1,199	2	99
South Carolina	27	452,654			14	247,414	13	205,240		
South Dakota	112	132,159	2	1,199	10	23,205	37	30,526	63	77,229
Tennessee	122	538,438	21	100,346	38	320,408	39	73,338	24	44,346
Texas										
<i>Torres-Martinez Desert Band</i>										
Utah	129	460,561	47	285,154	57	59,191	24	116,166	1	50
Vermont	202	42,299	33	9,817	121	25,404	30	6,205	2	473
Virginia										
Washington										
West Virginia	81	21,423	17	7,724	31	5,335	33	8,365		
Wisconsin										
Wyoming										
<b>Total</b>	<b>7,373</b>	<b>8,808,157</b>	<b>1,220</b>	<b>1,587,615</b>	<b>2,447</b>	<b>3,529,046</b>	<b>2,778</b>	<b>2,752,663</b>	<b>878</b>	<b>919,371</b>

Appendix H-1. Trophic Status of Assessed Significant Publicly Owned Lakes

Jurisdiction	Dystrophic		Comment
	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes	
New York			
North Carolina	14	18,984	
North Dakota			
Ohio			
Oklahoma	0	0	Oklahoma also assessed an additional 2 lakes (6,019 acres) for which trophic status was unknown (silt dominated).
Oregon	0	0	"Oligotrophic" includes 12 lakes (8,752 acres) classified as "ultra-oligotrophic."
Pennsylvania			Pennsylvania rates lakes as oligotrophic/mesotrophic because no immediate nutrient control action is needed on such lakes.
Puerto Rico			
Rhode Island	1	20	Oligotrophic includes lakes classified as oligo/meso and meso/oligo; mesotrophic includes lakes classified as meso/eutrophic. Rhode Island also surveyed an additional 4 lakes (366 acres) for which trophic status was not determined.
South Carolina			South Carolina reported the number and acreage of lakes as either oligotrophic/mesotrophic or eutrophic/hypereutrophic. The state also surveyed an additional 19 lakes (23,473 acres) for which trophic status was unknown.
South Dakota	0	0	
Tennessee			This information is from the state's 1996 305(b) report, but is still considered to reflect current conditions.
Texas			
<i>Torres-Martinez Desert Band</i>			
Utah			
Vermont	16	400	
Virginia			
Washington			
West Virginia			
Wisconsin			
Wyoming			
<b>Total</b>	<b>42</b>	<b>19,463</b>	

Table H-2. Acidity in Assessed Significant Publicly Owned Lakes

Jurisdiction	Number of Lakes Assessed for Acid Sensitivity	Lake Acres Assessed for Acid Sensitivity	Number of Lakes Exhibiting Sensitivity	Lake Acres Exhibiting Sensitivity	Number of Lakes Threatened by Acidity	Lake Acres Threatened by Acidity	Comment
Alabama	39	485,046	1	1,850	6	32,930	
Alaska							
Arizona							
Arkansas							
California							
Colorado			1	300			
Connecticut							
<i>Cortina Rancheria</i>							
Delaware							
District of Columbia							
Florida							
Georgia							
Hawaii							
Idaho							
Illinois	306	157,408	0	0			
Indiana							
Iowa	20	4,799	0	0	0	0	Data from 1992-1995. No monitoring during 1996-1997.
Kansas	307	181,337	7	43	200	1,500	The 200 threatened lakes are in a mined land area and are not included in the total number surveyed.
Kentucky	2	354	2	354	0	0	
Louisiana							
Maine							
<i>Manzanita Band</i>							
Maryland	58	21,010	0	0	1	20	Source: MD Lake Water Quality Assessment Report, 1997.
Massachusetts							
Michigan			5	755			
Minnesota	1,103	878,580	0	0	191	52,864	Minnesota notes that 191 lakes (52,864 acres) are at risk for acidity because they have a naturally low buffering capacity.
Mississippi							
Missouri							
Montana	200	1,000			1	75	Based on study by US Forest Service.
Nebraska	81	121,610	0	0	0	0	
Nevada							
New Hampshire	687	156,036	50	2,167			
New Jersey							
New Mexico							
New York			424	50,276			
North Carolina							
North Dakota							
Ohio							
Oklahoma	22	57,315	10	23,163	12	34,152	
Oregon	42		0		113		
Pennsylvania							

