

Delaware River Basin Commission

The Need and Role for Clean Water Regulation

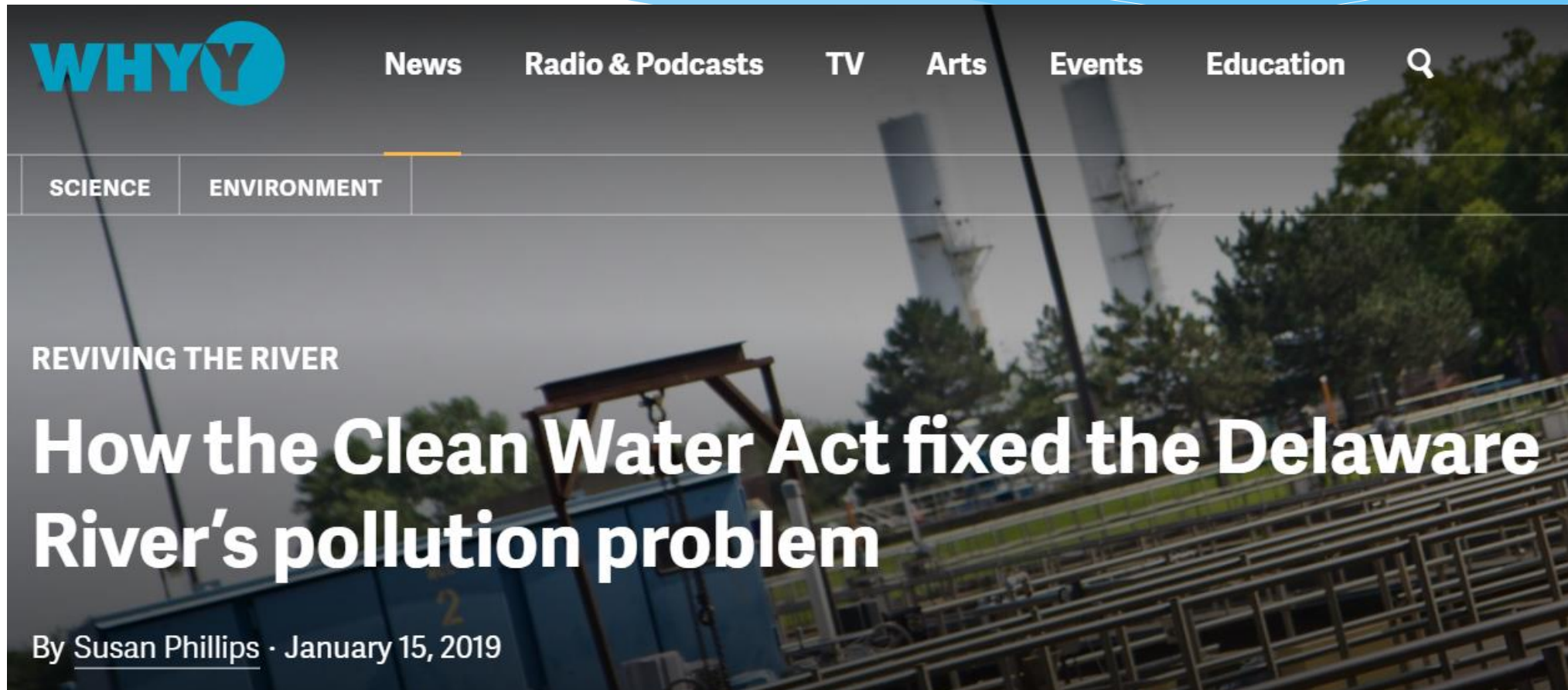
Steve Tambini
DRBC Executive Director


*Partnership for the Delaware Estuary
Science and Environmental Summit*

January 29, 2019



In the News



WHYY News Radio & Podcasts TV Arts Events Education 

SCIENCE ENVIRONMENT

REVIVING THE RIVER

How the Clean Water Act fixed the Delaware River's pollution problem

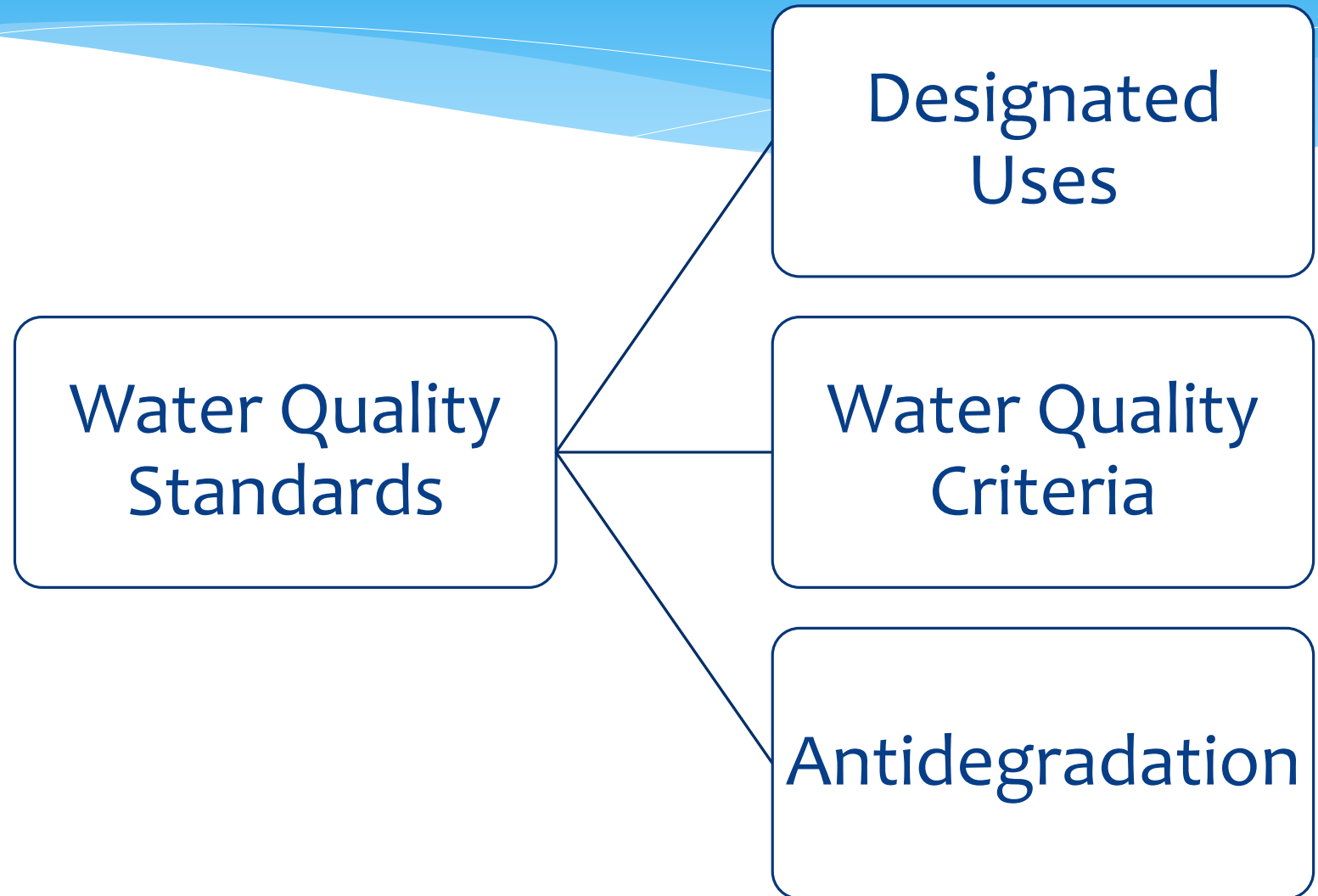
By Susan Phillips · January 15, 2019

<https://why.org/articles/how-the-clean-water-act-fixed-the-delaware-rivers-pollution-problem/>

Federal Clean Water Act Basics



Clean water starts with you
and ends with us.

