

DEPARTMENT OF ENVIRONMENTAL PROTECTION

LAND USE MANAGEMENT
WATER MONITORING AND STANDARDS

Surface Water Quality Standards

Adopted Amendments N.J.A.C. 7:9B-1.4 and 1.15

Proposed: May 21, 2007 at 39 N.J.R. 1845(a)
Adopted: May -- 2008 by Lisa P. Jackson, Commissioner,
Department of Environmental Protection ---
Filed: May --, 2008 R. d. **with substantive and
technical changes** not requiring additional public
notice and comment (see N.J.A.C. 1:30-6.3)
Authority: N.J.S.A. 58:10A-1 *et seq.*, 58:11A-1 *et seq.*,
N.J.S.A. 13:1D-1 *et seq.*
DEP Docket Number: 11-07-04/557
Effective Date:
Expiration Date:

The Department of Environmental Protection (Department) is adopting amendments to the Surface Water Quality Standards (SWQS) at N.J.A.C. 7:9B. The amendments at N.J.A.C. 7:9B-1.4 modify the definition of "category one waters" and add new definitions for "Exceptional Ecological Significance", "Exceptional Fisheries Resource(s)", "Exceptional Water Supply Significance", and "HUC 14." The Department is also adopting amendments to upgrade to Category One antidegradation designation approximately 686 river miles.

In consideration of comments received regarding some of the proposed Category One designations based exceptional ecological significance - endangered or threatened species, the Department reevaluated all the waterbodies proposed for Category One upgrade based on endangered or threatened species. The Department determined that portions of certain waterbodies do not meet the criteria for Category One designation and is modifying the rules on adoption accordingly. These changes on adoption are explained

→ in responses to comments 320 through 321, 340 through 341, and 388 through 397 below.

NOTE FAILURE TO CITE BMS Comment # 347

Summary of Hearing Officer's Recommendations and Agency Response:

A public hearing on the proposal was held on June 28, 2007, at the Rutgers EcoComplex Environmental Research and Extension Center, Bordentown, New Jersey. Debra Hammond, Chief of the Bureau of Water Quality Standards and Assessment served as the hearing officer. 26 persons attended the hearing, and 11 provided testimony. The hearing officer recommended that the rules be adopted as proposed, with the changes described in the responses to comments and in the summary of agency-initiated changes below. The Department accepted the recommendation.

The record of the public hearing is available for inspection in accordance with applicable law by contacting:

Office of Legal Affairs

Attn. DEP Docket Number 11-07-04/557

New Jersey Department of Environmental Protection

P.O. Box 402

Trenton, NJ 08625-0402

Summary of Public Comments and Agency Responses:

The following persons timely submitted written and/or oral comments on the proposal.

- | | | |
|---|---|--|
| 1 | South Jersey Bayshore Coalition C/O ANJEC | |
| 2 | Howell Township Environmental Commission | |
| 3 | Ackerman | Kathy |
| 4 | Ackerman | Beth |
| 5 | Akers | Fred |
| 6 | Aldrich | Chris |
| 7 | Alford | Renee & Robert |
| 8 | Amidon | Thomas |
| | | Great Egg Harbor Watershed Association |
| | | Lake Mohawk Country Club |
| | | Omni Environmental for Stony Brook Regional Sewerage Authority |

established hamlets and neighborhoods while creating irrevocable adverse environmental impacts. (204)

→ 321. COMMENT: The commenter is extremely disappointed that the Pequest River in Warren County, yet again, did not receive the upgrade designation. The Pequest River in Warren County had already been identified as a candidate for Category One designation, as documented by the Department in the March 2003 New Jersey Register publication listing approximately 1,600 "candidate waters" that Department staff determined met the existing Category One criteria. However, portions of the Pequest in Warren County have not been nominated even in this most recent round of nominations. (166)

RESPONSE TO COMMENTS 320 THROUGH 321: As part this proposal the Department assessed portions of Pequest River that were not already FW1 or Category One to identify portions that would qualify for Category One upgrade based on exceptional ecological significance - endangered and threatened species. Waterbodies which were listed on the DEP candidate list based on Open Space which did not qualify for Category One based on exceptional ecological significance were not proposed for Category One designation.