Table H-2. Acidity in Assessed Significant Publicly Owned Lakes

Jurisdiction	Number of Lakes Assessed for Acid Sensitivity	Lake Acres Assessed for Acid Sensitivity	Number of Lakes Exhibiting Sensitivity	Lake Acres Exhibiting Sensitivity	Number of Lakes Threatened by Acidity	Lake Acres Threatened by Acidity	Comment
Puerto Rico							
Rhode Island	84	9,718	1	26	23	2,524	
South Carolina	40	474,651	2	420			
South Dakota	112	132,159	0	0	0	0	
Tennessee	121	537,261	5	575			
Texas							
<i>Torres-Martinez Desert Band</i>							
Utah							
Vermont							
Virginia							
Washington							
West Virginia	93	21,523	2	61	5	7,405	
Wisconsin							
Wyoming							
<b>Total</b>	<b>3,317</b>	<b>3,239,806</b>	<b>510</b>	<b>79,990</b>	<b>552</b>	<b>131,470</b>	

Appendix H-3. Source of Acidity in Assessed Significant Publicly Owned Lakes

Jurisdiction	Acid Deposition				Acid Mine Drainage			
	Number of Lakes Impacted	Lake Acres Impacted	Number of Lakes Threatened	Lakes Acres Threatened	Number of Lakes Impacted	Lake Acres Impacted	Number of Lakes Threatened	Lakes Acres Threatened
Alabama	0	0			1	1,850		
Alaska								
Arizona								
Arkansas								
California								
Colorado					1	300		
Connecticut								
<i>Cortina Rancheria</i>								
Delaware								
District of Columbia								
Florida								
Georgia								
Hawaii								
Idaho								
Illinois	0	0			0	0		
Indiana								
Iowa	0	0	0	0	0	0	0	0
Kansas	0	0			7	43	200	1,500
Kentucky	0	0	0	0	2	354	0	0
Louisiana								
Maine								
<i>Manzanita Band</i>								
Maryland			1	20				
Massachusetts								
Michigan								
Minnesota								
Mississippi								
Missouri								
Montana					1	75		
Nebraska								
Nevada								
New Hampshire	23	1,007						
New Jersey								
New Mexico								
New York								
North Carolina								
North Dakota								
Ohio								
Oklahoma	0	0			21	57,167		
Oregon	0	0			0	0		



Appendix H-3. Source of Acidity in Assessed Significant Publicly Owned Lakes

Jurisdiction	Natural Condition				Other				Comment
	Number of Lakes Impacted	Lake Acres Impacted	Number of Lakes Threatened	Lakes Acres Threatened	Number of Lakes Impacted	Lake Acres Impacted	Number of Lakes Threatened	Lakes Acres Threatened	
Alabama	0	0			0	0			
Alaska									
Arizona									
Arkansas									
California									
Colorado									
Connecticut									
<i>Cortina Rancheria</i>									
Delaware									
District of Columbia									
Florida									
Georgia									
Hawaii									
Idaho									
Illinois	0	0			0	0			
Indiana									
Iowa	0	0	0	0	0	0	0	0	
Kansas	0	0			0	0			The 200 threatened lakes are in a mined land area.
Kentucky	0	0	0	0	0	0	0	0	
Louisiana									
Maine									
<i>Manzanita Band</i>									
Maryland									Source: MD Lake Water Quality Assessment Report, 1997.
Massachusetts									
Michigan									
Minnesota									
Mississippi									
Missouri									
Montana									Based on study by US Forest Service. Nebraska does not have a lake acidity problem.
Nebraska									
Nevada									
New Hampshire	27	1,160							
New Jersey									
New Mexico									
New York									
North Carolina									
North Dakota									
Ohio									
Oklahoma	1	148			0	0			
Oregon	0	0			0	0			