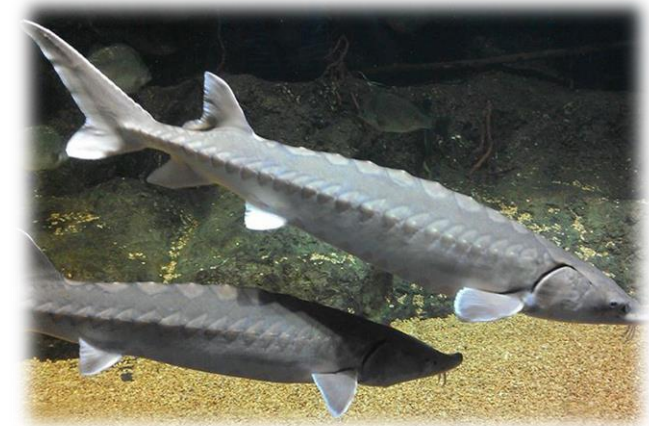


Designated Uses

- * “What do we want to use this water body for?”
- * CWA “Fishable / Swimmable” goals.
- * Examples:
 - * Public water supply (drinking water)
 - * Aquatic Life
 - * Water based recreation
 - * Fishing / fish consumption
 - * Industrial water supply
 - * Agriculture water supply



<https://www.nps.gov/dewa/learn/nature/fish.htm>



<https://www.fisheries.noaa.gov/species/atlantic-sturgeon>

Main Stem Delaware River Designated Uses

Designated Uses by DRBC Water Quality Management Zones

Designated Use	DRBC WQM Zone or AU									
	1A	1B	1C	1D	1E	2	3	4	5	6
Aquatic Life	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Drinking Water	✓	✓	✓	✓	✓	✓	✓			
Primary Recreation	✓	✓	✓	✓	✓	✓		✓	✓	✓
Secondary Recreation							✓	✓		
Fish Consumption	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shellfish Consumption										✓

Delaware Estuary Water Quality Zones



Water Quality Criteria: To Protect Designated Uses

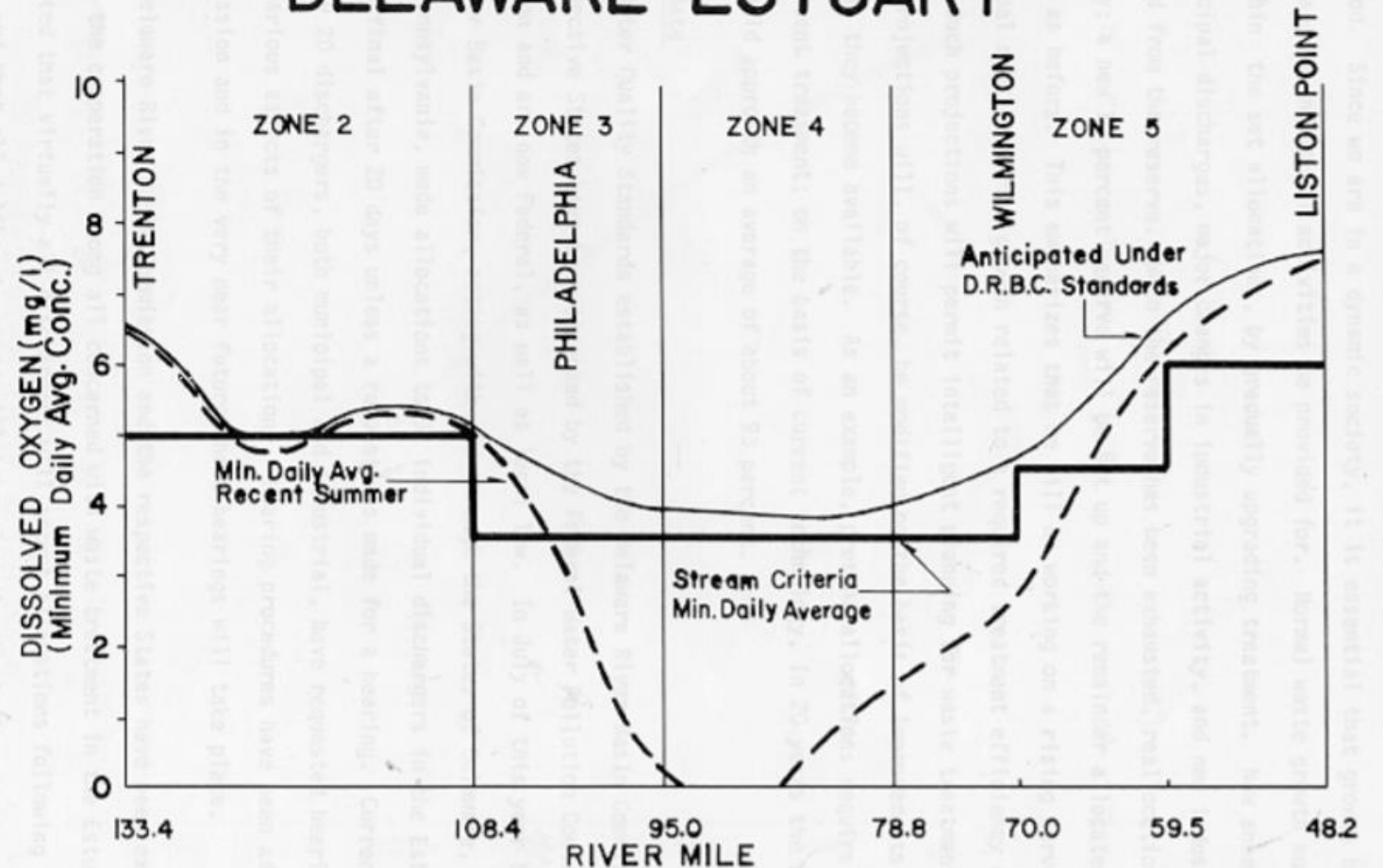
Zone	River Mile	Aquatic Life Use
2	108.4 – 133.4	maintenance and propagation of resident fish and other aquatic life
3	95 – 108.4	maintenance of resident fish and other aquatic life
4	78.8 – 95	maintenance of resident fish and other aquatic life
5	70 – 78.8	maintenance of resident fish and other aquatic life
	48.2 – 70	maintenance and propagation of resident fish and other aquatic life
6	0 – 48.2	maintenance and propagation of resident fish and other aquatic life maintenance and propagation of shellfish



