

# Category One Waters

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Water Monitoring and Standards



# Surface Water Quality Standards

N.J.A.C. 7:9B

## Overview

- Designated Uses
- Stream Classifications
- Antidegradation Designations
- Water Quality Criteria
- General Policies
- Technical Policies



# Surface Water Quality Standards

## Designated Uses

- Aquatic Life
- Drinking Water
- In the Water Recreation
- On the Water Recreation
- Agricultural and Industrial uses
- Fish consumption
- Shellfish harvest



# Surface Water Quality Standards

## Stream Classification

### Freshwaters

- FW1
- FW2
- PL



### Saline waters

- SE
- SC



# Surface Water Quality Standards Antidegradation Designations

- ONRW
- Category One
- Category Two



# Surface Water Quality Standards Antidegradation Designations

## New Jersey

- ONRW (PL & FW1)
- Category 1
- Category 2

## Federal

- Tier 3
- Tier 2 1/2
- Tier 2
- Tier 1



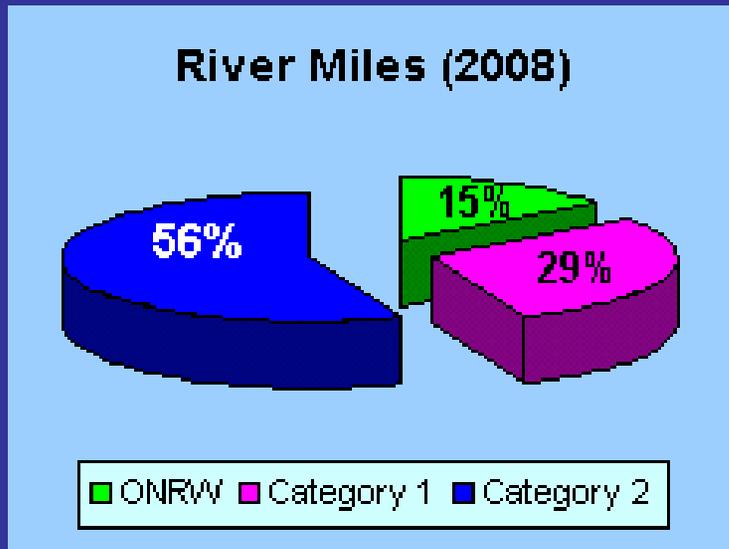
# Surface Water Quality Standards Antidegradation Policy

All surface water classifications are assigned to one of the three antidegradation designations

- FW1 and PL waters designated as ONRW
- Exceptional resource waters designated as Category One
- All other waters are Category Two

