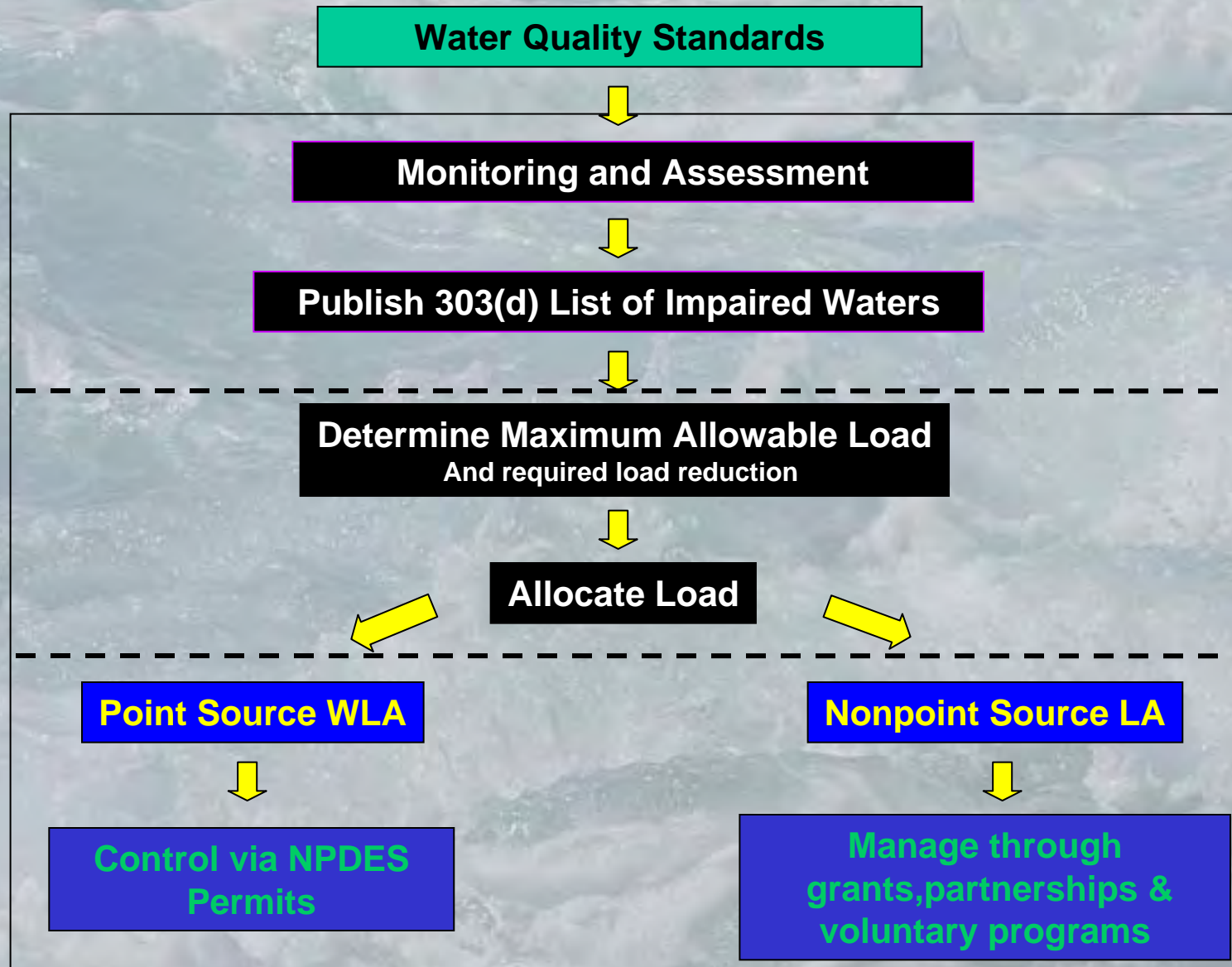




# 303(d) & TMDLs: DHEC's Perspective

**Mihir Mehta, P.E.**  
**SCDHEC Bureau of Water**

# Section 303(d) of the Clean Water Act

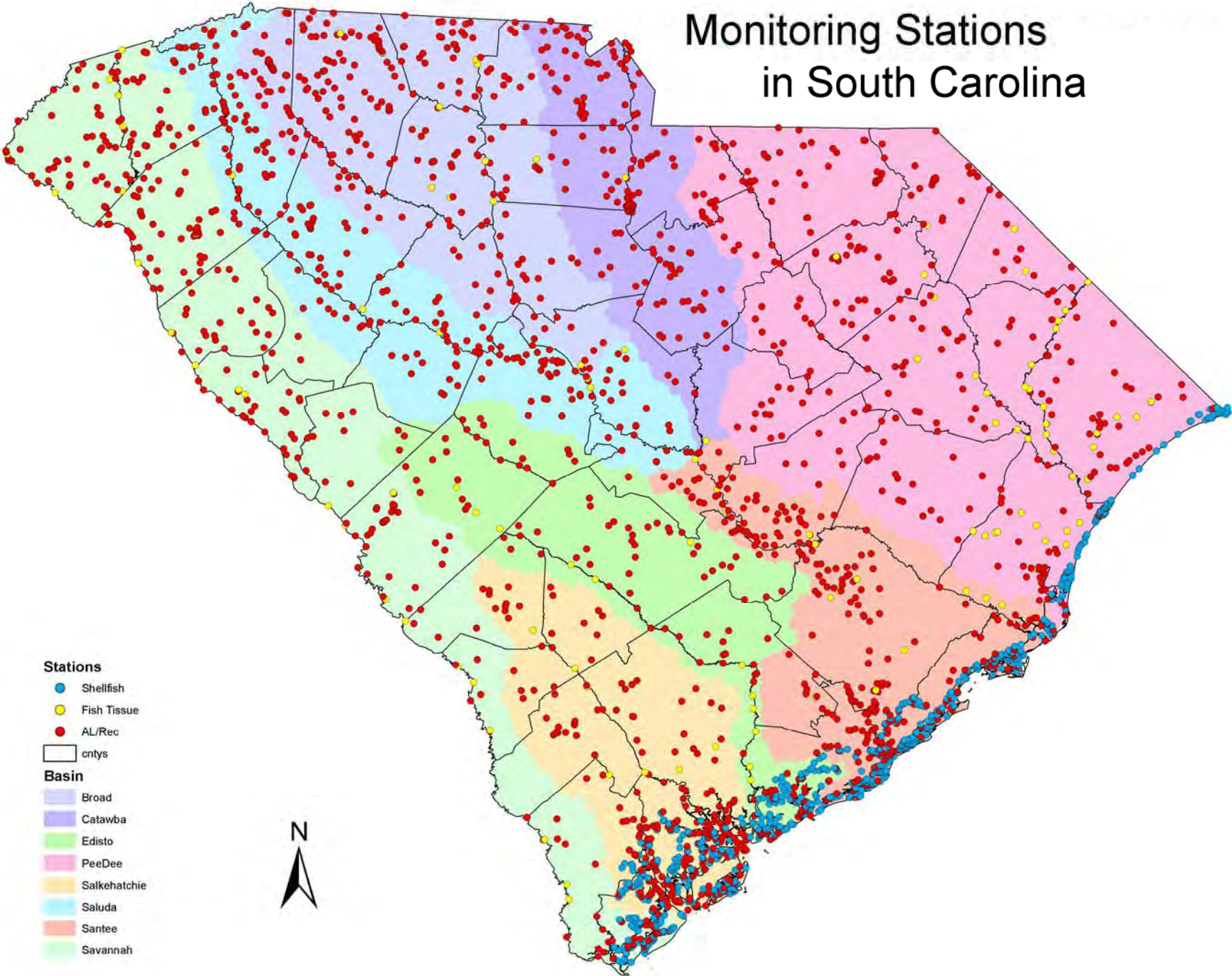


## 303(d) List of Impaired Waters

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- Includes locations of standards violations identified through DHEC's ambient monitoring
- In SC we list stations or sites and not segment or an area
- Assess for the following designated uses:
  - *Aquatic Life impairments include Bio, DO, pH, metals, nutrients & turbidity*
  - *Recreational Use impairments include enterococcus and fecal coliform bacteria*
  - *Human Consumption Use impairments include Hg or PCBs in fish tissue*
  - *Shellfish Harvesting Use impairments include fecal coliform bacteria*

