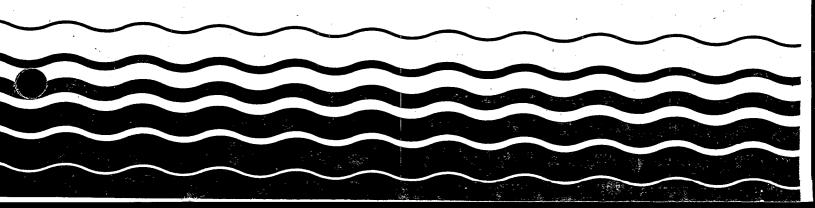
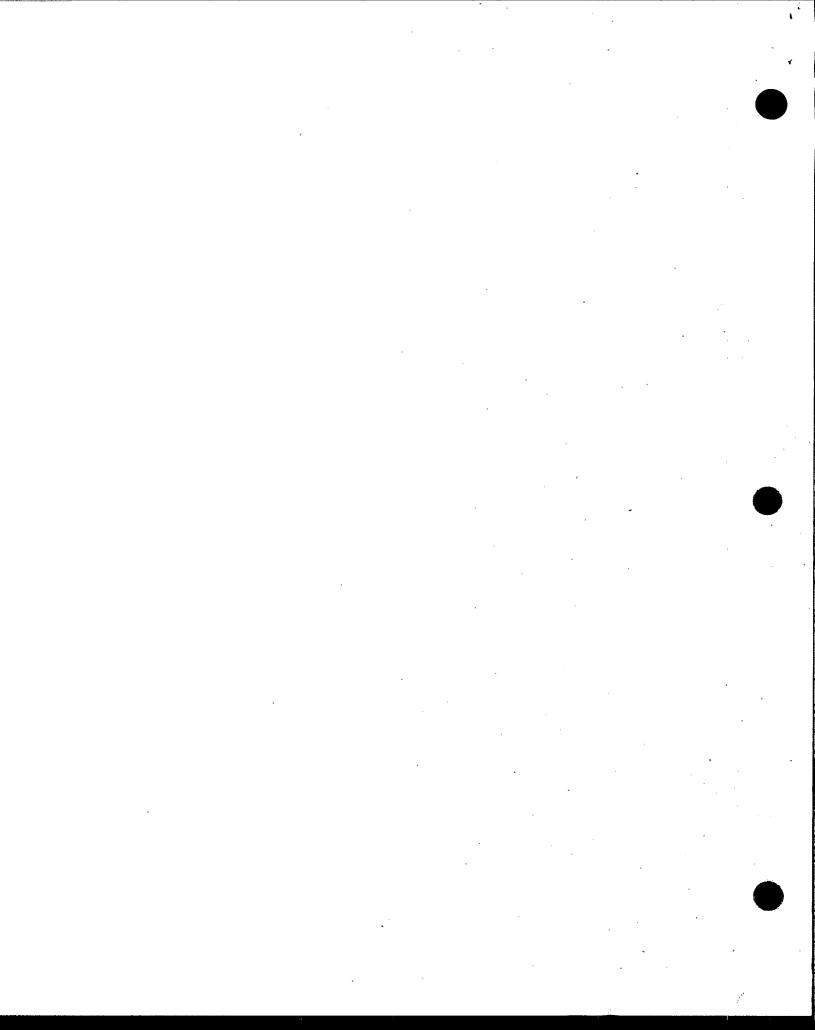
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Water

# State Water Quality Standards Summary: Puerto Rico





#### DISCLAIMER

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The reader should consult the water quality standards of a particular State for exact regulatory language applicable to that State. Copies of State water quality standards may be obtained from the State's Water Pollution Control Agency or its equivalent.

Additional information may also be obtained from the:

Standards Branch
Criteria and Standards Division (WH-585)
Office of Water Regulations and Standards
U.S. Environmental Protection Agency
Washington, D.C. 20460
202-475-7315

This document may be obtained only from the National Technical Information Service (NTIS) at the following address:

National Technical Information Service 5285 Front Royal Road Springfield, Virginia 22161 703-487-4650

The NTIS order number is: PB89-142061

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State Narrative Language For: Antidegradation

Waters whose existing quality as of the effective date of these Regulations is better than the standards established herein will be maintained at such quality. These and other waters of the Commonwealth will not be lowered in quality unless it has been affirmatively demonstrated to the Board (Environmental Quality Board) that such a change is justified as a result of necessary economic or social development and will not interfere or become injurious to any assigned uses made of, or presently possible in, such waters. This will require that any industrial, public or private project, or development which would constitute a new source of pollution, or a modified source of pollution, to a high quality water body, possess as a part of the initial project design the best practicable control technology currently available. This decision of the Board shall be preceded by adequate public notice.

