

Responsiveness Summary on the NC draft 2010 303(d)
Submitted March 29, 2010

Comments were received from the following entities and individuals:

Haw River Assembly
Twelve citizens of Chatham County (signed one comment letter)
City of Charlotte
Mecklenburg County
Friends of the Rocky River
Duke Energy
Rocky River Heritage Foundation
City of Raleigh
Center for Biological Diversity
Upper Watauga Riverkeeper
Neuse River Foundation
Individuals:
 D. Hill
 K. Hundley
 C. Keisler
 C. Miller
 C. Pieper

These comments with NC Division of Water Quality (DWQ) responses are summarized below. A list of changes made as a result of DWQ internal review is available on request.

One commenter opposes the de-listing of the lower portion of Falls Lake for chlorophyll *a* from the draft 2010 303(d) list. The commenter asks DWQ to consider broader ramifications of de-listing only a small portion of Falls Lake.

*Response: DWQ has discretion in defining the extent of individual assessment units. Neither the overall assessment methodology nor chlorophyll *a* results changed significantly between the 2008 and 2010 assessments; therefore, to avoid confusion during rulemaking for Falls Lake, similar assessment units will be used in 2010 as were used in 2008, and the lower portion of the lake will remain listed.*

One commenter was concerned about the listing for high water temperature in AU#11-(123.5)b of the South Fork Catawba River Arm of Lake Wylie. A variance from the thermal water quality standard in this area of Lake Wylie within the approved thermal mixing zone of the condenser cooling water discharge was granted per approval of the 316(a) demonstration and NPDES permit. This area of the watershed should not be listed as impaired for violation of the water temperature standard.

Response: At this time the 316(a) demonstration has not been approved by DWQ; therefore, this portion of Lake Wylie will remain on the 303(d) list for temperature. Upon approval of the 316(a) demonstration, DWQ will notify EPA of its intent to delist this AU in the next cycle. DWQ will not initiate TMDL development for this impairment before a decision is made on the current 316(a).

One commenter requested that North Carolina place ocean water segments on the 303(d) list and develop a total maximum daily load for carbon dioxide.

Response: This commenter made the same request of many states. EPA issued a notice in the Federal Register on March 22, 2010 soliciting public comment on the effects of ocean acidification as it relates to the listing of impaired waters under Section 303(d) of the Clean Water Act. EPA is requesting comments on whether EPA should issue guidance regarding the listing of waters as threatened or impaired for ocean acidification and what that potential guidance might entail. EPA will complete a memo by November 15, 2010 describing how it intends to proceed.

One commenter believes a portion of Robeson Creek should be considered impaired for turbidity.

Response: The commenter did not provide turbidity data. DWQ does not currently have an ambient monitoring station in AU#16-38-(3)c. We have forwarded your information to the appropriate basin planner. The commenter was also advised to contact DWQ's local regional office if they observe sediment and erosion control problems with construction activities.

One commenter hopes that DWQ can provide further information on the potential sources for zinc and copper impairments.

Response: DWQ has just recently started to assess for copper and zinc. DWQ is also reevaluating state metals standards. Before source identification work is done, DWQ will need to reassess these waters against the new standard and assessment methods to determine if there is a standards violation. In general, anthropogenic sources of copper in water include antifouling coatings on boats, automotive brake dust, wood preservatives, pesticides, and algacides. Sources of zinc include highway runoff (tires), galvanized steel (e.g., roofing materials), batteries, plastics, wood preservatives, antiseptics, and pesticides.

One commenter suggests that NC account for local sources of mercury (such as incinerator emissions and local coal plants) as well as the amount that is deposited after rainfall from airborne sources to the west of NC.

Response: DWQ is developing a statewide TMDL for mercury that will account for in-state and out-of-state sources of mercury.

Two commenters question the low pH for Mountain Island Lake and Lake Wylie. A joint study with DWQ to determine the source of discrepancy was requested.

Response: We are also interested in determining the cause of the discrepancy in the datasets. DWQ will assign a low priority for TMDL development for these waters until this issue is resolved.

