

Water Quality Trading in New Jersey

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Management

April 2004

2002 Integrated Water Quality Monitoring and Assessment Report

- 2,308 assessed non-tidal river miles
 - 1,913 miles (83%) did not meet SWQS
- Most frequently occurring impairments are fecal coliform and total phosphorus
 - 35% fecal coliform
 - 45% TP (0.1 mg/l criterion)

Draft 2004 Integrated List

- Approximately 450 segments assessed for “chemical” parameters
- Fecal coliform most common impairment
 - majority addressed by TMDLs established 2004
- Phosphorus remains key impairment
 - approximately 140 segments impaired for phosphorus
 - highest exceedances found in Passaic River basin

Category One Initiative

- Three rounds of Category One designations
 - April 2003
 - 82 miles (ecological significance)
 - November 2003
 - 14 miles (trout)
 - Proposal pending adoption
 - 500 miles (water supply)
- Stormwater Management Rule provides Special Water Resource Protection Area
 - 6,093 stream miles protected by 300 foot buffer
 - 3,307 Category One waters
 - 2,786 Tributaries to Category One waters

Phase II Stormwater

- Establishes two tiers of requirements:
 - Tier A
 - Tier B
- General Permits: basic requirements
- Water Quality Management Plan amendments: Additional Measures

Antidegradation

- If waterbody listed as impaired for a parameter AND
- TMDL not yet established for pollutant/waterbody combination; THEN
- Effluent limit for discharges of pollutant = criterion
- For phosphorus impairments: 0.1 mg/l end-of-pipe
- Reasonable potential to exceed will get a WQBEL

Phosphorus TMDLs

- 35 TMDLs for phosphorus in lakes established 2003
- Proposed April 2004:
 - Papakating Creek & Clove Acres Lake
 - Cooper River & Lakes

TMDL Schedule

- 2004
 - Passaic
- 2005
 - Raritan
 - Rancocas
 - Pennsauken
- 2006
 - Raritan
 - Saddle
 - Assunpink
 - Lakes
- 2007
 - Remainder of TP listings

Trading Opportunities

- Trading: meet regulatory obligations or protect high quality water at reduced cost
 - Improve Water Quality Pre-TMDL
 - Reduce Cost of Implementing TMDL
 - Maintain Water Quality Better than Standards
 - Ancillary benefits with Point/Nonpoint Trades
 - buffers
 - habitat
 - wetlands

Issues

- Accountability
- Verifiability
- Spatial and temporal equivalence
- NPS load variability and control efficiencies
- NPS quantification uncertainty
- Trades only for reductions beyond required reductions