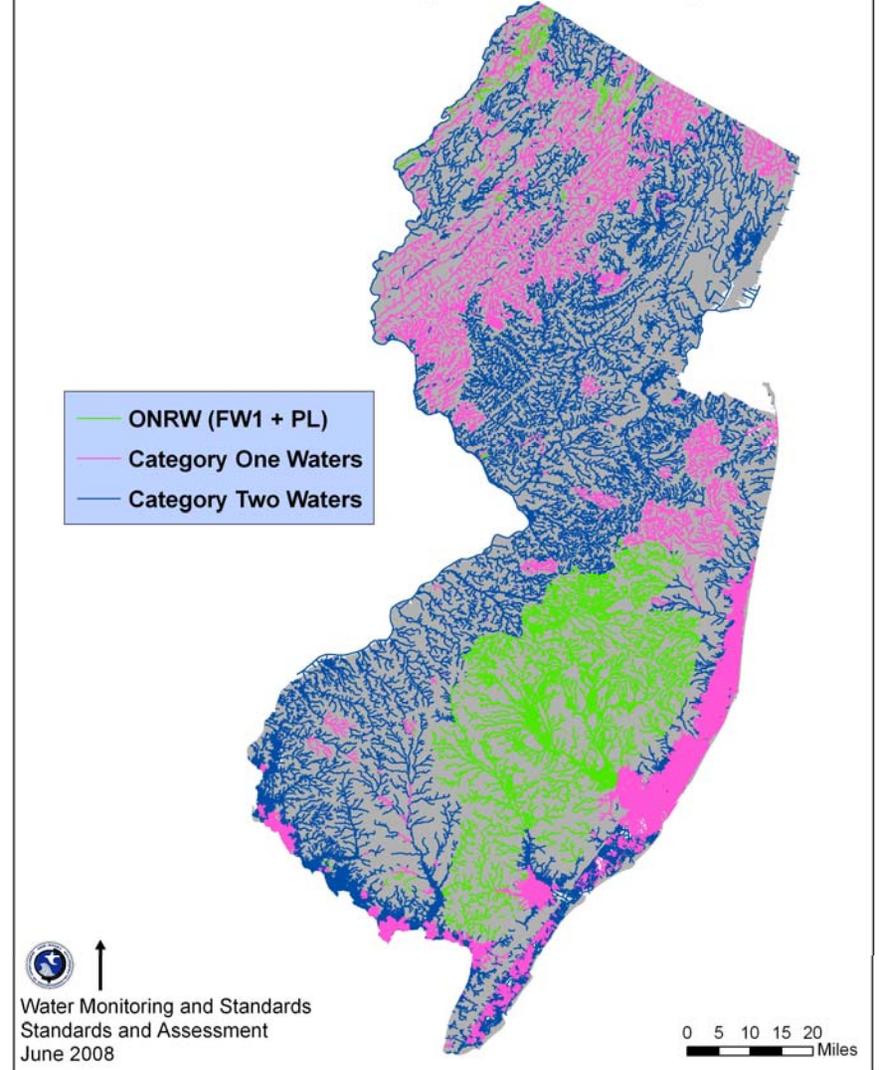


# Antidegradation Designations



To date, over 4,550 stream miles and 10,219 acres of lakes and reservoirs designated Category One

**Surface Water Antidegradation Designations**



# Category One Designation

Historically, C1 waters were based on:

- State & Federal Parks
- Trout Production Waters
- Approved Shellfish Waters



# Category One Designation Eligibility

- Exceptional ecological significance
- Exceptional water supply significance
- Exceptional fisheries resources



# Exceptional Ecological Significance

1. Documented occurrence of specific aquatic-dependent Endangered or Threatened species and suitable habitat
- OR
2. Exceptional Aquatic Community



# Exceptional Ecological Significance

## 1. Aquatic-Dependent T&E

- Bog turtle
- Dwarf wedgemussel
- Brook floater
- Green floater
- Triangle floater
- Eastern lampmussel
- Eastern pondmussel



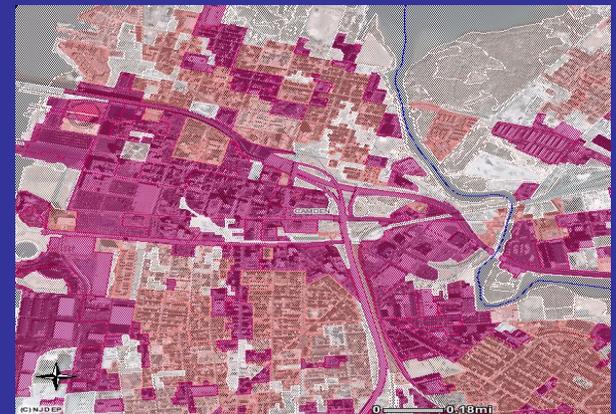
# Exceptional Ecological Significance

## 2. Exceptional Aquatic Community

### Nonimpaired Benthic Index

#### plus 2 of the following

- Optimal habitat
- Excellent Fish IBI
- Meet water quality criteria for DO, temp., TP, TSS
- Low impervious surface
  - <2% - HUC 14 < 5 sq. miles
  - <10% - HUC 14  $\geq$  5 sq, miles



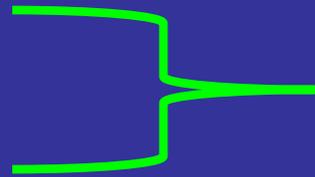
# Exceptional Ecological Significance

## 2. Exceptional Aquatic Community

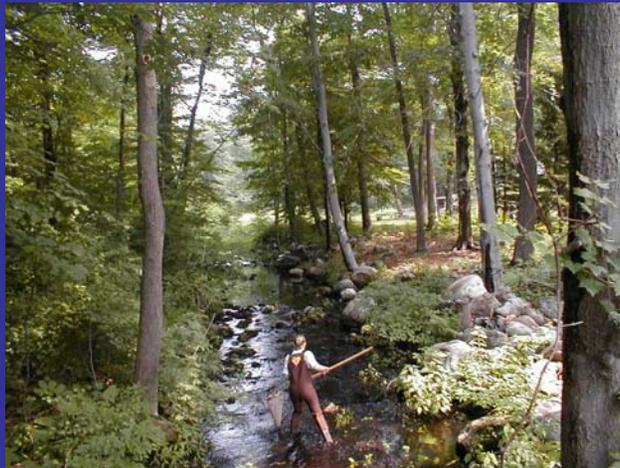
### Benthic Macroinvertebrates

Sites classified as:

