Delaware's Process to Develop the 305(b) Report and 303(d) List (The Integrated Report)

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What are the 305(b) Report and 303(d) List?

- Under the Clean Water Act, and EPA Regs, States and Tribes need to do regular reports of water quality in their jurisdictions (305 (b) reports)
- They also have to make a list of waters that need Total Maximum Daily Loads for pollutants that aren't being controlled with current measures (303 (d) List)
- As a practical matter, States now do Integrated Reports that combine these two separate requirements

To do the 305(b) Report

- Update Methodologies and ask for comment(s) before gathering data
- Gather data from Water Quality Portal and other sources
 - USGS
 - Submitted Data
- Use the methodologies
 - Station Roll Ups (each parameter)
 - Segment Roll Ups Categories 1,5

Station Roll Up

Dolowara	2020	Integrated	Donort	Ctation	Doll Has	
Delaware				Station		

01.15		M	B	Fresh	DO	DO	DO#	DO	ENT	ENT	ENT	Total N	Total	Total N	Total	Total	Total P	DIN	DIN	DIN	DIP	DIP	DIP	ZN
Station	Segment	Watershed	Description	or Marine	count	LCL	< 4.0	Status	count	geomean	Status	Count	LCL	Support	P	PLCL	Support	count	LCL	Status	count	LCL	Status	samples
207021	DE 110-003	Choptank	Cow Marsh Creek at Rd. 208	F	42	6.2	0	1	41	64.8	1	41	1.53	1	41	0.070	1	_		2-4		-		-
	DE 110-003	Choptank	White Marsh Branch at Rd. 268	F	42	6.7	0	1	42	124.6	5	41	5.11	5	41	0.072	1	-				3 3		
106201	DE 120-001	Christina River	Conrail Bridge (USGS tide gage 01481602) Up river from Port	F	60	6.2	0	1	60	132.6	5	60	2.26	1	60	0.096	1	-			-	-		51
	DE 120-002	Christina River	Rt. 141 Drawbridge, Newport (USGS tide gage 01480065)	F	40	6.5	0	1	40	162.9	5	32	1.86	1	37	0.082	1	-	1000	20-5	-	-		36
USGS 01480065	DE 120-002	Christina River	Christina River at Newport	F	1815	6.14	9	5																
106031	DE 120-003	Christina River	Smalley's Dam Spillway	F	42	6.7	0	1	42	77.1	1	42	1.30	1	42	0.062	1							38
106141		Christina River	Rt. 72, Below Newark (USGS guage 01478000)	F	71	7.2	0	1	71	79.7	1	71	1.55	1	71	0.055	1	5 -		20-5	-	-		63
106191	DE 120-006	Christina River	Rt. 273, Above Newark	F	42	8.5	0	1	42	139.4	5	42	2.32	1	42	0.027	1	-	100	2.44	-	3-6		34
106281	DE 120-007-01	Christina River	Little Mill Creek at atlantic Avenue (USGS Gage 01480095)	F	41	8.3	0	1	42	100.9	5	36	1.08	1	40	0.029	1	-		2	-	-		40
111011	DE 130-001	Dragon Run Creek	Rt. 9 Bridge	F	41	4.4	5	5	41	40.5	1	41	0.88	1	41	0.104	1	-	-		-	3 3		
111031	DE 130-002	Dragon Run Creek	Rt. 13 Bridge (flow at Rd. 407), Dragon Creek	F	41	3.8	8	5	41	87.9	1	41	1.28	1	41	0.054	1	-	-	17-	-	-		
	DE 140-001	Indian River	White Creek at the mouth of Assawoman Canal	M	42	5.9	2	1	40	13.8	1	41	0.60	1	38	0.043	1		0.05	1		0.019	5	3
	DE 140-002	Indian River	Blackwater Creek at Rd. 54	F	41	5.3	4	5	40	112.1	5	34	4.20	5	37	0.054	1		3.13	5		0.019	5	37
	DE 140-003	Indian River	Pepper Creek at Rt. 26	F	41	7.7	1	1	41	201.9	5	41	2.20	1	41	0.087	1	42	1.27	5		0.032	5	39
	DE 140-004	Indian River	Buoy 49, Indian River	M	38	6.6	0	1	38	22.2	1	33	1.82	1	36	0.093	1		0.75	5		0.016	5	10
	DE 140-004	Indian River	Island Creek, upper third	M	38	6.5	0	1	38	8.1	1	38	1.64	1	37	0.080	1	38	0.57	5	31	0.019	5	10
	DE 140-005	Indian River	Swan Creek at Rd. 297	F	41	8.1	0	1	41	231.7	5	35	2.43	1	40	0.013	1	42	2.19	5		0.009	1	33
	DE 140-006	Indian River	Cow Bridge Branch Rd. 48	F	39	6.3	0	1	38	18.0	1	37	1.67	1	38	0.038	1	37	1.22	5	38	0.017	5	34
	DE 140-E01	Indian River	Buoy 20, Indian River Bay	M	53	6.3	0	1	53	7.9	1		0.58	1	50	0.059	1	53	0.05	1		0.023	5	5
	DE 140-E01	Indian River	Indian River Inlet	M	59	6.7	0	1	56	3.6	1	53	0.37	1	53	0.044	1	59	0.03	1	42	0.025	5	8
	DE 140-E02	Indian River	Island Creek mouth	M	38	6.1	0	1	38	9.0	1	36	1.25	1	37	0.074	1	38	0.36	5	30	0.020	5	6
308071	DE 140-L01	Indian River	Millsboro Dam Overflow	F	72	7.6	1	1	72	18.9	1	72	3.00	5	70	0.040	1	73	2.34	5	71	0.016	5	61
USGS 01484525	DE 140-L01	Indian River	Millsboro Pond Outlet at Millsboro	F	1817	7.2	12	5			111 6	383		150			0.0							
309041	DE 150-001	Iron Branch	Whartons Branch at Rt. 334 Bridge	F	41	7.2	0	1	41	95.8	1	36	2.55	1	40	0.059	1	42	1.50	5	40	0.019	5	39
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Segment Roll Ups