# Monitoring Stations in South Carolina



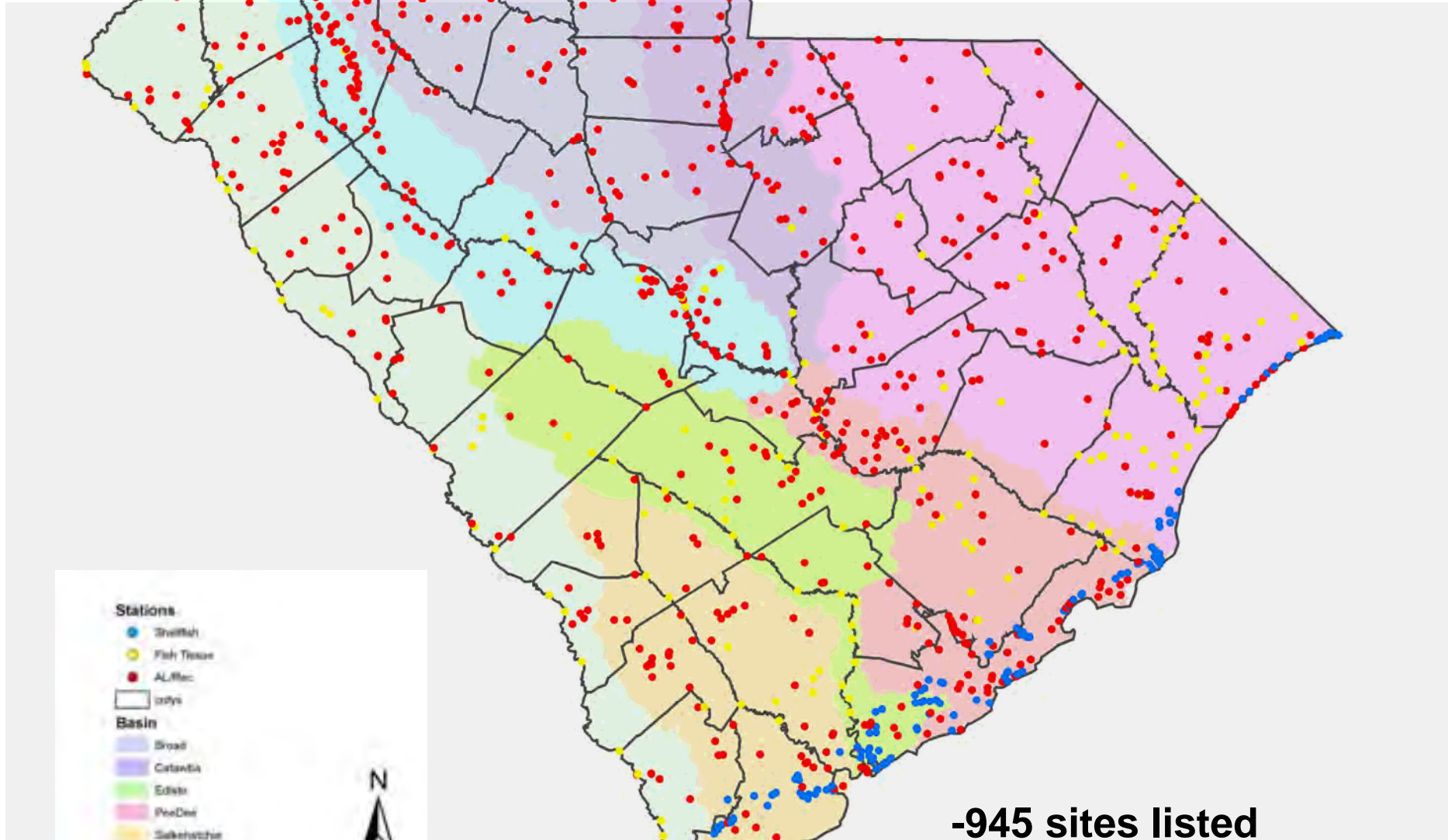
### Stations

- Shellfish
- Fish Tissue
- AL/Rec
- cntys

### Basin

- Broad
- Catawba
- Edisto
- PeeDee
- Salkehatchie
- Saluda
- Santee
- Savannah

# 2010 303(d) Listed Sites



**-945 sites listed**  
**-1103 total impairments**

# Total Maximum Daily Load

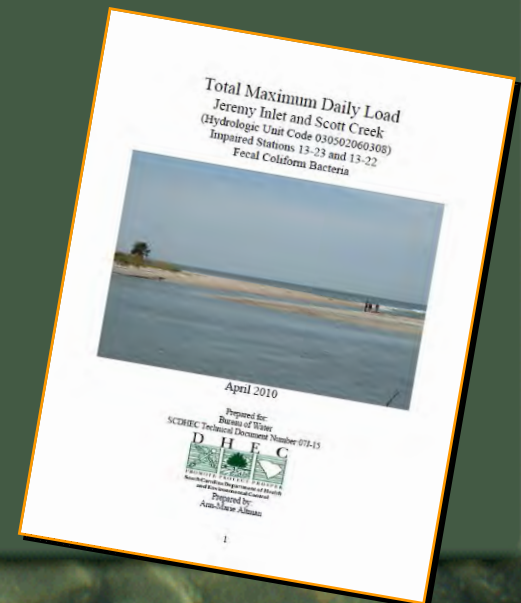
Maximum amount of a pollutant that a waterbody can receive from all sources, and still meet water quality standards, OR

•Formula: **TMDL = WLA + LA + MOS**

(WLA = Point, LA = Nonpoint, MOS = Margin of Safety)