Appendix H-3. Source of Acidity in Assessed Significant Publicly Owned Lakes

Jurisdiction	Acid Deposition				Acid Mine Drainage			
	Number of Lakes Impacted	Lake Acres Impacted	Number of Lakes Threatened	Lakes Acres Threatened	Number of Lakes Impacted	Lake Acres Impacted	Number of Lakes Threatened	Lakes Acres Threatened
Pennsylvania								
Puerto Rico								
Rhode Island								
South Carolina								
South Dakota	0	0	0	0	0	0	0	0
Tennessee					5	575		
Texas								
<i>Torres-Martinez Desert Band</i>								
Utah								
Vermont								
Virginia								
Washington								
West Virginia								
Wisconsin								
Wyoming								
<b>Total</b>	<b>23</b>	<b>1,007</b>	<b>1</b>	<b>20</b>	<b>38</b>	<b>60,364</b>	<b>200</b>	<b>1,500</b>

Appendix H-3. Source of Acidity in Assessed Significant Publicly Owned Lakes

Jurisdiction	Natural Condition				Other				Comment
	Number of Lakes Impacted	Lake Acres Impacted	Number of Lakes Threatened	Lakes Acres Threatened	Number of Lakes Impacted	Lake Acres Impacted	Number of Lakes Threatened	Lakes Acres Threatened	
Pennsylvania									
Puerto Rico									
Rhode Island									
South Carolina	2	420							The watersheds of these clear blackwater lakes contain extensive cypress swamps.
South Dakota	0	0	0	0	0	0	0	0	
Tennessee									
Texas									
<i>Torres-Martinez Desert Band</i>									
Utah									
Vermont									
Virginia									
Washington									
West Virginia									
Wisconsin									
Wyoming									
<b>Total</b>	<b>30</b>	<b>1,728</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

Appendix H-4. Trends in Assessed Significant Publicly Owned Lakes

Jurisdiction	Assessed		Improving		Stable		Degrading		Comment
	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes	Number of Significant Pubic Lakes	Acreage of Significant Pubic Lakes	
Alabama	33	232,871	1	2,300	26	179,363	6	51,208	Alabama also reported an additional 12 lakes (231,140 acres) as having unknown trend.
Alaska									
Arizona									
Arkansas									
California									
Colorado									
Connecticut									
<i>Cortina Rancheria</i>									
Delaware									
District of Columbia									
Florida	202	927,488	46	184,320	113	625,792	43	117,376	
Georgia									
Hawaii									
Idaho									
Illinois	175	94,111	18	22,986	21	6,735	31	16,982	Illinois reported 105 lakes totaling 47,408 acres as fluctuating in trend.
Indiana	109	50,979	15	8,474	72	22,569	22	19,936	Indiana also reported an additional 55 lakes (3,174 acres) as having an unknown trend.
Iowa	114	41,176	13	3,981	90	35,831	11	1,364	Water quality trends are based primarily on professional judgement of Iowa DNR staff.
Kansas	122	168,434	7	7,497	84	123,554	31	37,383	Trends based on change in trophic status. Kansas also reported an additional 185 lakes (12,903 acres) for which trend was not determined.
Kentucky	17	5,835	4	327	13	5,508			Kentucky has a basin-watershed approach. All lakes will be sampled every 5 years.
Louisiana									
Maine									
<i>Manzanita Band</i>									
Maryland									
Massachusetts									
Michigan									
Minnesota	303		121		166		16		Data from lakes in the citizen monitoring program in 1997. Trends were done for lakes with at least 9 years of data and at least 4 readings per summer.
Mississippi									
Missouri									
Montana	1						1	126,000	Flathead Lake is the only lake for which trend data are available.
Nebraska									
Nevada	17	319,946	0	0	17	319,946	0	0	
New Hampshire	102	35,190	20	8,968	63	23,088	19	3,134	Based on short-term trends in trophic status.
New Jersey									
New Mexico									
New York									