Delaware 2020 Integrated Report Segment Roll Ups

Segment	Watershed	Description	Dissolved Oxygen	Enterococcus	Total Nitrogen	Total Phosphorus	Dissolved Inorganic Nitroge	Dissolved Inorganic Phosphorus	Ammonia	Total Suspended Solids	Marine Copper	Zinc
DE 010-001-01	Appoquinimink River	Lower Appoquinimink River	5	1	1	1	-		1		5	1
DE 010-001-02	Appoquinimink River	Upper Appoquinimink River	1	5	1	1		1 m	1		1	1
DE 010-001-03	Appoquinimink River	Drawyer Creek	1	5	1	1	551	() () ()	1	-	-	1
DE 010-002-02	Appoquinimink River	Deep Creek to confluence with Silver Lake	1	1	1	1	227	100	1			100
DE 010-L01	Appoquinimink River	Noxontown Pond	1	1	1	1		1922	1		- 22	1
DE 010-L03	Appoquinimink River	Shallcross Lake	1	1	1	1		(i	1			1
DE 020-001	Army Creek	Lower Army Creek	1	1	1	1		O	1			
DE 020-002	Army Creek	Upper Army Creek	1	5	1	1		72	1	1 22		123
DE 020-003	Army Creek	Tributary to Army Creek	5	1	1	1	225	1922	1	122	- 22	225
DE 030-001	Lower Blackbird	Lower Blackbird	5	5	1	1		· ·	1		2.2	27-0
DE 040-001	Brandywine Creek	Lower Brandywine	1	5	1	1		_	1			1
DE 040-002	Brandywine Creek	Upper Brandywine	1	1	1	1	23		1	120	- 22	1
DE 050-001	Broad Creek	Lower Broad Creek	1	1	5	1		1922	1	- 22		1
DE 050-006-03	Broad Creek	Raccoon Prong	5	1	1	1		-	1			1
DE 050-L03	Broad Creek	Horseys Pond	1	1	5	1			1		-	1
DE 050-L04	Broad Creek	Records Pond	1	1	5	1			1		- 2	1
DE 050-L07	Broad Creek	Trap Pond	1	1	1	1		1022	1	-2		1
DE 060-001	Broadkill River	Lower Broadkill	5	5	1	1	-		1			-
DE 060-002	Broadkill River	Beaverdam Creek	1	5	5	1	-		1			
DE 060-002	Broadkill River	Upper Broadkill River	1	1	5	1	- 2		1			
DE 060-003	Broadkill River	Round Pole Branch	1	5	5	1		1020	1		- 22	
DE 060-005	Broadkill River	Ingrams Branch	1	5	5	5	-	-	5			
DE 060-006	Broadkill River	Pemberton Branch	1	5	5	1		-	1			
DE 060-007-01	Broadkill River	Lower Red Mill Branch	1	1	1	1			1			
DE 060-L03	Broadkill River	Waples Pond and Reynolds Pond	1	1	5	1			1			_
DE 070-001	Buntings Branch	Buntings Branch	1	5	5	1	5	5	1			1
DE 080-001	Cedar Creek	Lower Cedar Creek	_	5	5							
DE 090-001	Chesapeake & Delaware Canal	C&D Canal	1			1		·	1			
DE 090-L01	Chesapeake & Delaware Canal	Lums Pond	1	1	1	1		- 55	1	-		-
DE 100-002			1	1	1	1		19 -2	1			
DE 100-002 DE 110-001	Chesapeake Drainage System	Sewell Branch, including tributaries	5	1	1	1			1			
	Choptank	Tappahanna Ditch	1	1	1	1		0 0-0	1		-	
DE 110-002	Choptank	Culbreth Marsh Ditch	1	1	1	1			1			
DE 110-003	Choptank	Cow Marsh Creek	1	5	5	1	20	322	1			
DE 120-001	Christina River	Lower Christina River	1	5	1	1		-	1			1
DE 120-002	Christina River	Mid Christina River	5	5	1	1		() () () () () ()	1			1
DE 120-003	Christina River	Upper Christina River	1	1	1	1		S	1			1
DE 120-004-01	Christina River	Lower Christina Creek	1	1	1	1			1			1
DE 120-006	Christina River	Upper Christina Creek	1	5	1	1		322	1			1
DE 120-007-01	Christina River	Little Mill Creek and Willow Run	1	5	1	1		·	1			1
DE 130-001	Dragon Run Creek	Lower Dragon Run Creek	5	1	1	1			1			
DE 130-002	Dragon Run Creek	Upper Dragon Run Creek	5	1	1	1		12	1			
DE 140-001	Indian River	White Creek	1	1	1	1	1	5			1	S-2
DE 140-002	Indian River	Blackwater Creek	5	5	5	1	5	5	1	1		1
DE 140-003	Indian River	Pepper Creek, including tributaries	1	5	1	1	5	5	1	1		1
DE 140-004	Indian River	Indian River	1	1	1	1	5	5		5	1	-
DE 140-005	Indian River	Swan Creek	1	5	1	1	5	1	1	1		1
DE 140-006	Indian River	Stockley Branch	1	1	1	1	5	5	1	1		1
DE 140-E01	Indian River	Lower Indian River Bay	1	1	1	1	1	5		5	1	
DE 140-E02	Indian River	Upper Indian River Bay	1	1	1	1	5	5	- 22	5	1	