•TMDL Document:

A plan that helps target resources in order to achieve water quality improvement and restore impaired waters



# Nonpoint Source or Point Source?



## TMDL Facts

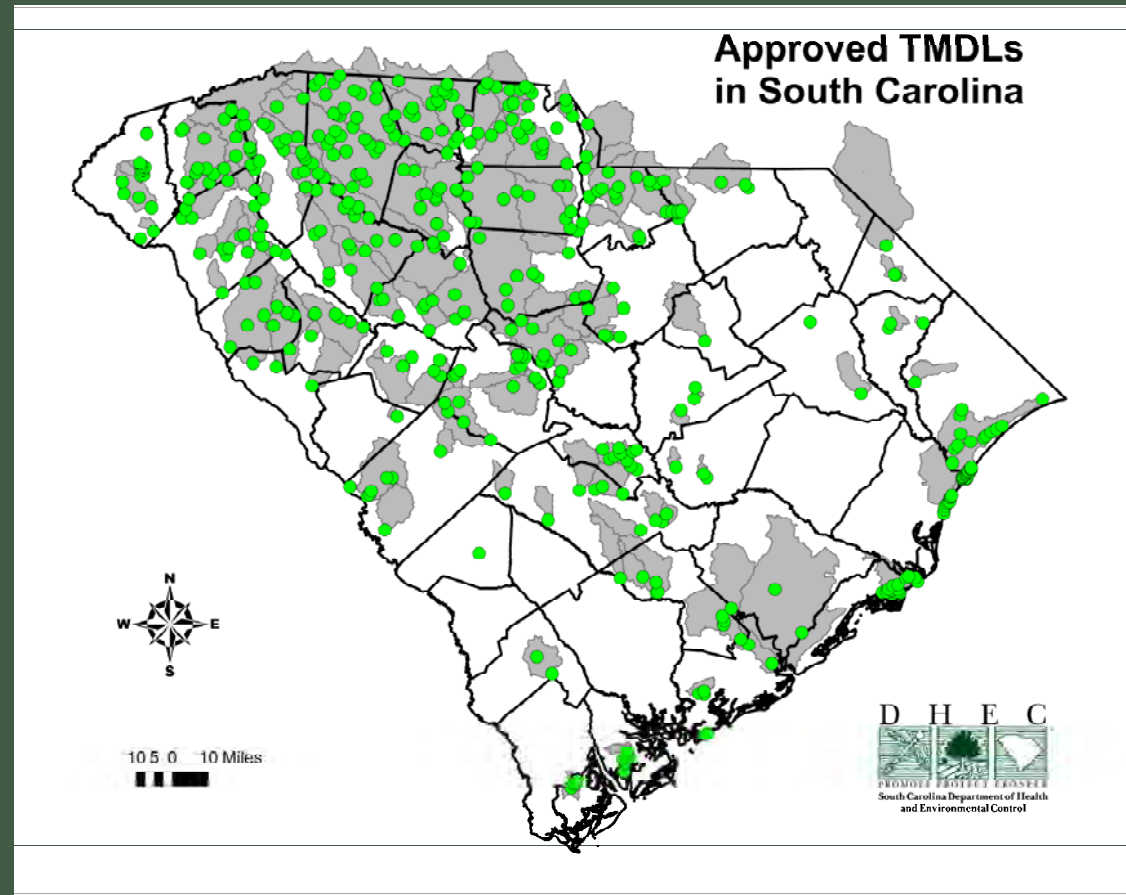
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- TMDL approval process includes public notice, comment period, & NODD (SC R.61-110)
- All TMDLs must be approved by EPA
- Approved TMDL confers no additional regulatory authority to DHEC
- TMDL implementation occurs through regulatory and non-regulatory mechanisms
- TMDLs may be revised, but never expire