The Landscape Maps identify habitat patches for certain species, including endangered or threatened species, using documented occurrences and peer-reviewed species models. The maps identify patches of habitat but do not provide specific species occurrence information. For more information on the Landscape Maps, see the "Landscape Project Report" which is available at <http://www.njfishandwildlife.com/ensphome.htm>. The Landscape Project maps can be viewed through the Department's interactive mapping tool or they can be downloaded as GIS data layers at <http://www.nj.gov/dep/gis/>. Specific sighting information and occurrence data is maintained in Natural Heritage Database. Documented occurrence information in the Natural Heritage Database is used to generate the Landscape Project maps.

The bog turtle occupies wetlands that meet certain characteristics of vegetation, soils, and, most importantly, hydrology. The life history of bog turtle is somewhat unique in that it spends the majority of the year within the wetland complex and often does not venture for great periods of time into the adjacent uplands and therefore the identification of wetlands occupied by the bog turtle is critical to the recovery of this species. A percentage of wetlands with bog turtles are of a small enough size that they are not currently identified as Wetlands in the 2002 Land Use/Land Cover data layer so therefore polygons are hand digitized to reduce the chance of not capturing core habitat. An additional 200 meters is generated around the Bog Turtle Colony polygons to account for turtle movements not identified during fieldwork as well as habitat that is valuable to the colony, but was not identified by the biologists. For more information, please see the Landscape Project at <http://www.state.nj.us/dep/fgw/ensp/landscape/index.htm>.

In consideration of comments received, the Department reevaluated the habitat mapped as suitable for bog turtle in the Landscape Project to determine whether a stream intersected with documented, occupied habitat and where a stream's water quality may impact the documented, occupied habitat. While suitable habitat exists throughout the Pequest River watershed, the Department determined that waterbodies that did not intersect with suitable habitat for bog turtle did not qualify for Category One based upon exceptional ecological significance. Based on this evaluation, the Department determined that only portions of the Pequest River segments proposed for upgrade, including Andover Junction Brook, Andover Pond, Bear Creek, Gardners Pond, Hidden Valley Lake, Iliff Lake, Kymer Brook, Lenape Lake, New Wawayanda Lake, Trout Brook, Tarhill Brook, and Valentines pond qualify for Category One upgrade. As a result, the Department is not adopting the Category One designation for the Pequest River from source to Conrail railway tracks south of Turtle Pond, including all unnamed and unlisted tributaries that are not currently designated as FW1 or Category One, portions of Andover Junction Brook above Valentine Pond, Kymer Brook tributaries immediately north and immediately south of Clearwater, and the entire Trout Brook. These changes are made on adoption at N.J.A.C. 7:9B-1.15(d). The Department is adopting Category One designation as proposed for the rest of the Pequest River tributaries including Kymer

Brook. A Category One designation was warranted based on the documented occurrences and suitable habitat of the State endangered bog turtle for Kymer Brook.

The SWQS rules ensure that appropriate protection is afforded to a waterbody through Category One designation. In addition to a no measurable change in water quality in Category One waters, other regulatory programs in the Department implement a 300 feet buffer requirement on Category One waters through application of the Stormwater Management rules and the Flood Hazard Area Control Act rules to provide addition protection.