Delaware River Basin Commission

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PENNSYLVANIA • NEW YORK
UNITED STATES OF AMERICA

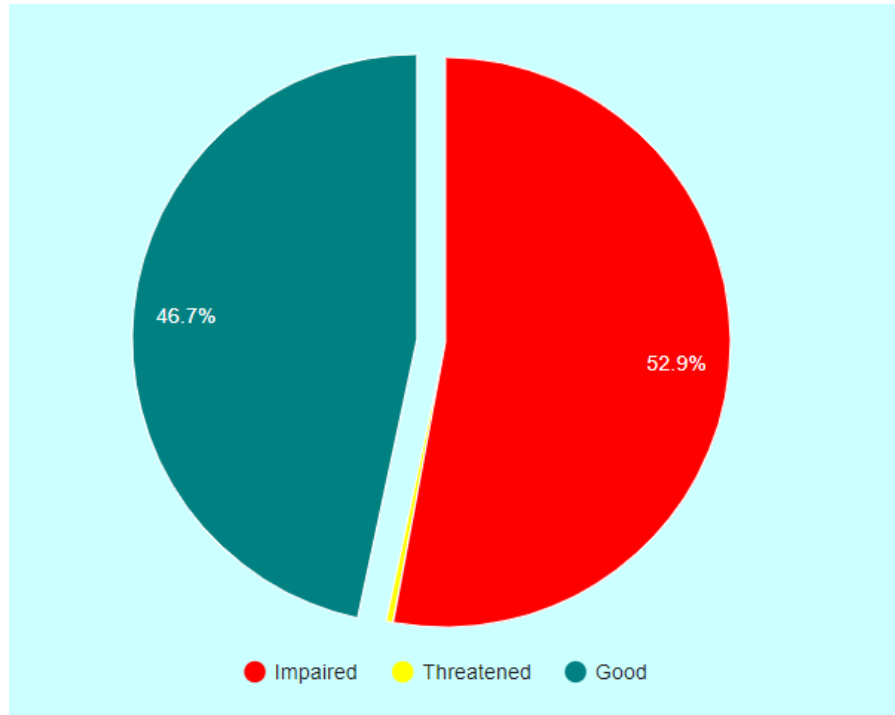
DISSOLVED OXYGEN PROFILES DELAWARE ESTUARY



USEPA National Summary

Water Quality Attainment in Assessed Rivers and Streams

Assessed Rivers and Streams



1,110,960.8 Miles of Assessed Rivers and Streams

Attainment Status	Miles
Good	518,293
Threatened	4,495
Impaired	588,173
Total Miles Assessed	1,110,961



United States Environmental Protection Agency

Learn the Issues

Science & Technology

Laws & Regulations

About EPA

National Summary of State Information

River and Streams	Miles	%
Good Waters	518,293	46.7%
Threatened Waters	4,495	0.4%
Impaired Waters	588,173	52.9%
Total Assessed	1,110,961	100.0%
Total Waters	3,533,205	

https://iaspub.epa.gov/waters10/attains_nation_cy.control

USEPA National Summary

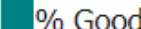
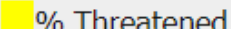
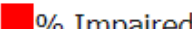










Designated Uses of Rivers and Streams

https://iaspub.epa.gov/waters10/attains_nation_cy.control

National Summary Designated Use Support in Assessed Rivers and Streams*

* Waters assessed for more than one designated use are included in multiple designated use groups below.

[Description of this table](#)

Designated Use Group	Miles Assessed	Percent Good	Percent Threatened	Percent Impaired	 % Good
					 % Threatened
					 % Impaired
 Fish, Shellfish, And Wildlife Protection And Propagation	896,133	55.2	.3	44.5	
 Recreation	448,462	55.2	.8	44.1	
 Agricultural	375,900	95.6	.0	4.4	
 Aquatic Life Harvesting	313,932	45.6	.0	54.4	
 Public Water Supply	290,107	74.9	.1	25.1	
 Industrial	192,108	98.2	.0	1.8	

USEPA National Summary







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**Clean Water Act ≠
“No Impaired Waters”**

National Summary Causes of Impairment in Assessed Rivers and Streams

[Description of this table](#)

<u>Cause of Impairment Group</u>	<u>Miles Threatened or Impaired</u>
<u>Pathogens</u>	187,872
<u>Sediment</u>	138,874
<u>Nutrients</u>	118,831
<u>Organic Enrichment/Oxygen Depletion</u>	98,037
<u>Temperature</u>	94,488
<u>Metals (other than Mercury)</u>	94,384
<u>Polychlorinated Biphenyls (PCBs)</u>	82,311
<u>Mercury</u>	72,554
<u>Habitat Alterations</u>	63,019
<u>Turbidity</u>	47,750
<u>Cause Unknown</u>	45,318
<u>Cause Unknown - Impaired Biota</u>	44,900
<u>Flow Alteration(s)</u>	41,329
<u>Salinity/Total Dissolved Solids/Chlorides/Sulfates</u>	38,072