One commenter noted that in 2005 EPA approved a turbidity TMDL for Little Sugar Creek. However, at that time only one section of Little Sugar Creek was listed as impaired, AU 11-137-8c, the lowest downstream section of Little Sugar Creek. This year, the highest upstream section of Little Sugar Creek (AU 11-137-8a) is listed as impaired for turbidity. Both segments have similar land uses, impairments, and urban constraints. The commenter suggests that Little Sugar Creek AU 11-137-8a be delisted to Category 4a.

Response: We have moved AU 11-137-8a to Category 4t. We will continue to monitor turbidity as the TMDL strategy continues to be implemented.

One commenter provided information about ongoing land applications of biosolids in the watersheds of several creeks on the 2010 303(d) list. This includes Dry Creek and Terrells Creek (South Side of Haw #16-31) in Chatham County, Cane Creek in Orange County, and Varnal's Creek in Alamance. The commenter suggested that the Fair bioclassification ratings on these streams could be in part to runoff from the fields treated with biosolids.

Response: Thank you for this information. We have forwarded this to the appropriate basin planner for follow-up.

One commenter believes that Dry Creek continues to show impairment from a large sediment deposition. This happened before the drought in 2007, and destroyed much of the bottom habitat needed by benthic macroinvertebrates. Improvement in the creek in the years since has been observed, but it continues to be impaired as the listing indicates. The commenter has read the "Biological Assessment" by DWQ for Dry Creek from 2008 and hopes that the 2012 303(d) list will reflect current conditions.

Response: Thank you for this information. We have forwarded this to the appropriate basin planner. The biological sampling conducted by DWQ for Dry Creek AU# 16-34-(0.7) was done on 3/19/2009. Data collected in 2009 will be assessed for 2012.

One commenter noted that the statewide listing for mercury impairment in all waters is very troubling given the continued consumption of fish in freshwaters. The commenter understands not including mercury impairment under each stream on the list, but hopes the state will make this information more accessible to the general public, particularly by posting information where fishing takes place.

Response: We forwarded this comment to NC Department of Health and Human Services, which is responsible for fish consumption advisories. DWQ is currently developing a statewide TMDL for mercury that will account for atmospheric deposition from in-state and out-of-state sources.

One commenter inquired about the Trent River, which as part of the Neuse River watershed, has been eliminated from the list of impaired waters.

Response: The Trent River continues to be impaired because of chlorophyll a violations but has been listed in category 4b since 2006. This assessment unit (AU) was not part of the original estuary modeling and subsequent TMDL but is immediately adjacent to these AUs. The Trent River subbasin is subject to the rules in the Neuse Nutrient Sensitive

Waters strategy and therefore upon full implementation of those requirements is expected to meet uses.

Eight commenters recommend the Rocky River from Vernal Creek to the confluence with the Deep River be listed as impaired for secondary recreation because of the noxious filamentous algal mats, which are most prevalent during times of low flow. The Division should consider also listing the Rocky River as nutrient impaired because it is the nutrient loading in the river that causes this problem. The Division should further consider listing the Rocky River as impaired for ecological/biological integrity because of the impacts of the algal mats on fish habitat.

Response: DWQ is considering listing this section of the Rocky River in the 2012 303(d) list based on 2009 chlorophyll a data from behind Woody's Dam. In the meantime, requirements of the 401 water quality certification for Siler City's lower drinking water reservoir are being implemented to address the filamentous algal mats. The certification requires a pulse to be released from the dam every 30 days to mimic a natural storm event and dislodge the algal mats. Members of the Rocky River Management team include NCDWQ, NC Division of Water Resources, NC Wildlife Resource Commission, USFWS, Friends of the Rocky River, Rocky River Heritage Foundation and Siler City. This team will review the need for additional monitoring or studies to better understand the causes and sources of the mats.

One commenter indicated that Collins Creek, 3.7 miles from a point 0.8 miles downstream in Orange Co, SR 1005 to the Haw River was on the 2006 303(d) list for impaired biological integrity, but is delisted in 2010. The DWQ 2009 Cape Fear Basinwide Assessment Report includes benthic macroinvertebrate data for Collins Creek. The data analysis section notes that the creek has "declined from Good- Fair in 2003 to Fair in 2009" and that "conditions are not improving here."