- Excellent
- Good
- Fair
- Poor



**Benthic  
Macroinvertebrates  
must be non-  
impaired**



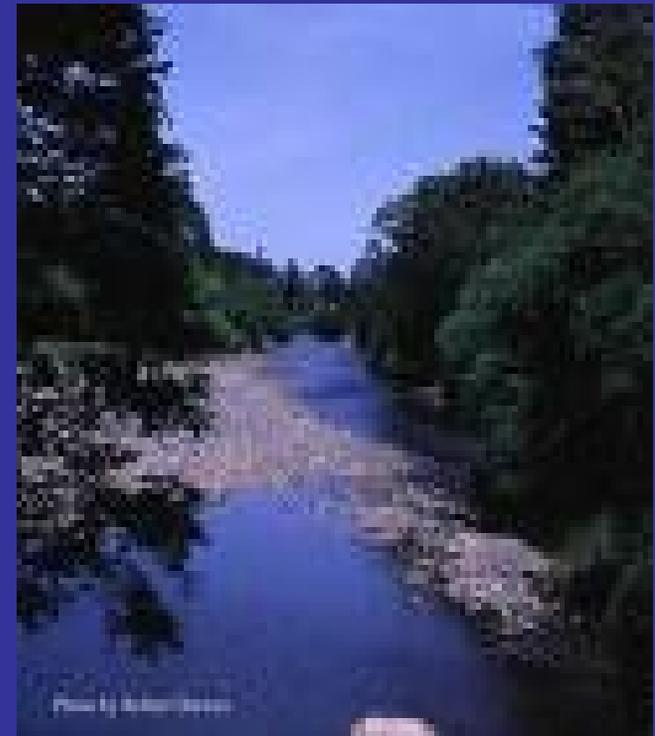
# Exceptional Ecological Significance

## 2. Exceptional Aquatic Community Habitat Assessment

Sites ranked as:

- Optimal
- Suboptimal
- Marginal
- Poor

**Habitat must be optimal for C1**



# Exceptional Ecological Significance

## 2. Exceptional Aquatic Community Fish Index

Sites classified as:

- Excellent
- Good
- Fair
- Poor

**Fish Index must  
be Excellent for C1**



Exceptional Ecological Significance  
2. Exceptional Aquatic Community  
Water Chemistry

Data supplemented by other agencies. Results presented in Integrated Report/List

**Must meet water quality criteria for DO, Temp, TP, and TSS for C1**



Exceptional Ecological Significance  
2. Exceptional Aquatic Community  
Impervious Surface

**Must meet low IS for C1**

<2% - HUC 14 < 5 sq. miles

<10% - HUC 14  $\geq$  5 sq. miles



# Exceptional Ecological Significance

## 2. Exceptional Aquatic Community

### Examples of Qualifying Factors

#### Qualify for C1

- Non impaired Benthic
- AND
- Suboptimal Habitat
  - Meets Water Quality
- OR
- Excellent fish index
  - Low Impervious surface

#### Do not qualify for C1

- Impaired Benthic
- Optimal Habitat
- Excellent Fish Index
- Meet Water Quality
- Low Impervious surface



# Exceptional Fisheries Resources

- Waterbodies that support trout production and classified as FW2-TP
- Waterbodies approved for unrestricted shellfish harvesting