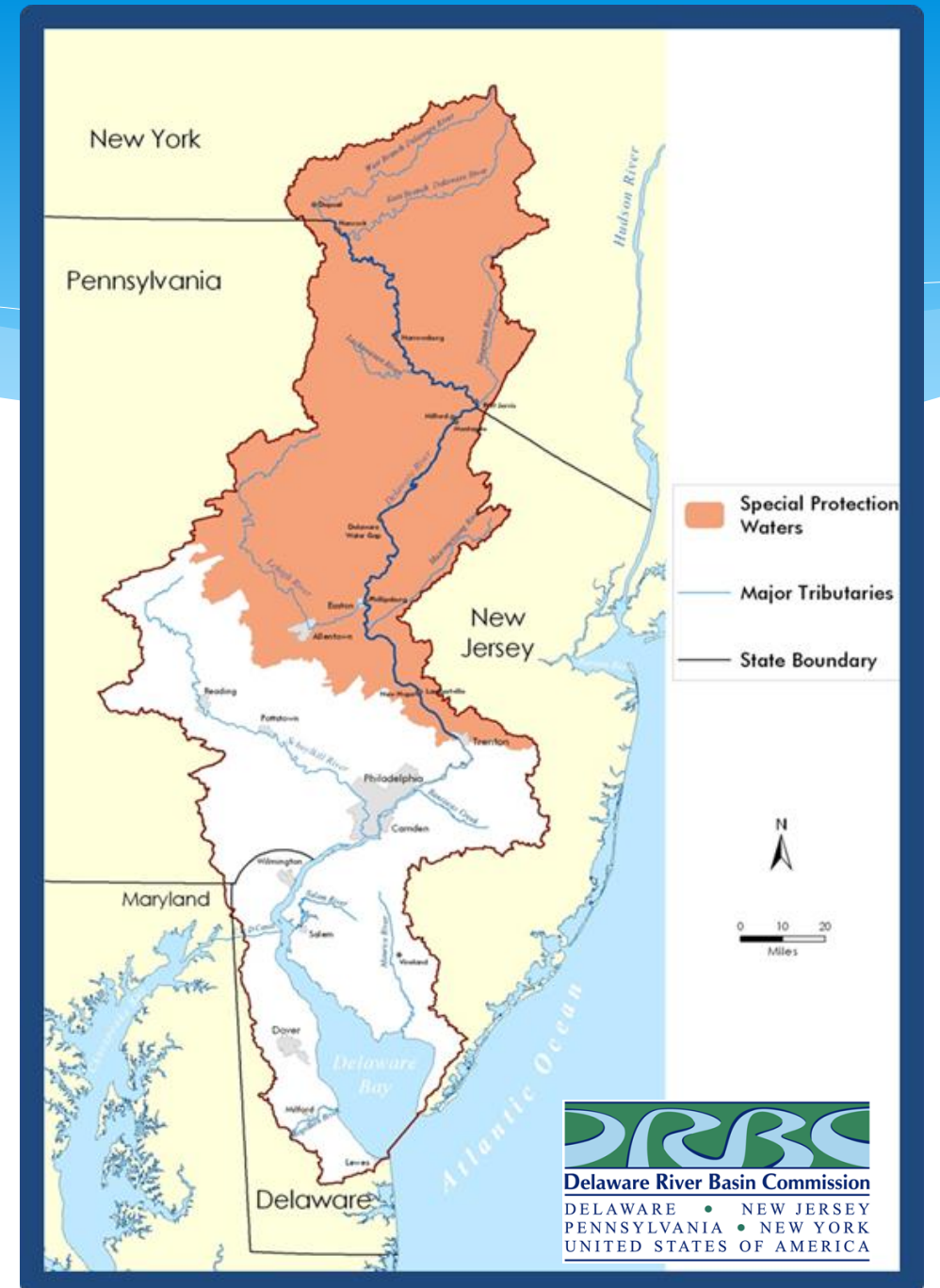
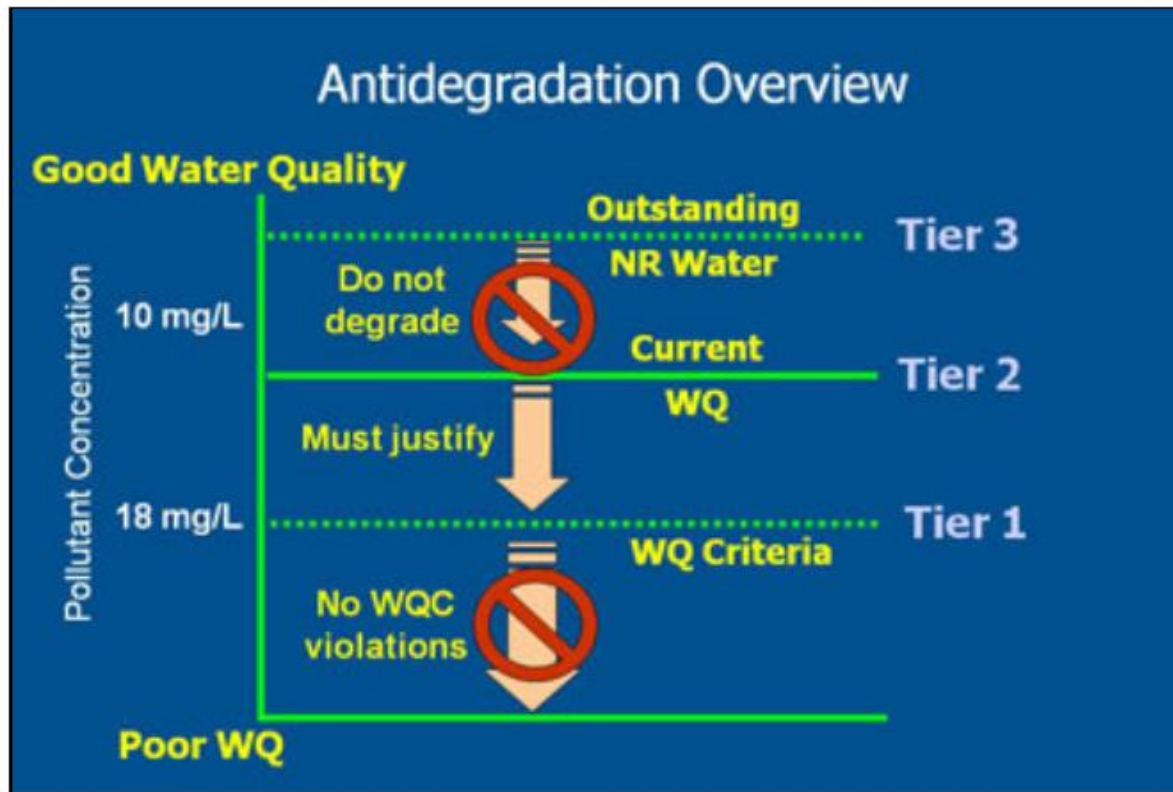
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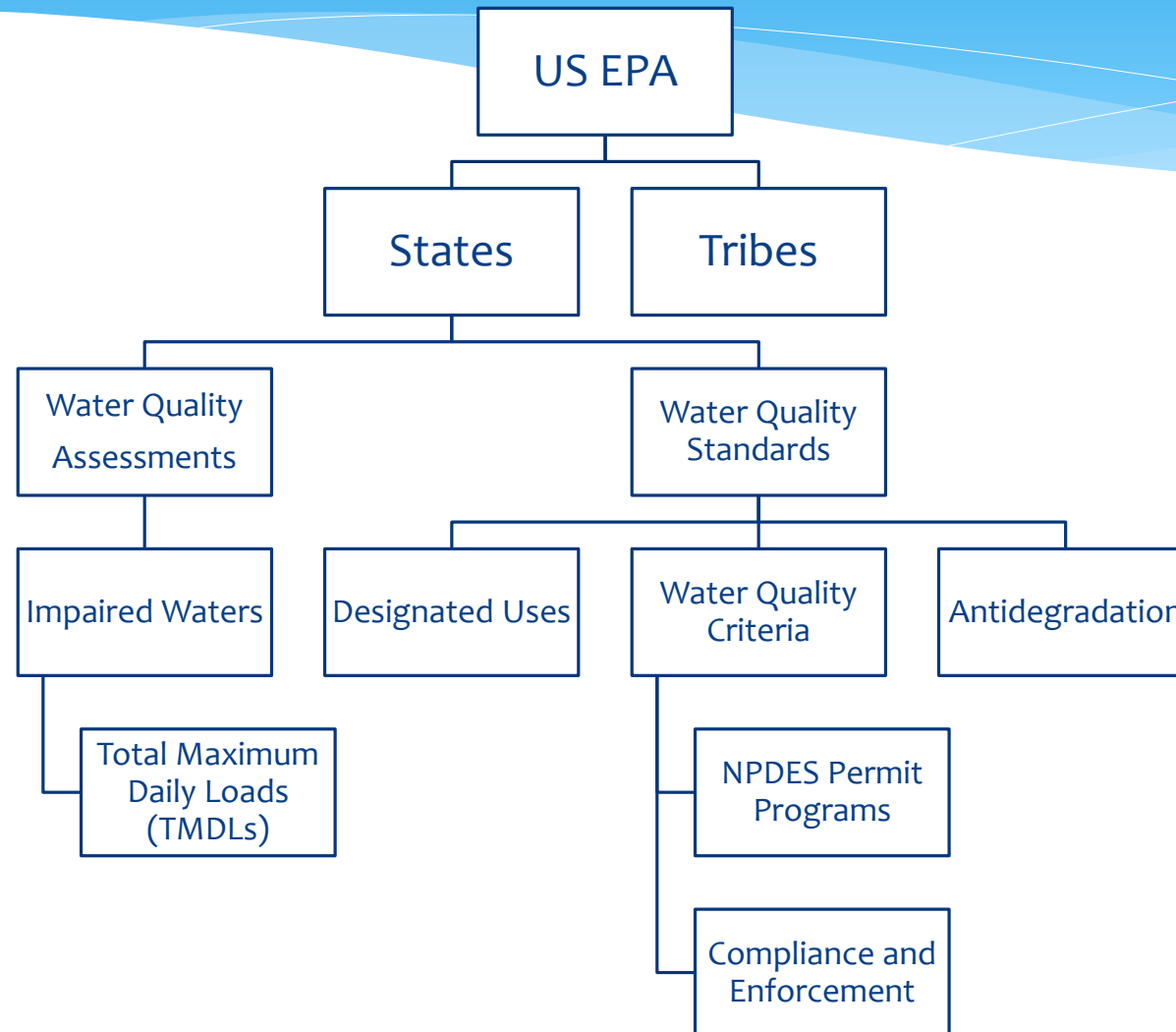
Priorities??