Response: Data from 2006 through 2010 will be assessed for the 2012 list. Unless more current data yield different results we expect this AU be listed again at that time.

One commenter is concerned that the entire Neuse River is classified as nutrient sensitive by the Division of Water Quality, yet very little of it appears on the impaired waterbody list.

Response: There are seven estuarine AUs in category 4t for chlorophyll a. These waters are impaired, and are the target of the Neuse Nutrient Sensitive Waters strategy and TMDL. The 303(d) list is a list of waters still requiring TMDLs.

One commenter believes that the elevated levels of water column mercury are temporary due to the extensive work being conducted to day-light and restore Little Sugar Creek directly upstream of NCDWQ's monitoring site.

Response: Thank you for the information regarding the restoration project. Please contact DWQ when the stream restoration work is completed so that additional monitoring can be conducted.

One commenter recommends that NCDWQ review its sample protocols for copper and zinc sample collection in Irwin Creek. Specifically, NCDWQ appears to be

over-representing high flow events in its dataset. The commenter suggests that Irwin Creek not be listed for copper and zinc until a review of protocols has been conducted.

Response: Cu and Zn methods are the same as for other parameters. Neither high nor low flows are specifically targeted.

One commenter identified Little Sugar Creek (AU 11-137-8 a, b), Irwin Creek (AU 11-137-1) and Sugar Creek (AU 11-137) as first being listed as impaired and needing TMDLs with the 2008 303(d) list. The draft 2010 303(d) list incorrectly indicates that 2010 is the first year.

Response: Thank you. We have corrected the list date for Copper to 2008.

One commenter supports the listing of Beaverdam Creek in the Watauga River watershed. The commenter, with other organizations and citizens, is hoping to work to improve the quality of Beaverdam Creek projects feasible.

Response: Beaverdam Creek will remain on the 303(d) list. Thank for your interest in improving its water quality.

One commenter provided information regarding Haw River AU#16-(1)-a. There is a permanent conservation easement on a six-acre forest in Forsyth County where small headwater springs are considered to be the source of the Haw River. The springs have a significant amount of algae, which seems to indicate groundwater nutrient pollution. The commenter encourages DWQ to find out more about the source of the impairment there. There may also be additional pollution reaching this very small stream as it heads downhill for the next 7.8 miles.

Response: Thank you for the information. We have forwarded your comment to the appropriate basin planner and groundwater planning to evaluate potential nutrient loading from shallow groundwater. This area will be subject to the Jordan Lake rules.

One commenter requests that the Goose Creek Watershed Management Plan be considered as a mechanism expected to attain water quality standards and thereby re-categorize the Duck Creek listing from Category 5 to Category 4b.

*Response: The Goose Creek Watershed Site-Specific Water Quality Management Plan became effective on January 1, 2009. This Plan is enforceable and has been written in the North Carolina Administrative Code: 15A NCAC 2B .0600-.0609. These rules mandated by the NC Environmental Management Commission require recovery of the water quality conditions needed to sustain the federally endangered Carolina heelsplitter (*Lasmigona decorata*). The requirements included in these State regulations support a 4b categorization.*

One commenter suggested that DWQ compile a notification email list of those who have commented in previous years.

Response: Thank you. We are working on compiling a notification list specifically for the 303(d) list and TMDLs, and a web-based sign-up process.

One commenter observed the listings for Robeson Creek, Bolin Creek, Little Troublesome Creek and the UT at Guilford College all seem to rely on data collections from 2001 or earlier.

Response: If there are no more current data, the most recent data and assessment are carried forward. An AU will remain impaired until data are collected showing standards are being met, or a TMDL is developed.

One commenter identified that the local nomenclature for the McAlpine Creek AU 11-137-9 a, b, c, d watersheds typically does not include “Waverly Lake” as they are named on the draft 303(d) list. The commenter suggests that “Waverly Lake” be removed from the AU name for McAlpine Creek watersheds.

Response: AU descriptions are based on official state classification names.