Pompeston Creek

322. COMMENT: The buffer provided for Pompeston Creek under Category One is badly needed to prevent further deterioration of the stream corridor due to development. (180)

323. COMMENT: The commenter would like to thank the Department for designating the Pompeston Creek as Category One. (172)

324. COMMENT: Pompeston Creek Watershed Association is in full support of the Category One designation proposed for a portion of the Pompeston Creek from the Route 130 to the Broad Street Bridge, including unnamed tributaries. Pompeston Creek Watershed Association applauds the Department's wisdom in proposing to designate this portion of the Pompeston Creek for Category One protection. It is our sincere hope that through the combined efforts of the Department, the municipalities, County, and Pompeston Creek Watershed Association, we will be successful in improving water quality in the Creek and protecting habitats for the Eastern Pondmussel, bog turtles, and the myriad of other species that depend on the Pompeston Creek. (131)

325. COMMENT: The Environmental Commission of the Borough of Riverton is pleased regarding the change in the definition of Category One waterways and its effect upon the Pompeston Creek in Burlington County. The commenter have long thought it is ironic that the Category One protection was applicable only to less-endangered streams

→ 340. COMMENT: The Department has not provided any basis for establishing the upstream starting point and downstream end point for the segment of the Stony Brook, and its tributaries, proposed for designation as Category One.

It is apparent that the downstream end point was arbitrarily selected by the Department since the habitat and water quality at the downstream end point do not support the characteristics of "exceptional ecological significance" as defined by the Department. Further, the downstream end point of the proposed segment of Stony Brook extends well into the impoundment zone of Carnegie Lake which does not provide suitable habitat for the listed species. The habitat conditions identified by the Department for the green floater, the eastern pondmussel, and the triangle floater do not exist in Stony Brook at the locations surveyed by Princeton Hydro. For the reasons set forth above, until the Department provides such documentation with time to review and comment, the adoption of the proposed amendment as to that segment of Stony Brook within the limits of Princeton Township and its tributaries is unlawful. Even if the Department provides such documentation to demonstrate that certain segments of Stony Brook should be categorized as Category One, the segment of Stony Brook surveyed by Princeton Hydro does not meet the criteria for Category One and the Department has provided no scientific basis to designate such segment as Category One. Therefore, the segment of Stony Brook proposed for designation as Category One is arbitrary and capricious and should not be adopted. (Masten)

→ 341. COMMENT: The Department, in error, has identified two different downstream end points for the segment of Stony Brook proposed for designation as Category One in the proposed rule amendment.

The preamble or "Summary" provides two inconsistent downstream end points in the same paragraph. In the first instance, the preamble indicates that the downstream end point is the "pumping station south of West Road"; however, at the end of that same paragraph, the downstream end point is stated as the "Delaware and Raritan Canal". Further, there is nothing in the rule or the public record demonstrating why either the

Canal or the pumping station should be the downstream limit of the Category One designation. For this reason, the record upon which the Department is proposing to amend the rules lacks the standard of clarity necessary for interested and affected persons to understand the Department's analysis. Therefore, the segment of Stony Brook proposed for designation as Category One is arbitrary and capricious and should not be adopted. (Masten)

RESPONSE TO COMMENTS 340 THROUGH 341: The Department must provide a narrative description of the waterbody segment proposed for Category One designation. Typically, designations start and end at a road crossings or a named tributary. It was extremely difficult to select a lower boundary for the Stony Brook Category One designation. There are no road crossings or named tributaries between Quaker Road and West Road. Therefore, the rule text indicated Pumping Station south of West Road, while the summary stated Pumping Station south of West Road and also referenced the Delaware and Raritan Canal.

Based on the comments received the Department conducted additional field visits to verify sightings and confirm that the suitable habitat was still present in the portion of the Stony Brook proposed for Category One designation. The Department determined that some of the endangered or threatened species sightings data used to upgrade Stony Brook to Category One was more than 10 years old. As a result, the Stony Brook was reevaluated to confirm the extent of Category One designation through field visits and it was determined that Stony Brook from Pennington Hopewell Road to Old Mill Road that was proposed for Category One showed less suitable habitat and no documented sightings. Therefore, the Department is not adopting Stony Brook from Hopewell Pennington Road to Old Mill Road as Category One at this time. The Department is adopting the Stony Brook, from Old Mill Road to Quaker Road as Category One. At N.J.A.C. 7:9B-1.15(f) the Department is revising the description for Stony Brook based on endangered or threatened species reevaluation.

