

New Jersey Water Quality Standards

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Water Monitoring and Standards

October 16, 2009



Water Quality Management



* Integrated Water Quality
Monitoring & Assessment
Report - Sublist 5



Surface Water Quality Standards

- CWA Section 303(c) - States required to adopt WQS
- Standards must include designated uses, water quality criteria, antidegradation policy & general policies
- States required to review & revise WQS 1x/3yrs
- EPA must review and approve WQS after consultation with USFWS
- CWA authorizes EPA to promulgate for States if necessary – National Toxics Rule



SWQS are Foundation for:

- Integrated Report requirements (CWA §305(b) & 303(d)) – general water quality & id of impaired waters – **WM&S**
- Total maximum daily loads (TMDLs) - **DWM**
- Water quality management plans - **DWM**
- NJPDES –WQ based effluent limitations - **DWQ**
- Water quality certifications (CWA §401) for activities affecting water quality & requiring federal license or permit - **DLUR** CWA §319 management plans for the control of NPS pollution – **DWM**
- Stream classifications – **DLUR and DWM**
- Site remediation - **SRP**



Surface Water Quality Standards

- Policies
- Designated uses
- Criteria to protect designated uses
 - Narrative
 - Numeric
- Stream Classifications
 - Designated Uses
 - Antidegradation



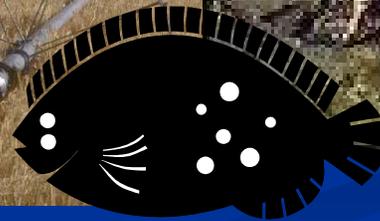
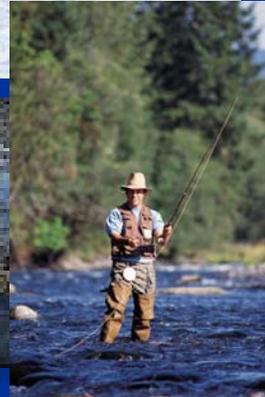
Surface Water Quality Standards Policies

- General policies
- Antidegradation
- Mixing Zones
- Variances
- Technical implementation policies



Surface Water Quality Standards Designated Uses

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



Surface Water Quality Standards

Stream Classification

- Freshwaters
- FW1
- FW2
- PL
- Saline waters
- SE
- SC



Surface Water Quality Standards

Stream Classification

- FW-2 - All freshwaters not classified FW1 or PL. These waters are further classified as:
 - FW2 - Trout Production (TP)
 - FW2 - Trout Maintenance (TM)
 - FW2 - Non-Trout (NT)



Surface Water Quality Standards

Stream Classification

Saline waters are classified as saline estuarine (SE) and saline coastal (SC):

- SE waters are further classified as
 - SE1 (Fishable & swimmable)
 - SE2 (Secondary contact, maintenance and migration of fish)
 - SE3 (Secondary contact and migration of fish)



Surface Water Quality Standards

Water Quality Criteria

- Adopted to protect specific designated uses.
- Criteria may be numeric or narrative.
- Numeric criteria should include a magnitude, frequency and duration
 - Example: chronic aquatic life criteria 4ug/l as a four day average concentration no more than once every three years.
- Narrative criteria describe an acceptable condition
 - Example: Nutrients – at levels that do not cause excessive productivity



Surface Water Quality Standards Antidegradation Tiers

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 water bodies are assigned to one of the three tiers.
- Waters designated as ONRW (non-degradation) are listed in separate table in the SWQS
- Waters designated as Category One are specifically listed in the Stream Classification Tables in the SWQS
- Waters not designated ONRW or C1 are C2

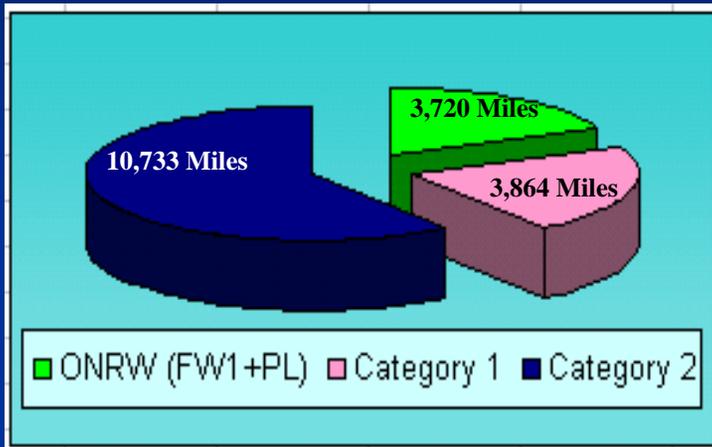


Antidegradation Policy Outstanding National Resource Water (ONRW)