Antidegradation



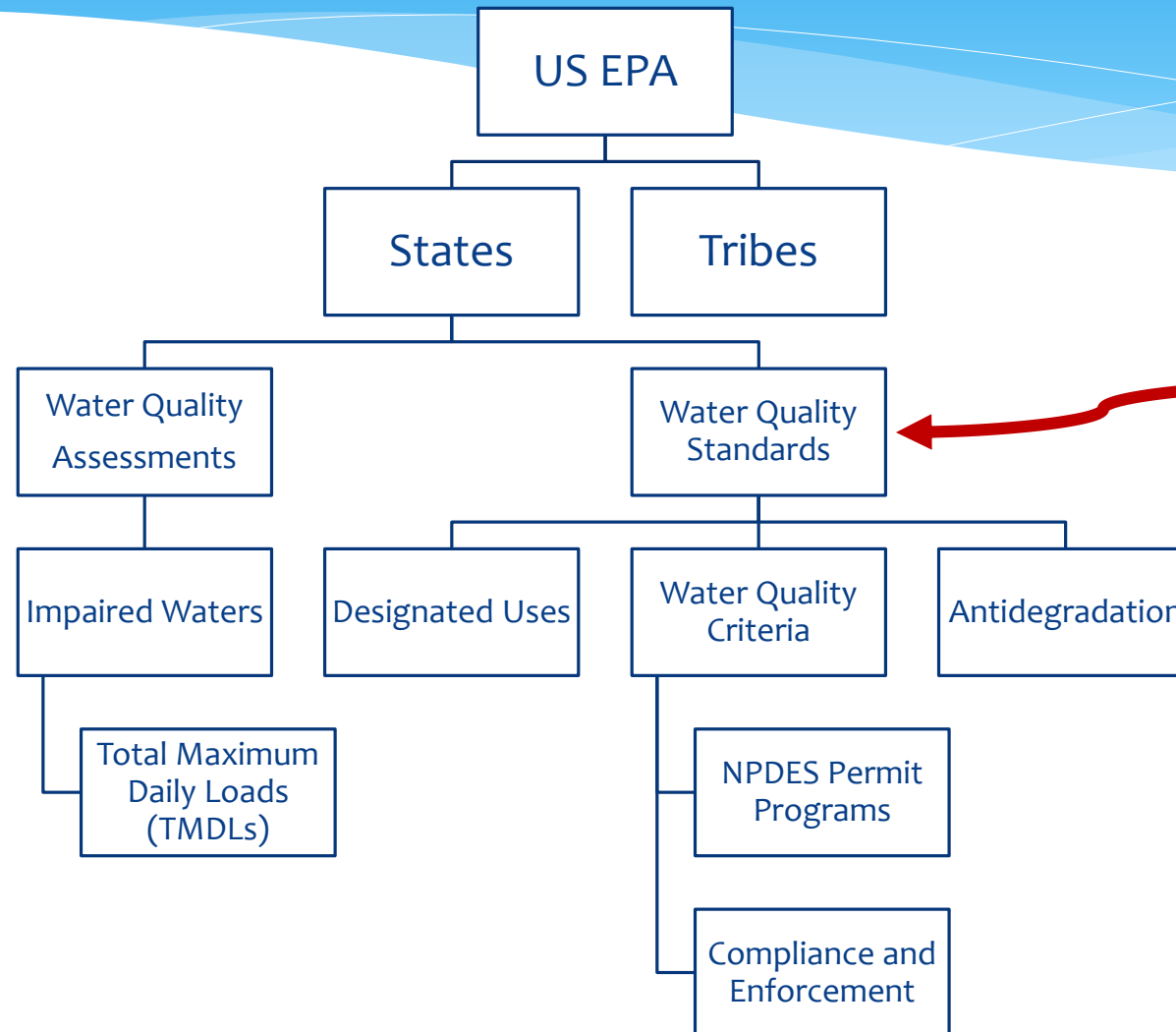
Clean Water Act Responsibilities

Point Sources of Pollution



Clean Water Act Responsibilities

Point Sources of Pollution

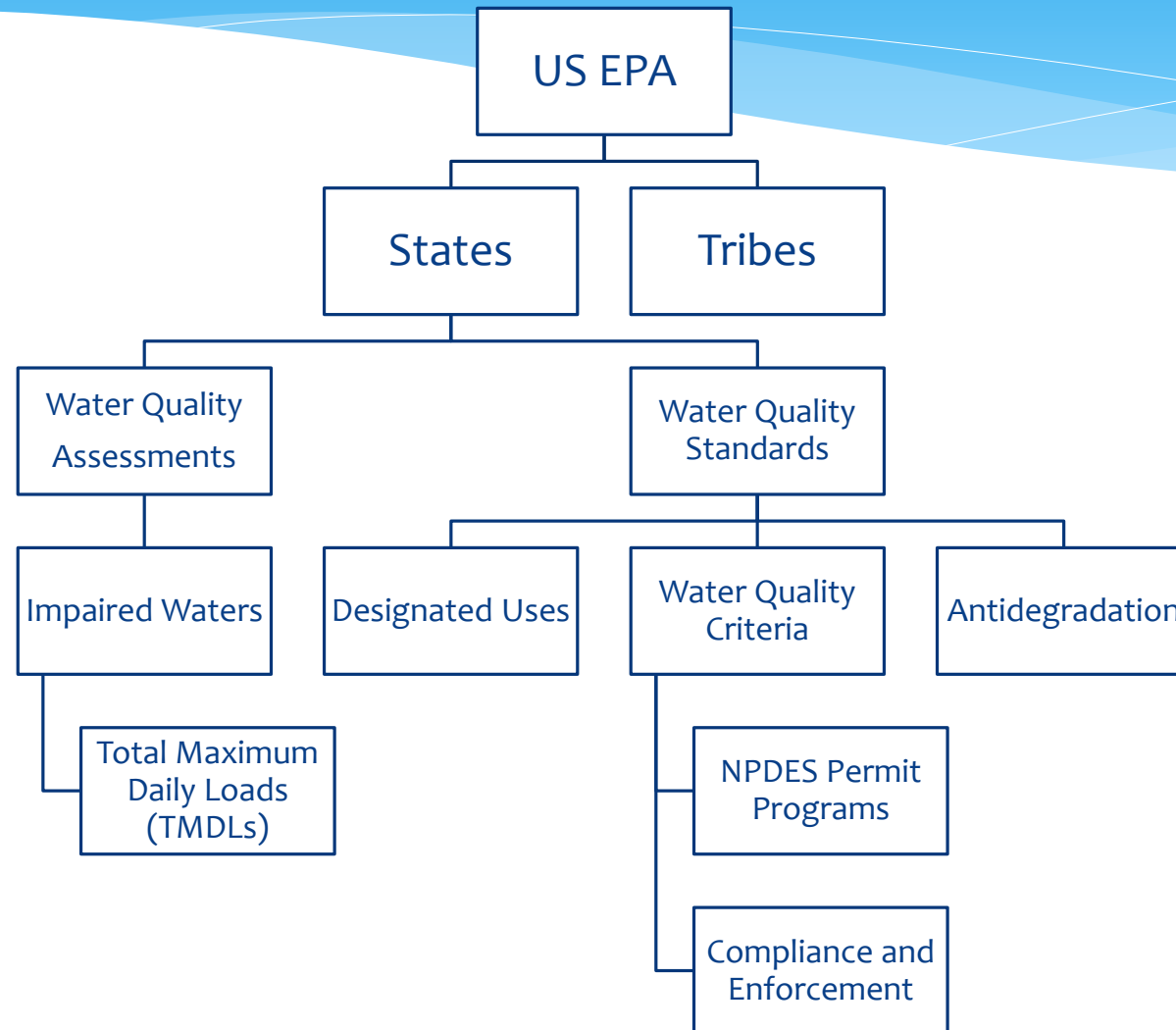


For Main Stem Delaware River Interstate Waters:

- DRBC establishes or revises WQ Standards, WQ Criteria and Designated Uses.