# EPA-Approved TMDLs

- 30 DO
- 374 FC
- 51 SFH FC
- 1 TP
- 2 pH
- 1 Turbidity



# 303(d) List & TMDLs: Information on Web Site



South Carolina Department of Health and Environmental Control  
*We promote and protect the health of the public and the environment.*

Health

Environment

Services

Permits

Regulatory

A-Z

Q search

## TMDL Home

[303\(d\) List](#)

[TMDLs under development](#)

[Proposed TMDLs on Public Notice](#)

[Notice of Department Decision](#)

[Approved SC TMDLS](#)

[TMDL Implementation for Nonpoint Sources](#)

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## 303 (d) & Total Maximum Daily Loads

### South Carolina 303(d) List of Impaired Waters & TMDL Program

#### **Table of Contents:**

#### **A) 303(d) List**

- [What is the 303\(d\) List?](#)
- [How is the 303\(d\) List developed?](#)
- [How can a site be removed \(or "delisted"\) from the 303\(d\) List?](#)
- [How can I find the current and past South Carolina's 303\(d\) List?](#)
- [What is the complete list of impaired water in South Carolina?](#)

#### **B): Total Maximum Daily Loads**

- [What is a TMDL?](#)
- [How are TMDLs calculated?](#)
- [What are water quality classifications, standards and designated uses?](#)
- [Which waterbodies require a TMDL?](#)
- [How many TMDLs are currently developed?](#)
- [What TMDLs are currently being developed in South Carolina?](#)
- [How are TMDLs Implemented?](#)
- [How is TMDL implementation evaluated?](#)
- [How does a TMDL implementation plan benefit citizens?](#)
- [How should an NPDES permittee deal with a discharge to a waterbody for which there is a TMDL?](#)

# 303(d) List: Information on Web Site

2010 SC List of Impaired Waters by 12-Digit HUC

TMDL TARGET DATE(S)**	NOTE	BASIN	HUC	LOCATION	STATION	COUNTY	USE	CAUSE
2021		CATAWBA	030501030107	MCALPINE CK AT S-29-64	CW-064	LANCASTER	AL	NH3N
2014		CATAWBA	030501030107	MCALPINE CK AT S-29-64	CW-064	LANCASTER	REC	FC
2021		CATAWBA	030501030108	STEEL CR. AT US BY-PASS 21	CW-681	YORK	AL	PH
2016		CATAWBA	030501030109	SUGAR CK AT SC 160 E OF FORT MILL	CW-013	LANCASTER	AL	BIO
2014		CATAWBA	030501030109	SUGAR CREEK AT S-46-36	CW-036	LANCASTER	REC	FC
2019		CATAWBA	030501030302	CANE CK AT SC 200 5 MI NNE OF LANCASTER	CW-185	LANCASTER	AL	DO
2021		CATAWBA	030501030304	HANNAHS CREEK AT S-29-376 3.4 MI E OF LANCASTER	RS-05403	LANCASTER	AL	DO
2021	#	CATAWBA	030501030304	GILLS CK AT S-29-36 4.5 MI ENE OF LANCASTER	RS-07043	LANCASTER	AL	DO
2019, 2019		CATAWBA	030501030305	CANE CK AT S-29-50	CW-017	LANCASTER	AL	CU, DO
2021		CATAWBA	030501030305	CANE CR. AT SC 9 BYPASS	CW-210	LANCASTER	AL	PH
2013		CATAWBA	030501030305	RUM CK AT S-29-187	CW-232	LANCASTER	AL	DO
2013		CATAWBA	030501030401	WILDCAT CK AT S-46-650	CW-006	YORK	AL	DO
2014		CATAWBA	030501030401	TOOLS FORK AT S-46-195 7 MI NW OF ROCK HILL	CW-212	YORK	AL	TURBIDITY
2014		CATAWBA	030501030401	TOOLS FORK CREEKUPSTREAM OF RETENTION POND IN HAWKINS RIDGE OFF S-46-195	CW-545	YORK	REC	FC