# State Narrative Language For: Toxics

The waters of Puerto Rico shall not contain any substance in a concentration which is toxic or which produces undesirable physiological responses in human, fish or other animal life, and plants. The waters of Puerto Rico shall not contain two or more substances whose combination is toxic or which will produce chronic or other undesirable physiological responses in humans, fish or other animal life and plants.

# State Narrative Language For: Free From

The waters of Puerto Rico shall not contain material attributable to discharges that will settle to form objectionable deposits. Nor will they contain floating debris, scum, oil and other floating materials attributable to discharges in amounts sufficient to be unsightly or deleterious.

The waters of Puerto Rico shall be free from color, odor, taste or turbidity attributable to discharges in such a degree as to create a nuisance.

The waters of Puerto Rico shall not contain any substance in a concentration which is toxic or which produces undesirable physiological responses in human, fish or other animal life, or plants.

# State Narrative Language For: Low Flow

Water quality standards shall apply at all times, except in surface waters during periods when their flows are less than the average minimum seven day low flow which occurs once in any two consecutive years.

# State Narrative Language For: Mixing Zones

5.1 Requirements for the Authorization of Mixing Zones - A discharge will be permitted for which a mixing zone has not been defined and authorized by the Board only when the petitioner demonstrates to the satisfaction of the Board that the discharge, undiluted, complies with all the water quality standards (at the discharge sampling point).

5.2 Natural Background Concentrations - If the petitioner demonstrates to the satisfaction of the Board, through extensive field monitoring and investigations, that the natural background concentration of the receiving waters exceed one or more of the water quality standards set forth for the corresponding classification, the Board may allow the parameters in the discharge to be equal to or less than the natural

background values.

Please refer to the "EPA Water Quality Criteria Summaries: A Compilation of State/Federal Criteria" for additional mixing zone language for Puerto Rico.

### Classifications:

Class SA

Coastal waters whose existing characteristics should not be altered in order to preserve the existing natural phenomena.

Class SB

Coastal waters intended for uses where the human body may come in direct contact with the water (such as complete submergence); and for use in propagation and preservation of desirable species.

Class SC

Coastal waters for uses where the human body may come in indirect contact with the water (such as fishing, boating, etc.), and for use in propagation and maintenance of desirable species.

Class SD

Surface waters intended for use as a raw water source for public water supply, and propagation and preservation of desirable species. These waters cannot be safely used for primary and secondary contact recreation, unless they comply with Section 2.2.4.8.10.

Class SE

Surface waters of exceptional ecological value, whose existing characteristics should not be altered in order to preserve the existing natural phenomena.

		All Clas	ses	Class SA	Class	s SB	Class	SC
	Physical							
	рН							
	Upper Value			Narr.	8.5		8.5	
	Lower Value				7.3		7.3	
	Dissolved Oxygen				710		7.5	
	Upper Value			Narr.		<b>s</b> g/L		ea /i
	Lower Value				5	ag/L	4	<b>a</b> g/L <b>a</b> g/L
	Temperature				•	<b>-9</b> /-2	7	mg/L
	Upper Value	94	F					
	Temperature Change							
	Upper Value	5	F					
	Turbidity							
	Upper Value			Narr.	10	NTU	10	NTU
	Sulfates							
	Upper Value				2800	mg/L	2800	eg/L
	Total Dissolved Solids					•		
	Upper Value			Narr.				
)	lutrients							
·	Total Nitrogen							
	Upper Value			Narr.	5	//		,,
				, , , , , , , , , , , , , , , , , , ,		∎g/L	5	<b>e</b> g/L
1	oxic Metals							
	Arsenic			•				
	Upper Value			Narr.	150.0	ua/L	150.0	ug/L
	Cadmium					-5	, ,,,,,,	ug/ L
	Upper Value			Narr.	5.00	ug/L	5.00	ug/L
	Chronium - Total					-3	0100	ug/ L
	Upper Value			Narr.	300.0	ug/L	300.0	ug/L
	Chromium - Hexavalent					-3		<b>44</b> / <b>2</b>
	Upper Value			. Narr.	50.0	ug/L	50.0	ug/L
	Copper					, <b>.</b>		-9
	Upper Value			Narr.	50.0	ug/L	50.0	ug/L
	Cyanide					•		-3
	Upper Value			Narr.	20.0	ug/L	20.0	ug/L
	Iron			•		-		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	Upper Value			Narr.	200.0	ug/L	200.0	ug/L
	Lead					-		•
	Upper Value			Narr.	15.0	ug/L	15.0	ug/L
	Mercury					*		
	Upper Value Zinc	1.00	ug/L					
	Upper Value Barium	50.0	ug/L					•
						*		
	Upper Value Boron			Narr.	1000.0	ug/L	1000.0	ug/L
	Upper Value				•		,	
	opper value Manganese			Narr.	4800.0	ug/L	4800.0	ug/L
	Upper Value		,	.,				
	האובו אמזמה			Narr.	100.0	ug/L	100.0	ug/L