Category One designation allows refuge managers to more fully address and achieve management objectives much as the State of New Jersey does with its Wildlife Management Areas. (133)

→ RESPONSE TO COMMENTS 385 THROUGH 387: The Department acknowledges the commenters support. The Department is adopting a Category One designation to White Lake and Lake Grinnell through this rulemaking based on Bog turtle occurrence and its habitat.

388. COMMENT: The commenter is especially eager to see the streams, rivers, reservoirs, and lakes in Sussex County (including but not limited to the Wallkill River and its tributaries, Black Creek and its tributaries, Pacock Brook, and Russia Brook and all its tributaries, as well as Silver Lake, Summit Lake, Lake Tamarack, Franklin Pond and Franklin Pond Creek and all their tributaries, Lake Mohawk, and Canister Reservoir) listed in the proposed amendment upgraded at the earliest possible time. (47)

389. COMMENT: According to the regulatory proposal, approximately 250 miles of these waterways are located in the Highlands Preservation Area. This area is already heavily regulated by the Department as a result of the enactment of the "Highlands Water Protection and Planning Act." Sussex County is a large part of the Highlands area, with many State parks, forests and protected lands. Protecting our State's watershed is vitally important, but it must be balanced with the economic interests of the State and region. Regretfully, these newly proposed Category One water regulations will effectively stifle economic growth in Sussex County and surrounding areas. (127, 128)

390. COMMENT: The commenter opposes the Category One regulations for Sparta, Sussex County. (78, 79, 142, 143, 156, 173, 182, 215, 216, 217)

391. COMMENT: Assembly woman Alison McHose and soon to be elected Freeholders Steve Oroho and Gary Chiusano have personally expressed to the Department their extreme disappointment in the new Category One rule proposal that would affect their

towns. It is their strong desire for the Department to carve out an exception for the tourism centers in Hardyston and Vernon, which is the primary economic engine for Sussex County. The Department should take the advice of senators Littell and McHose; freeholders Oroho and Chiusano who know the area of Sussex County and know the people that would be hurt by the new Category One rules. The Department should hold more meetings with these senators and freeholders and work out a compromise that will protect the economic viability. (Student)

392. COMMENT: The Department has listed Bog Turtles, Eastern Lampmussel, and Triangle Floater (being endangered or threatened species) as the basis for Category One designation in the Wallkill River. Please provide verification of the necessary and required documented occurrence(s) and location and spatial extent for the Bog Turtle, Eastern Lampmussel and Triangle floater. (233)

393. COMMENT: The proposal has inadequate support as the Wallkill and Black Creek redesignations are based on the endangered or threatened Landscape Project. There appears to have been a targeted assessment of these waterbodies; while other State open waters with similar attributes were overlooked. The Department's action is arbitrary and capricious in targeting certain waterbodies. (155)

394. COMMENT: It appears that the Landscape Maps identify areas within the watershed as Bog Turtle Habitat but do not designate the specific location of the Black Creek as such habitat.

It appears that the Landscape Maps do not identify any areas within the Black Creek watershed as documented habitat for the Triangle Floater.

The existing Black Creek Sanctuary Development has preserved and in fact created habitat for the bog turtle to ensure its continued existence in the area. There is no need to add additional regulatory restrictions to the redevelopment project area to ensure preservation of bog turtle habitat and the existence of Bog Turtles in the area. (48)

395. COMMENT: The regulations assume, in the absence of proof, that endangered or threatened species habitat exists throughout the county. If the State is looking to protect overall water quality there must be a provision in the rules for verification of habitat. (Horsefield)

396. COMMENT: The proposed regulations designate the Wallkill River as a Category One waterway based on the fact the river is considered to be a "suitable" habitat for eastern lampmussels, triangle floaters, and bog turtles. However, while the science may find that there is suitable habitat for the above species there is no science or documentation available that verifies that there are actual occurrences of the species within these areas. The rules as proposed require both criteria to qualify for Category One designation; and due to the fact that there are no documented occurrences of endangered or threatened species, the Wallkill River should not be a Category One waterway. (199, 201)