- State WQ Regulations refer to or defer to DRBC WQ Standards.

Clean Water Act Responsibilities

Point Sources of Pollution

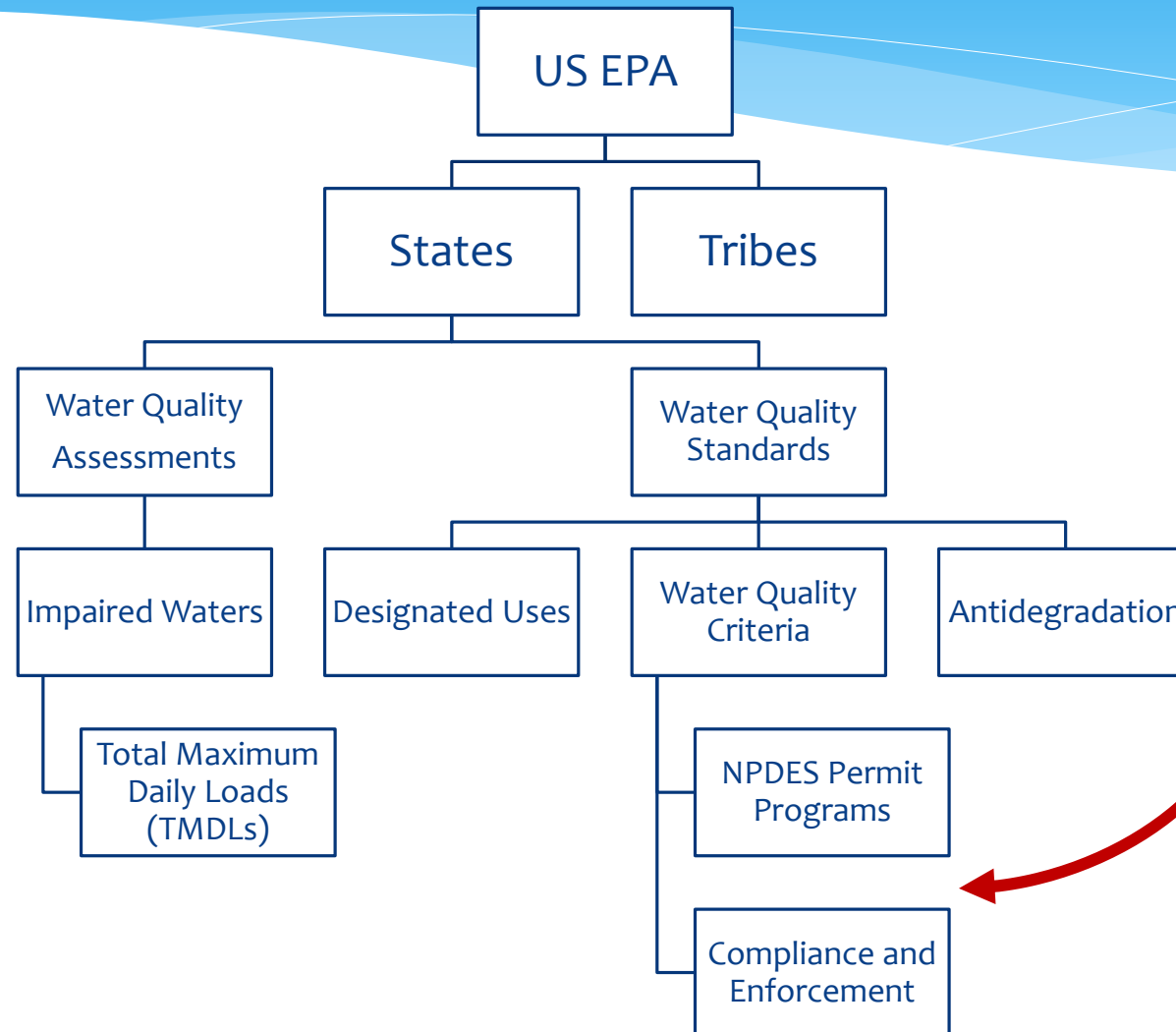


***For Main Stem Delaware River
Interstate Waters:***

- DRBC established Special Protection Waters for the entire main stem upstream from Trenton.