	All Classes	Class SA	Class SB	Class SC	
Selenium					
Upper Value		Narr.	10.0 ug/L	10.0 ug/L	
Silver			-3, -	2010 ug/ E	
Upper Value		Narr.	2.00 ug/L	2.00 ug/L	
Pesticides	•				
Aldrin & Dieldrin		.*			
Upper Value	0.002 ug/L				
Chlordane	-				
Upper Value	0.004 ug/L				
2,4,D					
Upper Value	80.00 ug/L				
2,4,5-TP (Silvex)	-			•	
Upper Value	10.00 ug/L				
Taa	•				
Upper Value	0.001 ug/L				
Demeton	•				
Upper Value	0.100 ug/L		•		
Endosulfan	•			,	
Upper Value	0.001 ug/L				
Endrin	•			•	
Upper Value	0.001 ug/L			••	
Guthion					
Upper Value	0.010 ug/L			•	
Heptachlor				•	
Upper Value	0.001 ug/L				
Lindane	******				
Upper Value	0.004 ug/L				
Malathion			•		
Upper Value	0.100 ug/L				
Methoxychlor	23.2				
Upper Value	0.020 ug/L				
Mirex			•		
Upper Value	0.001 ug/L				
Parathion					
Upper Value	0.004 ug/L		•		
Toxaphene					
Upper Value	0.005 ug/L				
Organics					
Phenolic Compounds	•				
Upper Value		N	44.4		
opper targe		Narr.	10.0 ug/L	10.0 ug/L	
Bacteria	,				
Fecal Coliform			•		
Upper Value			Narr.	Narr.	
Total Coliform			·· · •	***************************************	
Upper Value		Narr.	Narr.	Narr.	

	Class	s SD	Class S	Ε
Physical				
рH				
Upper Value	9.0		Narr.	
Lower Value	6.0			
Dissolved Oxygen				
Lower Value	4.0	mg/L		
Turbidity				
Upper Value Chlorides	50	NTU	Narr.	
	250			
Upper Value Total Dissoved Solids	250	<b>≡</b> g/L		
Upper Value	EAA	//		
ohher 48705	500	<b>e</b> g/L		
Kutrients				
Nitrate				
Upper Value	10	ag/L	10	ng/L
,,		<b>-</b> 9/ <b>-</b>	10	ıy/L
Toxic Metals				
Arsenic				
Upper Value	50.0	ug/L	50.0 k	ıg/L
Cadmium		•		-3
Upper Value	5.0	ug/L	5.0 t	1g/L
Chromium - Total				•
Upper Value	50.0	ug/L	50.0 t	ıg/L
Chromium - Hexavalent				٠.
Upper Value	50.0	ug/L	50.0 t	ıg/L
Copper				
Upper Value	40.0	ug/L	40.0 u	ıg/L
Cyanide				
Upper Value Iron	200.0	ug/L	200.0	ıg/L
Upper Value	700 0	!!	700.0	
Lead tead	300.0	ug/L	300.0 u	ıg/L
Upper Value	50.0	/!	<b>50.0</b>	- //
Barium	. 30.0	ug/L	50.0 u	g/L
Upper Value			1000.0 u	n /I
Boron			100010 0	y, L
Upper Value			1000.0 u	a/l
Selenium				3
Upper Value			10.0 u	g/L
Silver				<b>J</b> . –
Upper Value		6	2.00 u	g/L
				•
Pesticides		•	,	
				`
Organics				
Phenolic Compounds				
Upper Value	1.00	ug/L	1.00 ц	g/L
Bacteria				
Darrell				

Class SD

Class SE

Fecal Colifora
Upper Value
Total Colifora
Upper Value

Narr.

Narr,

Narr.