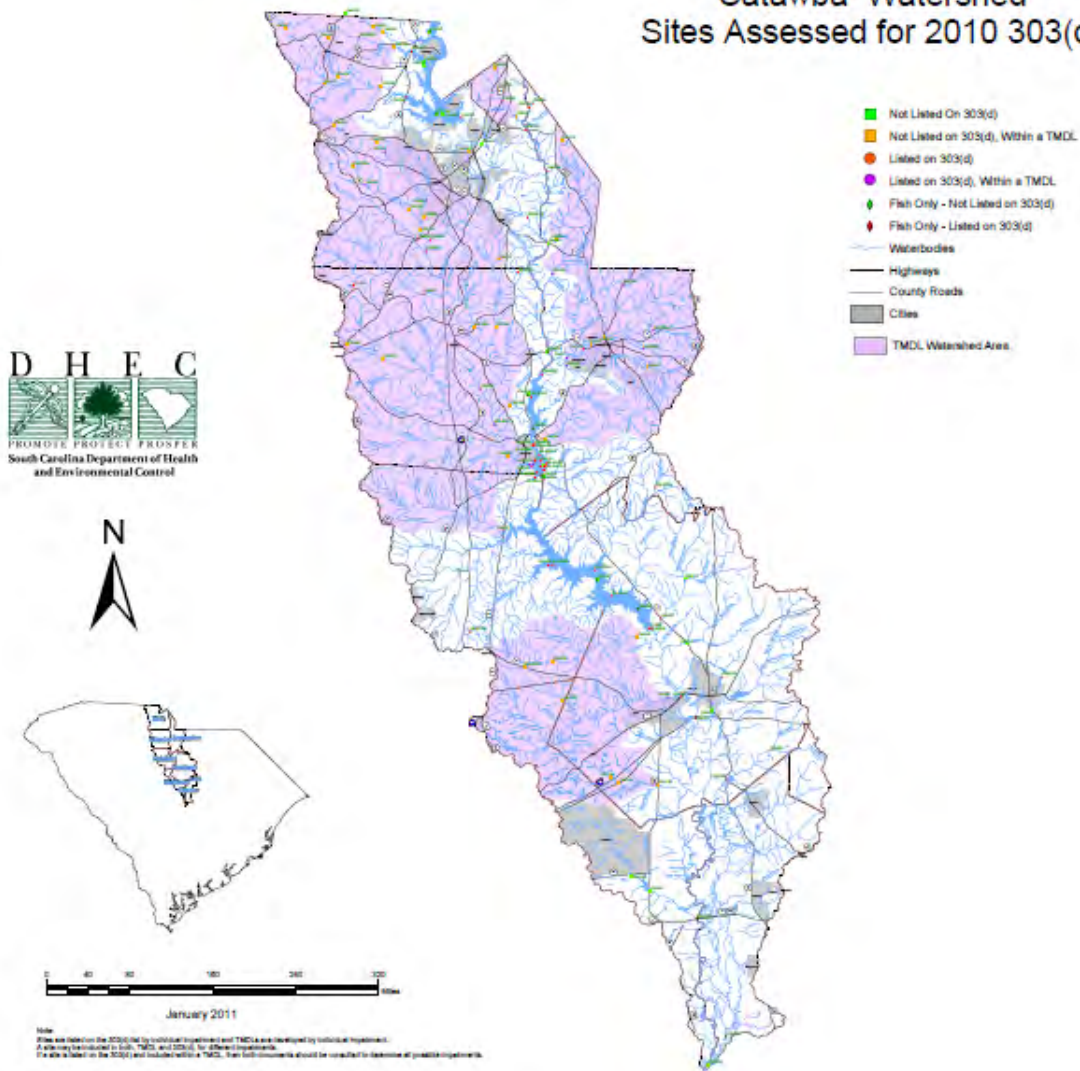
# TMDL Information as Part of 303(d) List