Clean Water Act Responsibilities

Point Sources of Pollution

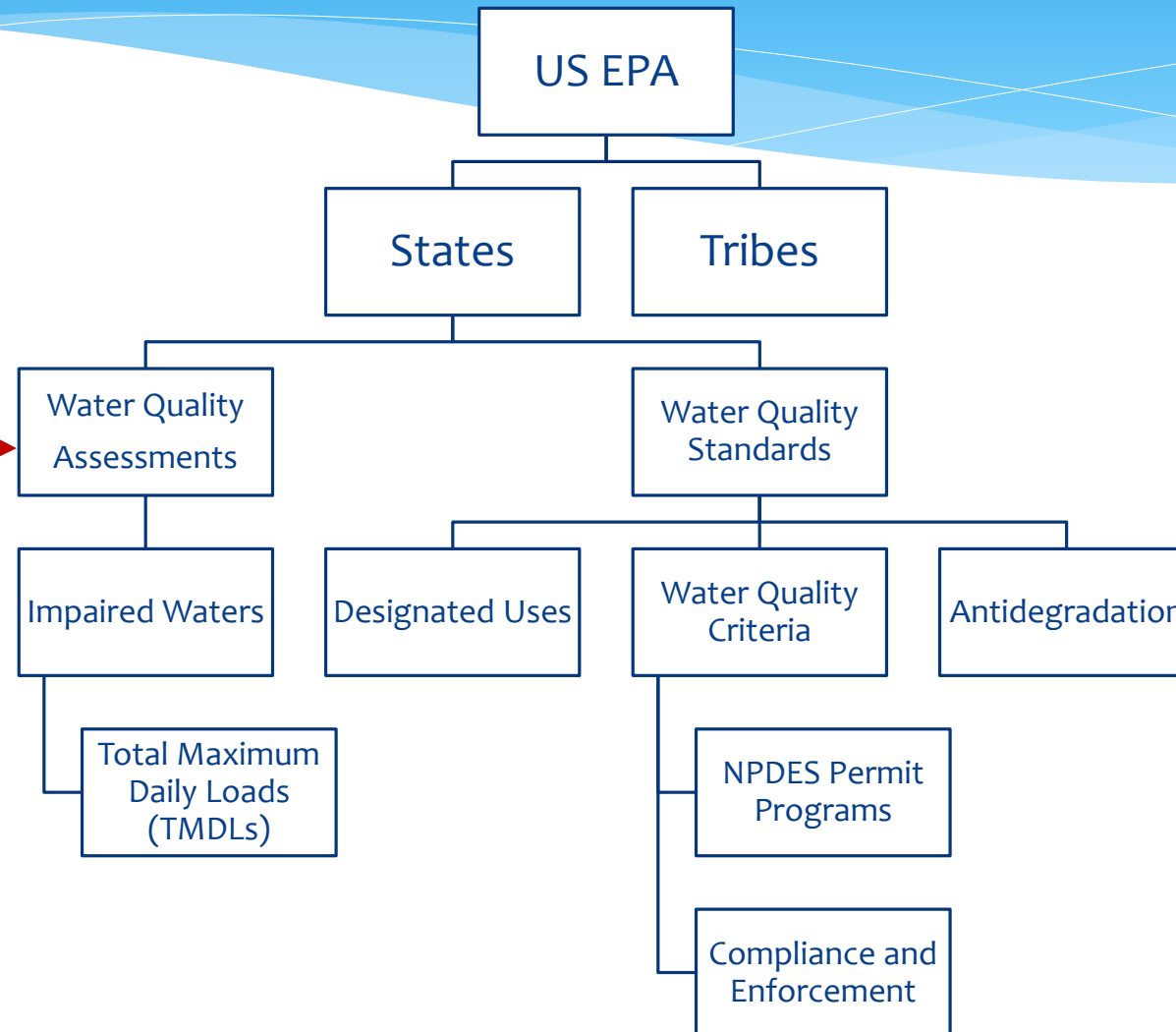


For Main Stem Delaware River Interstate Waters:

- DRBC uses docket approvals or administrative agreements to implement and enforce water quality criteria.
- Both are added to the DRBC Comprehensive Plan.

Clean Water Act Responsibilities

Point Sources of Pollution

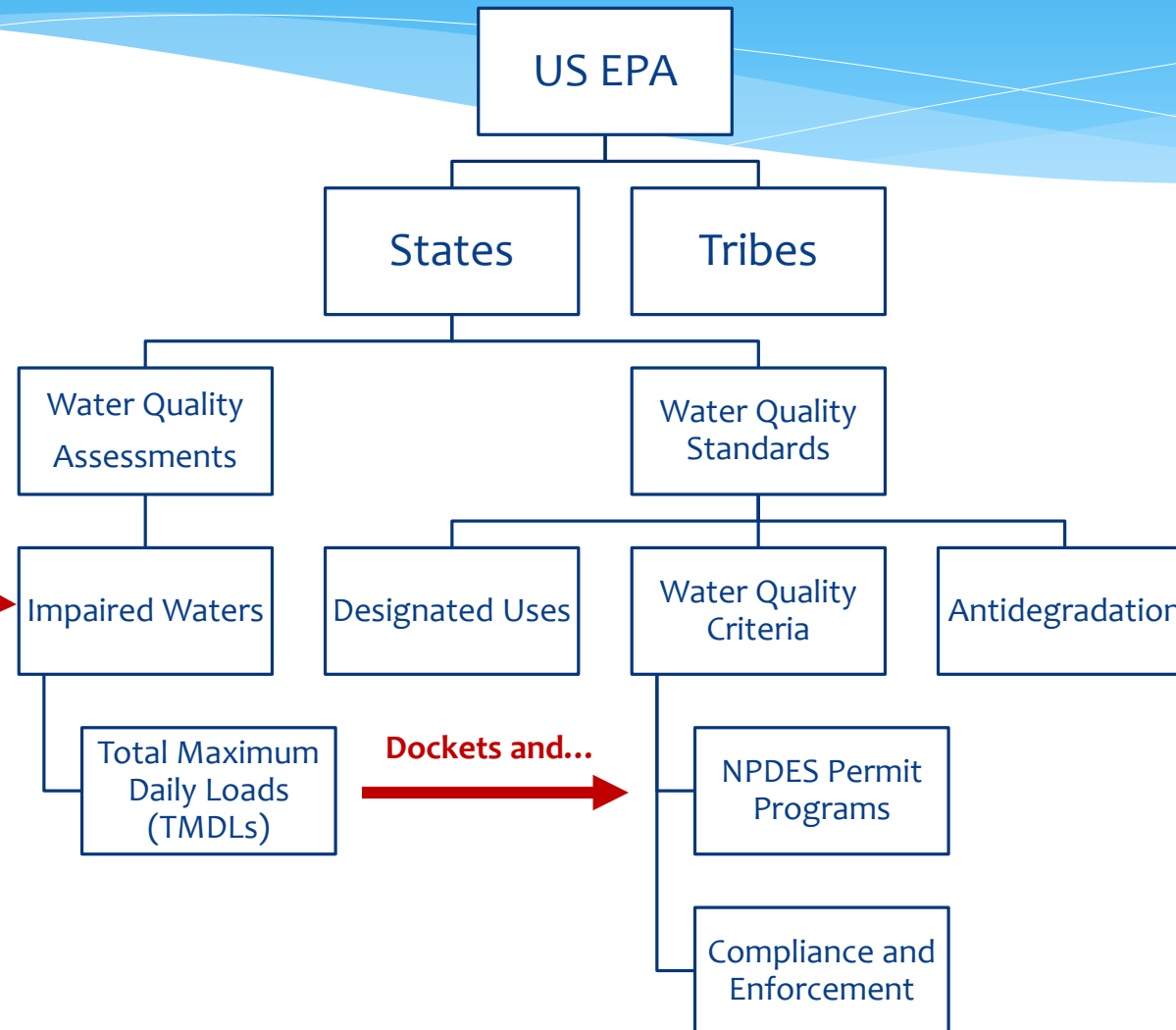


For Main Stem Delaware River Interstate Waters:

- DRBC Conducts Monitoring and Impairment Assessments.
- States use the DRBC main stem assessment as part of their reports to US EPA.