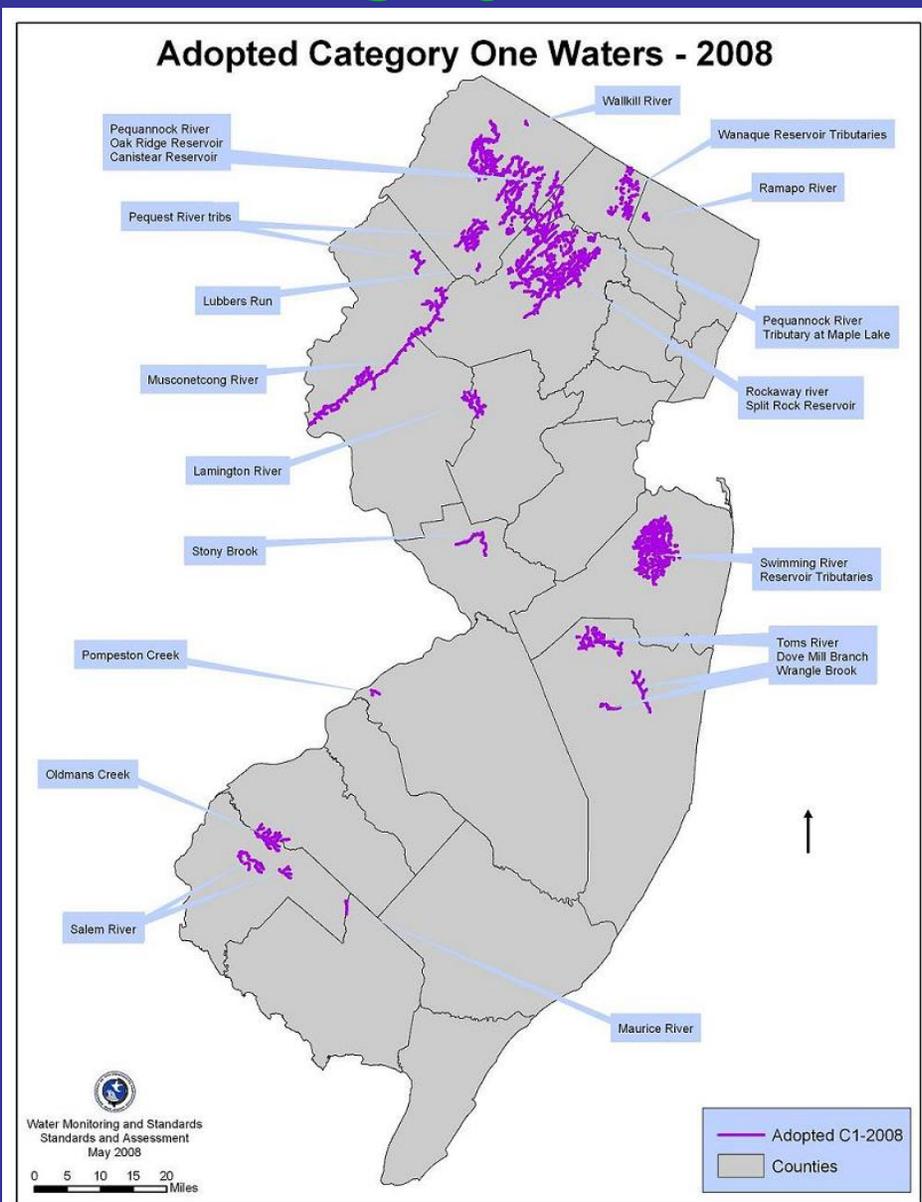


# Exceptional Water Supply Significance

Water supply system serving a population of greater than 100,000 including reservoirs and natural tributaries



# NEW Category One Waters



Rockaway River

Walkkill River

Pequest River

Ramapo River

Pequannock River

Stony Brook

Wanaque Reservoir

Swimming River Reservoir Tribs

Toms River

Musconetcong River

Lamington River

Pompeston Creek

Oldmans Creek

Salem River

Maurice River



# Process for Upgrading Antidegradation Designation

- Review all available data to determine whether the waterbody can qualify as Category 1
- Prepare rule proposal
- Publish notice of proposal in the New Jersey Register with 60 day comment period
- Hold a public hearing
- Prepare adoption document including responses to comments received
- Publish the adoption in the New Jersey Register
- Rule becomes effective upon publication in NJR



# Category One Implementation



# Category 1 Requirements

- No measurable changes in water quality
- Where the water quality does not meet criteria, the quality must be improved, unless the exceedence is due to natural conditions



# Category 1 Implementation Point Sources



- New and expanded discharges can not cause a measurable change in water quality at the Category 1 boundary – NO NEW LOAD
- Permit renewal without more loading or increase in wastewater flow without additional pollutant loadings meets C1 standard



# Category 1 Implementation for Non-Point Sources

- Implemented through Best Management Practices (BMP)
- For C1 waters the required BMP is a 300 foot buffer
- Buffers are implemented by Stormwater Management rules and Flood Hazard Area Control Act rules



# Additional Information

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