Appendix H-4. Trends in Assessed Significant Publicly Owned Lakes

Jurisdiction	Assessed		Improving		Stable		Degrading		Comment
	Number of Significant Public Lakes	Acreage of Significant Public Lakes	Number of Significant Public Lakes	Acreage of Significant Public Lakes	Number of Significant Public Lakes	Acreage of Significant Public Lakes	Number of Significant Public Lakes	Acreage of Significant Public Lakes	
North Carolina									
North Dakota	16	473,612	2	74,824	10	392,723	4	6,066	Trends based on change in trophic status.
Ohio									
Oklahoma									
Oregon	12	6,443	4	2,208	5	690	3	3,545	
Pennsylvania									
Puerto Rico	18	7,343	11	5,060	7	2,283	0	0	Puerto Rico reported trends in several parameters. Trends in phosphorus data are presented in this table.
Rhode Island	49	6,531	12	2,073	29	2,951	8	1,508	Rhode Island also reported an additional 15 lakes (662 acres) for which trend was not determined.
South Carolina	38	473,160	12	250,740	24	197,310	2	25,110	Trends based on change in trophic status.
South Dakota	106	126,222	54	53,808	22	28,537	30	43,877	South Dakota also reported an additional 6 lakes (5,937 acres) as having unknown trend.
Tennessee									
Texas									
<i>Torres-Martinez Desert Band</i>									
Utah									
Vermont									
Virginia									
Washington									
West Virginia	11	15,195	4	6,900	7	8,295	0	0	
Wisconsin									
Wyoming									
<b>Total</b>	<b>1,445</b>	<b>2,984,537</b>	<b>344</b>	<b>634,465</b>	<b>769</b>	<b>1,975,174</b>	<b>227</b>	<b>453,490</b>	

Appendix H-5. 1996-1997 Clean Lakes Program Projects

Jurisdiction	Phase 1 Projects		Phase 2 Projects		Phase 3 Projects		LWQA Annual Grants		Comment
	Number of Ongoing Projects	Number of Projects Completed	Number of Ongoing Projects	Number of Projects Completed	Number of Ongoing Projects	Number of Projects Completed	Number of Ongoing Projects	Number of Projects Completed	
Alabama	5								
Alaska									
Arizona	0	0							
Arkansas									
California									
Colorado	0	0	0	0	0	0	0	0	
Connecticut									
<i>Cortina Rancheria</i>									
Delaware									
District of Columbia									
Florida									
Georgia	4	0	0	0	0	0	0	0	
Hawaii									
Idaho									
Illinois									
Indiana									
Iowa	0	0	1	2	0	0	0	0	
Kansas	0	0	0	0	0	0	0	0	
Kentucky	0	0	0	0	0	0	0	0	
Louisiana									
Maine									
<i>Manzanita Band</i>									
Maryland	0	1	0	1	0	0	0	0	Source: MD Lake Water Quality Assessment Report, 1997.
Massachusetts									
Michigan	1	1	2	3	1	1			
Minnesota	2	5	2	0	0	1			
Mississippi									
Missouri									
Montana									
Nebraska		2		2					
Nevada									
New Hampshire									
New Jersey							0	0	
New Mexico									
New York									
North Carolina									
North Dakota									
Ohio									
Oklahoma									
Oregon	0	0	0	0	0	0	0	0	
Pennsylvania	2	2	2	0			1	1	
Puerto Rico									
Rhode Island	0	2	0	0	0	0	0	4	
South Carolina	1	0	1	0	1	0	2	1	

Appendix H-5. 1996-1997 Clean Lakes Program Projects

Jurisdiction	Phase 1 Projects		Phase 2 Projects		Phase 3 Projects		LWQA Annual Grants		Comment
	Number of Ongoing Projects	Number of Projects Completed	Number of Ongoing Projects	Number of Projects Completed	Number of Ongoing Projects	Number of Projects Completed	Number of Ongoing Projects	Number of Projects Completed	
South Dakota									All Clean Lakes program projects in South Dakota have been completed.
Tennessee									
Texas									
<i>Torres-Martinez Desert Band</i>									
Utah	6	0	1	0	0	0	1	0	
Vermont									
Virginia									
Washington									
West Virginia	0	4	0	2	0	0	0	4	Includes projects for both the 1996 and 1998 cycles.
Wisconsin									
Wyoming									
<b>Total</b>	<b>21</b>	<b>17</b>	<b>9</b>	<b>10</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>10</b>	