## Sites Covered Under an Approved TMDL and Attainment Status as of 12/09/10

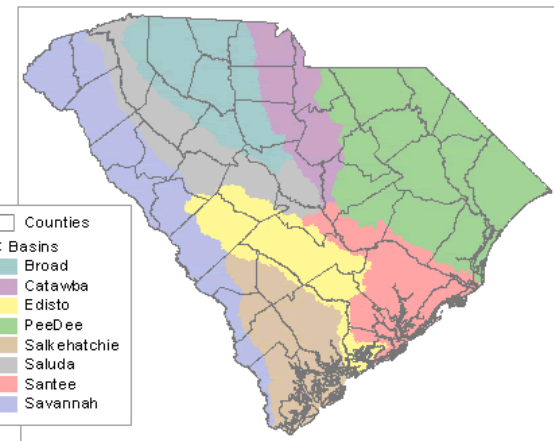
BASIN	12-DIGIT HUC	DESCRIPTION	STATION	COUNTY	USE	CAUSE	USE SUPPORT	TMDL*	DHEC_TECH REPORT	APPROVAL DATE
CATAWBA	030501011505	CROWDERS CK AT S-46-564 NE CLOVER	CW-023	YORK	REC	FC	Not Supported	InTMDL	NC TMDL	
CATAWBA	030501011505	CROWDERS CREEK AT S-46-1104	CW-024	YORK	REC	FC	Not Supported	InTMDL	NC TMDL	
CATAWBA	030501011505	SOUTH FORK CROWDERS CK AT S-46-79 4.5 MI NW OF CLOVER	CW-192	YORK	REC	FC	Fully Supported	WnTMDL	NC TMDL	
CATAWBA	030501011506	CALABASH BR AT S-46-414 2.5 MI SE OF CLOVER	CW-134	YORK	REC	FC	Not Supported	InTMDL	010-03	12/10/03
CATAWBA	030501011506	ALLISON CK AT US 321 3.1 MI S OF CLOVER	CW-171	YORK	REC	FC	Not Supported	InTMDL	011-03	12/19/03
CATAWBA	030501011506	ALLISON CK AT S-46-114	CW-249	YORK	REC	FC	Not Supported	InTMDL	007-07	02/22/07
CATAWBA	030501030108	STEELE CK AT S-46-22 N OF FORT MILL	CW-009	YORK	REC	FC	Not Supported	InTMDL	010-07	08/31/07
CATAWBA	030501030108	STEELE CK AT S-46-270	CW-011	YORK	REC	FC	Fully Supported	InTMDL	010-07	08/31/07
CATAWBA	030501030108	STEELE CK AT S-46-98	CW-203	YORK	REC	FC	Not Supported	InTMDL	010-07	08/31/07
CATAWBA	030501030203	SIXMILE CREEK AT S-29-54	CW-176	LANCASTER	REC	FC	Fully Supported	InTMDL	031-05	09/11/05
CATAWBA	030501030204	TWELVEMILE CK AT S-29-55 0.3 MI NW OF VAN WYCK	CW-083	LANCASTER	REC	FC	Not Supported	InTMDL	031-05	09/11/05

# 303(d) Sites and TMDL Areas on the Web Site

Catawba Watershed Sites Assessed for 2010 303(d)