- **FW-1** - Waters set aside for posterity due to exceptional characteristics
 - No manmade wastewater discharges are allowed
 - No activities which might cause changes in water quality, except toward natural conditions
- **Pinelands (PL)** - Waters within the Pineland Area
 - No activities which might cause changes in water quality, except toward natural conditions

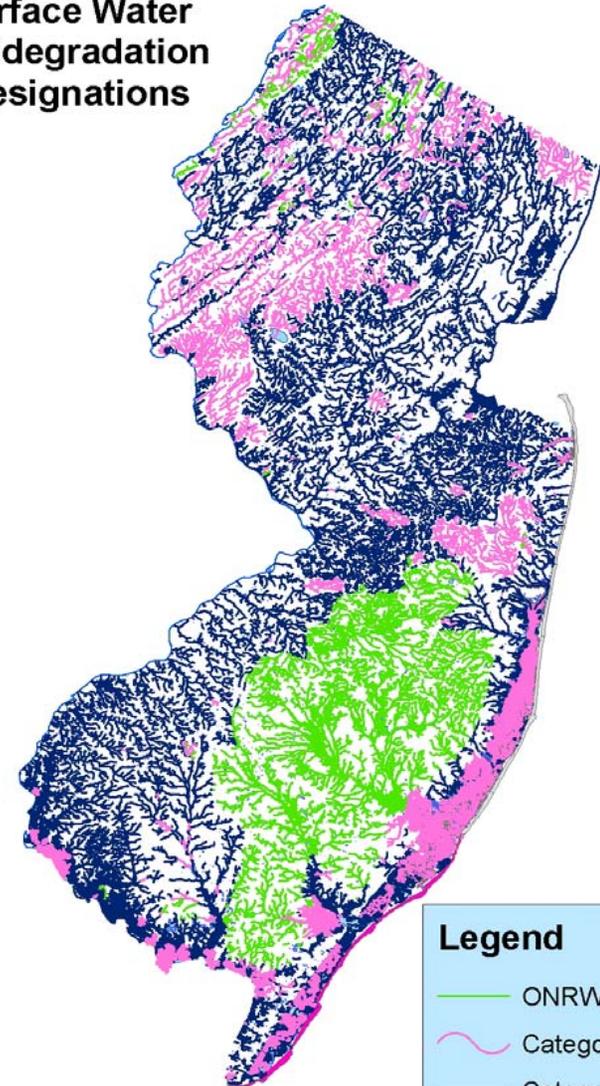


Antidegradation Designations



To date, over 3,864 stream miles and 10,219 acres of lakes and reservoirs designated Category One

Surface Water Antidegradation Designations



Legend

- ONRW (FW1 + PL)
- Category One Waters
- Category Two Waters



Antidegradation Policy

Category One Waters

- Applies to new and expanded activities
- Provides additional protection to waterbodies that help prevent water quality degradation and discourage development where it would impair or destroy natural resources and environmental quality.
- Waters shall be protected from measurable change in water quality



Antidegradation Policy

Category Two Waters

- All streams not designated as C1
- Applies to new and expanded activities
- Similar to Category One, existing water quality is maintained. However, some degradation to high quality waters may be allowed to accommodate important economic and social development
- Must continue to meet Surface Water Quality Standards
- Review done on a pollutant-by-pollutant basis



Category One Designation Eligibility

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



Exceptional Ecological Significance

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



Exceptional Ecological Significance Aquatic-Dependent T&E

Specific T&E species eligible for C1 designation
without other water quality information