397. COMMENT: While there may be portions of the Wallkill River that possess exceptional water quality or habitat the broad application of the Category One designation to the entire river and all its tributaries is unwarranted. By designating waters that are less than pristine in character the significance of more deserving waters such as the Flat Brook, located in northwestern Sussex County may be lost. Previously the Department used scientific data that allowed for specific sections or segments of rivers and streams to be designated as Category One while maintaining the other portions as Category Two. This approach would likely be more effective and generate less resistance from both municipalities and property owners throughout Sussex County and may be the more appropriate approach to take in seeking to protect those portions of the Wallkill River that are found to have the exceptional qualities suitable for classification as Category One waters. (199, 201)

→ RESPONSE TO COMMENTS 388 THROUGH 397: The Landscape Maps identify habitat patches for certain species, including endangered or threatened species, using

documented occurrences and peer-reviewed species models. The maps identify patches of habitat but do not provide specific species occurrence information. For more information on the Landscape Maps, see the "Landscape Project Report" which is available at <http://www.njfishandwildlife.com/ensphome.htm>. The Landscape Project maps can be viewed through the Department's interactive mapping tool or they can be downloaded as GIS data layers at <http://www.nj.gov/dep/gis/>. Specific sighting information and occurrence data is maintained in Natural Heritage Database. Documented occurrence information in the Natural Heritage Database is used to generate the Landscape Project maps.

The bog turtle occupies wetlands that meet certain characteristics of vegetation, soils, and, most importantly, hydrology. The life history of bog turtle is somewhat unique in that it spends the majority of the year within the wetland complex and often does not venture for great periods of time into the adjacent uplands and therefore the identification of wetlands occupied by the bog turtle is critical to the recovery of this species. A percentage of wetlands with bog turtles are of a small enough size that they are not currently identified as Wetlands in the 2002 Land Use/Land Cover data layer so therefore polygons are hand digitized to reduce the chance of not capturing core habitat. An additional 200 meters is generated around the Bog Turtle Colony polygons to account for turtle movements not identified during fieldwork as well as habitat that is valuable to the colony, but was not identified by the biologists. For more information, please see the Landscape Project at <http://www.state.nj.us/dep/fgw/ensp/landscape/index.htm>

In consideration of comments received, the Department reevaluated the habitat mapped as suitable for bog turtle in the Landscape Project to determine whether a stream intersected with documented, occupied habitat and where a stream's water quality may impact the documented, occupied habitat. While suitable habitat exists throughout the Wallkill River watershed, the Department determined that waterbodies that did not intersect with suitable habitat for bog turtle did not qualify for Category One based upon exceptional ecological significance. Based on this reevaluation, the Department determined that only portions of the Wallkill River qualify for Category One designation.

This reevaluation affected other waters in the Wallkill River basin. At N.J.A.C. 7:9B-1.15(g) the Department is making revisions based on endangered or threatened species reevaluation.

→ Tributaries or portions of tributaries to the Wallkill River that did not intersect with bog turtle habitat are not being adopted as Category One at this time. Based on the reevaluation the Department is not adopting the proposed Beaver Run tributaries that originate in Wantage Township, Clove Brook, Franklin Pond, proposed portions of Franklin Pond Creek, Mohawk Lake, Papakating Creek from Lehigh and New England railroad crossing in Wantage Township including tributary east of Roys, Lake Windsor tributary, and the tributary that drains into Papakating Creek immediately upstream of the Lehigh and New England railroad crossing in Wantage Township, West Branch Papakating Creek from the confluence with Libertyville tributary including two tributaries immediately west of Plumbsock, Silver Lake, Summit Lake, Tamaracks Lake, and Wallkill River from confluence with Beaver Run to State line. Because the Department is only adopting portions of some tributaries, few segments of the streams that were covered under the proposal as unnamed and unlisted tributaries are newly identified in the rule text upon adoption. At the same time rule text also reflects changes as a result of not adopting portions of proposed Wallkill River and its tributaries.