Clean Water Act Responsibilities

Point Sources of Pollution

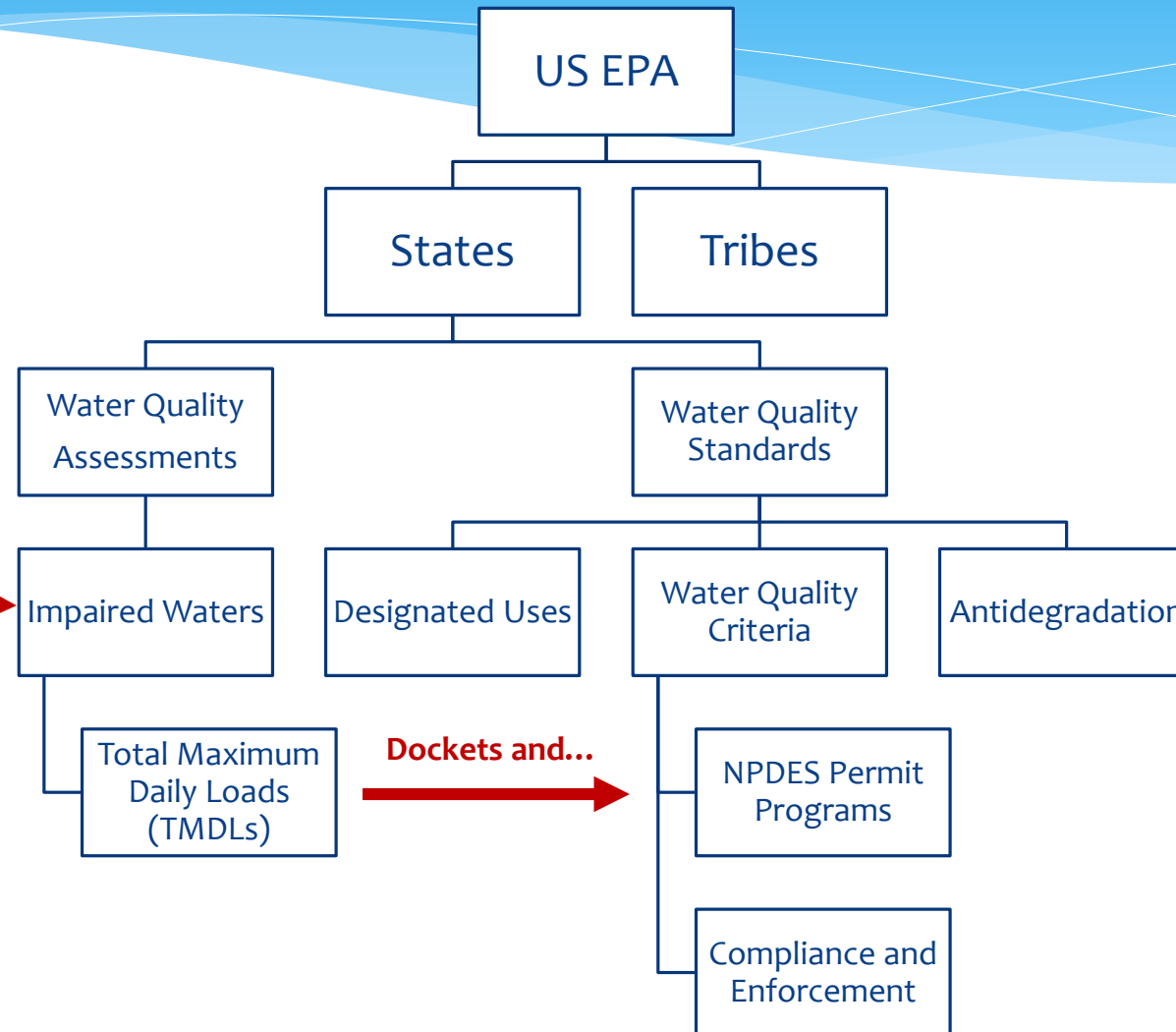


For Main Stem Delaware River Interstate Waters:

- DRBC leads impaired waters recovery.
- Models improvement plans
- Establishes “pollution budgets” or waste allocations.
- Sets interim and long term standards, goals and plans.

Clean Water Act Responsibilities

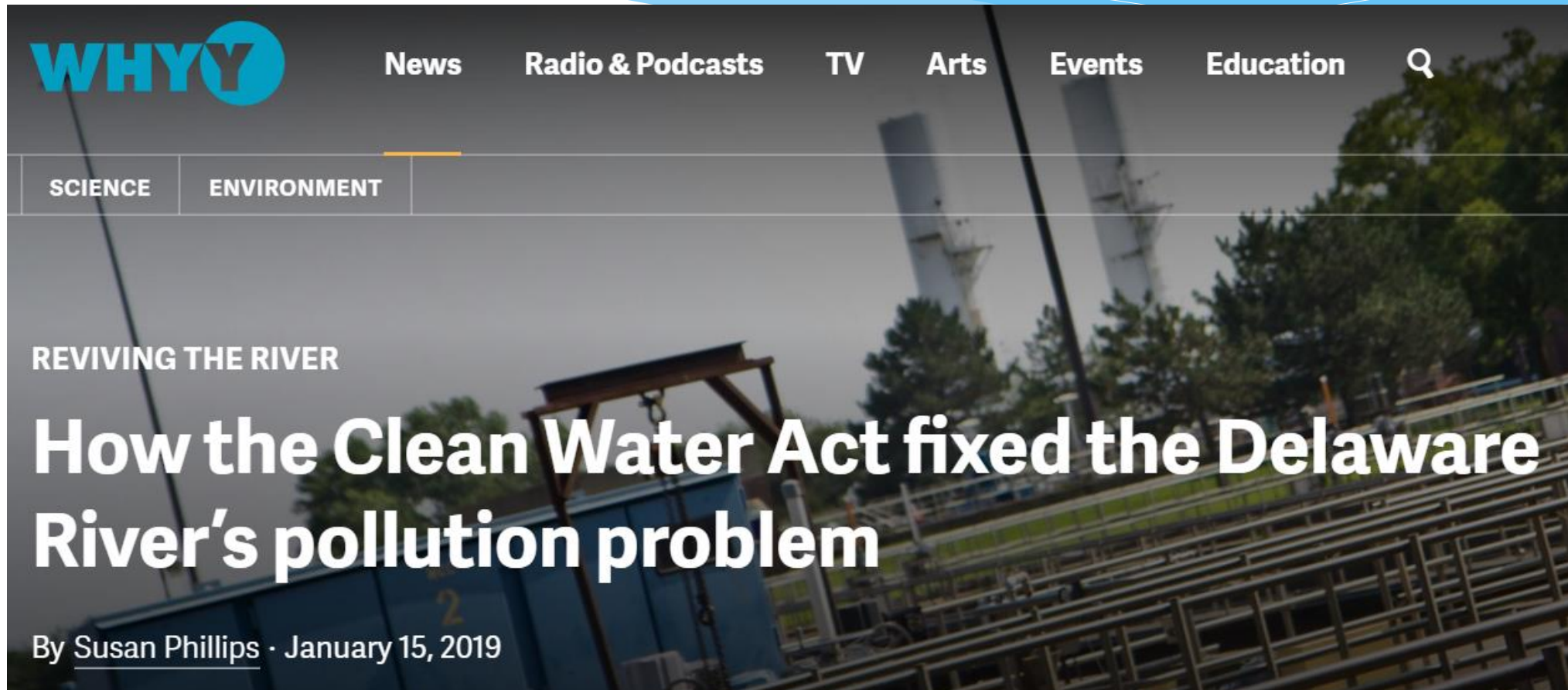
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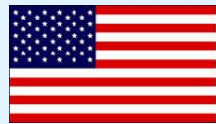
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Plans, goals and priorities

DRBC:

- Delaware 
- New Jersey 
- Pennsylvania 
- New York State 
- Federal Government



Water Quality Advisory Committee:

Academia/Science: Stroud Water Research

Delaware: DNREC

Environmental Group: Delaware Riverkeeper

Watershed Org.: Wildlands Conservancy

National Park Service

New Jersey: NJDEP

New York: NYDEC

Pennsylvania: PADEP

Industry: Chemours

Municipal: Philadelphia Water

US EPA

Plus: Toxics Advisory Committee and Monitoring Advisory and Coordination Committee



Steve Tambini, Executive Director

Steve.Tambini@drbc.gov

www.drbc.gov



Delaware River Basin Commission

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UNITED STATES OF AMERICA

*Managing Our Shared Water
Resources since 1961*