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

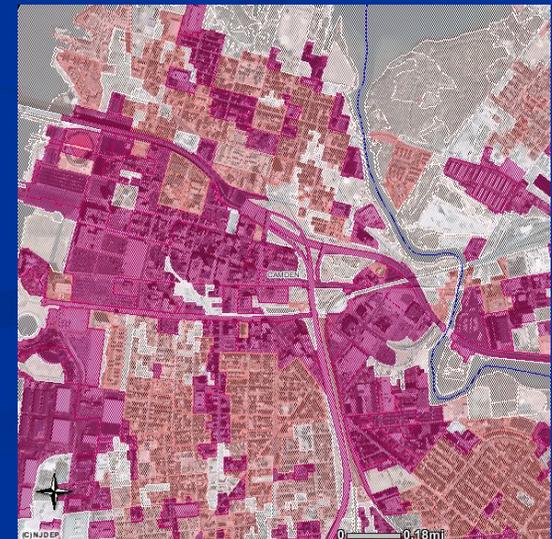


Exceptional Ecological Significance

Exceptional Aquatic Community

Nonimpaired aquatic community and 2 of the following:

- Optimal habitat
- Excellent fish community
- Meet water quality criteria for DO, temp., TP, TSS
- Low impervious surface
 - <2% - HUC 14 < 5 acres
 - <10% - HUC 14 \geq 5 acres



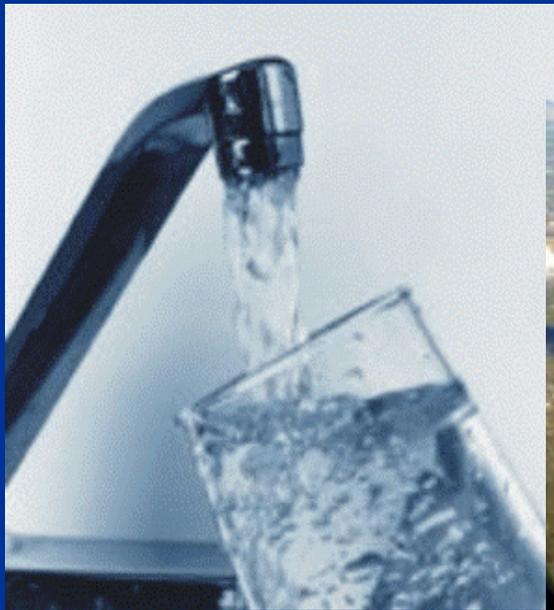
Exceptional Fisheries Resources

- 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



Surface Water Quality Standards

History

- 1996 - proposed “Mega Rule” (total overhaul of the WQMP, NJPDES and SWQS) – Not adopted
- Readopted without change - May 18, 1998
- Since 1998, initiated 7 rounds of rulemakings.
- October 16, 2006 - adopted major revisions to criteria for toxics, temperature, and pathogens including implementation provisions.
- Five of 7 limited to Category One designations. Most recent - June 16, 2008



Current Status

- Conducted Stakeholder outreach to determine provisions in need of update/delete/change.
- Developed scope for proposal based on outreach and DEP staff/management input.
- Proposed to readopt with major amendments -April 20, 2009
- Comment Period Closed June 21, 2009
- Adopted most amendments effective December 21, 2009
- Concurrent proposal to be published in NJR December 21, 2009



Amendments Effective December 21, 2009

- Added a new policy encouraging the implementation of wastewater reuse
- Added a reference to Assessment Methods Document for developing 303(d)1 List
- Moved sections to NJPDES – translators and bioassay requirements
- Added provision to develop site-specific water quality criteria thru TMDL
- Removed/modified definitions



Amendments Effective December 21, 2009

- Modified compliance schedules to that the time frames reflect permit
- Revised Temperature criteria - add shorter durations
- Added new pH criteria for South Jersey closer to Pinelands conditions
- Updated the cyanide criteria for saline waters



Amendments Effective December 21, 2009

- Changed phosphorus numeric criteria and the nutrient policies
- Allow for watershed specific translators of the narrative criteria thru TMDLs
- Based on comments will be proposing concurrent amendments to nutrient criteria and policies



Additional Information

Water Monitoring and Standards – NJ Water Quality Standards including Category One waters, water quality assessment and water monitoring programs www.state.nj.us/dep/wms/

Division of Land Use Regulation – Land use permits www.state.nj.us/dep/landuse/

Division of Water Quality – NJPDES Permits www.state.nj.us/dep/dwq/



Questions

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