The Department inadvertently included the eastern lampmussel and triangle floater as the basis for the proposed portion of the Black Creek. The eastern lampmussel and triangle floater are found in the existing Category One portion of Pochuck Creek downstream of the proposed Black Creek segment. Therefore, Black Creek is not being adopted as Category One at this time.

398. COMMENT: On February 1, 1993, the Department initially proposed designating the Wallkill River Category One, however it was subsequently agreed between the Sussex County Municipal Utilities Authority and Department that the development of a Wallkill River Watershed Management Plan would provide a holistic and more appropriate approach to the protection of the Wallkill River and its tributaries.

maps can be viewed through the Department's interactive mapping tool or they can be downloaded as GIS data layers at <http://www.nj.gov/dep/gis/>. As part of the Department's proposal to upgrade portions of the Stony Brook, the Department provided notice to the public of the selected waterbodies designated for Category One based on endangered or threatened species, and the public was given an opportunity to comment on the Department's bases. In fact, based upon public comments on this rule proposal, the Department determined that changes to the spatial extent of the Category One designation of the Stony Brook were warranted. See response to comments 340 through 341.

"HIDDEN" BMS COMMENT

→ 347. COMMENT: The commenter supports conservation and protection of water resources and believes that the Department evaluation process leading to Category One designation proposals should be open and transparent.

As directed by the Department, BMS relied on information concerning habitat and endangered or threatened species that was provided by the Department during the planning and permitting phase of the Hopewell Campus project. Information that BMS obtained from Department during the planning and permitting the Hopewell Campus included Landscape Maps. The Landscape Maps that were provided by the Department and used by BMS as a basis for the planning and permitting activities described above -- not to mention the digital Geographic Information System (GIS) data layers that are available from the website referenced in the SWQS rule proposal -- do not indicate the presence of suitable habitat within the Stony Brook for any freshwater mussel species. Moreover, Appendix IV of the report describing New Jersey Landscape Project, Version 2.0 (NJDEP, 2004) indicates that the species that now are alleged to qualify the Stony Brook for Category One designation were not used when preparing data layers for the Landscape Maps. Clearly, the process for proposing to designate the Stony Brook as a Category One waterbody has not been open and transparent. (114)

348. COMMENT: If adopted, the proposed designation of the Stony Brook as a Category One waterbody will nullify a decade of planning and permitting approvals that

the Bristol Myers Squibb (BMS) Hopewell Campus sustainable build-out project has received from state, county, and local agencies and result in unintended consequences of sprawl, reduction of open space, and increased impervious surfaces.

It is unfortunate that all of BMS's efforts to protect the environment along the Stony Brook will be nullified if the proposal to designate the Stony Brook as a Category One water is adopted. Indeed, what surely must be an unintended consequence of the proposed amendment to the SWQS rule, designation of the Stony Brook as a Category One water may cause BMS to have to revert to the previously-approved plan for the build out of the property in order to preserve its investment in the Hopewell Campus. Remarkably, adoption of the proposed revisions to the SWQS will translate to: (a) rather than eliminating sprawl, sprawl will be increased; (b) rather than increasing open space, open space will be reduced; (c) rather than preserving existing views and character, existing views and character will be eliminated; (d) rather than reducing impervious surfaces, impervious surfaces will be increased; (e) rather than enhancing watershed protection, watershed protection will remain at the status quo; (f) rather than fostering pedestrian activity, pedestrian activity will be discouraged; and, (g) incremental growth will increase rather than decrease.

In short, it is misguided to designate the Stony Brook as a Category One water because existing planning and permitting approvals for the development of the Hopewell Campus would provide greater protection for the Stony Brook than would the Category One designation. (114) *BMS*

RESPONSE TO COMMENTS 347 THROUGH 348: As explained earlier in the response to comments 340 through 341, the Department reevaluated the extent of Stony Brook proposed for Category One designation and were unable to verify at this time that the mussel species were present. Thus, the Department is not adopting the Category One designation in the area of the referenced project and therefore it is not likely to be affected by this rule.