To do the 303(d) List...

- Compare the most recent 305(b) results to the last cycle:
 - Parameter by parameter, segment by segment

Has the category changed for the parameter segment combination?

If the parameter/segment combination does not meet the target or criteria, has to been 303(d) Listed before?

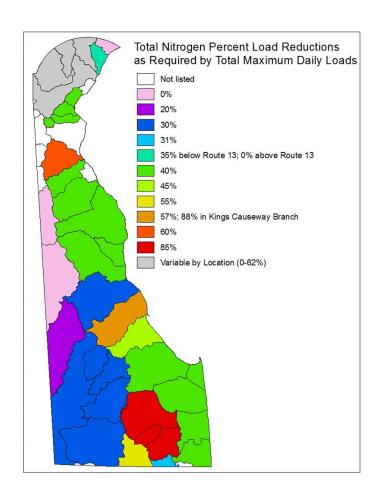
No: New listing with priority for TMDL Development

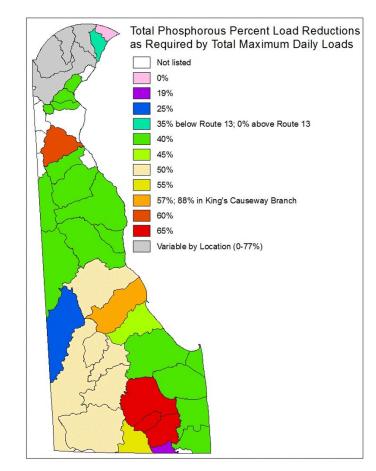
Yes: Put in Category 4 (has TMDL) or 5 (needs TMDL)

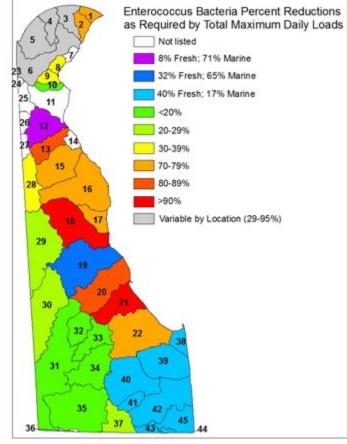
If the Category is the same as the last listing, no change required

- Publish Draft Results of 303(d) list for public comment
- Submit final Integrated Report For EPA Approval

Current Approved TMDLs







Contact for more information or to be added to email list <u>David.Wolanski@delaware.gov</u>