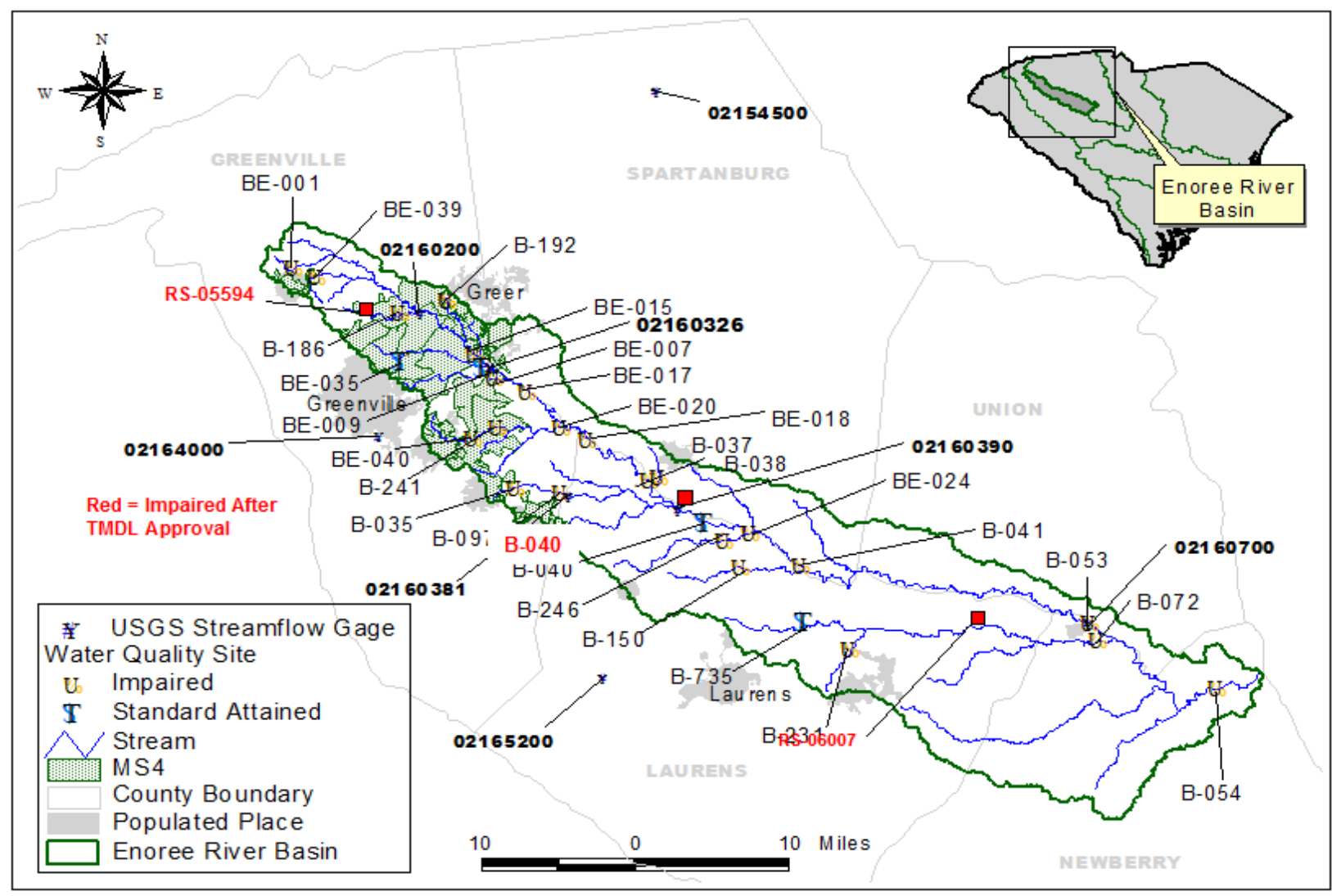
- Not Listed On 303(d)
- Not Listed on 303(d), Within a TMDL
- Listed on 303(d)
- Listed on 303(d), Within a TMDL
- ◆ Fish Only - Not Listed on 303(d)
- ◆ Fish Only - Listed on 303(d)
- Waterbodies
- Highways
- County Roads
- Cities
- TMDL Watershed Area



- Counties
- SC Basins
- Broad
- Catawba
- Edisto
- PeeDee
- Salkehatchie
- Saluda
- Santee
- Savannah

Note:  
Sites are listed on the 303(d) list by individual watershed and TMDLs are identified by individual basins.  
A listing is included in both 303(d) and TMDLs for different basins.  
If a site is listed on the 303(d) list but is not within a TMDL, then both basins should be consulted to determine all possible impairments.

# Example - Enoree River FC TMDL Drainage Area



# Questions?

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mehtam@dhec.sc.gov**