# New Hope Creek Corridor Advisory Committee Minutes of Meeting of January 10, 2008

(Present: Fowler, Goebel, Kent, Edeburn, Jacobs, Healy, Olive, Welch, Jane Korest, Helen Youngblood, Ryke Longest and Tanya Wheeler Berliner (Duke Law School), Greg Schuster)

- (1) Jordan Lake Master Plan Update. The Army Corps of Engineers has invited comments on a draft update of its management plan for Jordan Lake. Healy, with the help of Olive and Kent, and in consultation with DOST, will prepare comments on behalf of the NHCCAC. [This was done, and comments submitted January 18, 2007. Healy met with Will Wilson, DOST chair, to coordinate comments. These comments are reproduced below].
- (2) Hollow Rock Area Planning. Welch reported that the planning group will meet again toward the end of January.
- Potential Duke Forest Land Acquisition. Edeburn said that Duke and Triangle Land Conservancy will be applying to the state Clean Water Management Trust Fund for monies that would allow purchase by Duke of 40 acres that would join Duke Forest to the TLC Johnston Mill Preserve. Duke would grant a conservation easement on the tract. Edeburn asked that the NHCCAC offer its support to this endeavor, which it did through unanimous passage of the following resolution:

Whereas, the acquisition of this tract would provide a biological connector between Duke Forest's Oosting natural area and the Triangle Land Conservancy's Johnston Mill nature preserve, and whereas the preservation of this land will further protect watershed values and complement the Clean Water trust fund's previous investment in the area, the New Hope Creek Corridor Advisory Committee strongly endorses this land purchase and requests that the Clean Water Management Trust provide financial support to make it possible.

(4) Turkey Farm Road Bridge Replacement. Healy introduced Ryke Longest, director of the Duke Environmental Law Clinic, which will be handling the NHCCAC's appeal of the permits issued by the North Carolina Division of Water Quality to NC Department of Transportation for the proposed bridge replacement. The clinic, founded last Fall, will assign Duke Law School and Nicholas School of the Environment students to research an appeal, with a target for submittal in the second week of February. Among contentions that will be made is that NCDOT did not take adequate account of several state-listed species of

endangered or threatened mussels, as well as one species that may be new to science. Another issue is the impact of a new, lower, bridge on passage of people and wildlife along the riverine corridor. Longest reviewed the bridge design and the legal issues involved in contesting the NCDOT categorical exemption. The current bridge has bents at ether end; the proposed bridge would have a bent in the middle of the stream. Installing a bent in the stream would require putting a cofferdam into the stream while the area was excavated and concrete poured. It would also require temporary diversion of the stream. The in-stream bent would not only harm the high quality benthic ecosystem, but would also serve as a permanent "debris trap" that would catch trees and cause scouring of the stream banks. To prevent this, rip-rap would probably have to be installed on the sides of the stream.

Kent and Healy will represent the NHCCAC as plaintiffs if and when the administrative appeal is filed. Kent pointed out that this appeal could set precedents for NCDOT bridge projects in other parts of the state. He commented that the high environmental quality of the site was evidenced not only by the mussels but by the large quantity of stone flies that he has observed. We discussed the possible future role of the media in publicizing this situation. Healy passed out a letter written Dec. 18 by Barry Jacobs, chair of the Orange County Board of Supervisors, pointing to the issues raised by the NHCCAC and asking for a public hearing. Kent suggested that one future action should be a field meeting of NCDOT engineers with biologists, with the purpose of considering environmental impacts and bridge design alternatives. He says that he knows three North Carolina mussel experts who could usefully participate in such a meeting.

It was noted that the new bridge over the Eno River at Guess Road, a long span with no in-stream bents, could be a model for a new design for the Turkey Farm Road bridge.

## **Update 2-4-2008**

On January 28, 2008, Bob Healy received a copy of a letter from NCDOT to Orange County Board of Supervisors chair Barry Jacobs stating that NCDOT was redesigning the bridge. The new design would not have a bent in the middle of the stream. Subsequently, Healy and Kent received a preliminary design for the new bridge. It would have a single span somewhat wider (36 ft. vs. 30 ft.) than the original two-span design, and would have bents on each side that would be slightly farther from the stream than the existing bridge. Removal of the bent from the stream is a major improvement in the design. However, we believe that there are still unresolved issues with regard to human and wildlife passage under the bridge and with protecting the mussels during the course of demolition/construction. The NCDOT letter did not indicate any intent to meet with the NHCCAC to explore these issues, and took the position that nothing now stands in the way of letting construction contracts in July 2008.

On February 1, Kent and Healy met with Ryke Longest, director of the Duke Environmental Law Clinic and the three Duke graduate students who are working

on our case. It was decided to: (1) file an appeal of the permits awarded to NCDOT so as to preserve our legal rights in case negotiations are unsatisfactory; (2) seek a resolution from the Orange County Board of Commissioners that would reiterate the natural and recreational values of the bridge site, and would request NCDOT to work with the NHCCAC to fully resolve the issues raised in our December 2006 comments on the project. One suggested component of that process would be a "field meeting" at the bridge site between NCDOT engineers and mussel experts to provide a full discussion of the various environmental issues involved and ways in which a new bridge design and a careful construction process could address them.

## Next Meeting Thursday, February 14 5 pm Forest View Elementary

## Comments on Proposed USACE Master Plan Updates and Revisions for Jordan Lake January 18, 2008

Thank you for the opportunity to submit the following comments on the draft of the Master Plan update.

### **Procedural comments:**

**(1)** More public input should be solicited on the proposed plan and the plan should contain a new list of those from whom comments were solicited. The list of people and agencies included in the "Coordination" section (Appendix E) dates to 1994 and 1995. Many of these contacts are no longer relevant; many other new relevant contacts exist, and should be included. (Two examples: Sherwood Githens Middle School, located immediately adjacent to Corps land; Piedmont Wildlife Center, a wildlife rehabilitation facility located at Leigh Farm Park, again immediately adjacent to Corps land). Some of the information in the plan revision is obsolete—for example, the reference to the American Tobacco Trail on Map 17 as "proposed". Moreover, there is little evidence that the revised Jordan Lake plan takes account of the valuable comments provided in 1995. In particular, we reference the detailed comments made by the City and County of Durham (dated September 29, 1995), which makes specific reference to a number of New Hope concerns. The "Problems and Constraints referenced at pages 5.3, 5.4, and 5.5 include several topics that should be the subject of focused future public meetings or workshops.

- (2) Explicit reference should be made, and links provided where possible, to relevant local and regional planning documents, including the New Hope Creek Open Space Master Plan (1992) <a href="www.newhopecreek.org">www.newhopecreek.org</a>, the Durham Open Space and Trails Plan, plans by park and recreation agencies in Durham and Orange counties, bicycle and pedestrian plans, municipal and county land use plans for areas adjacent to Corps lands, zoning maps for areas adjacent to Corps lands.
- (3) The draft document provided for review might be better labeled "Jordan Lake Recreation Plan" rather than "Jordan Lake Master Plan". As you will see from the comments below, and no doubt others that will be received, there is a real need for an updated Master Plan that includes much more detail on long term supply and demand for water from Jordan Lake, management alternatives (e.g. lake levels for storage, use of sub-impoundments for water retention, etc.), and the quality of water, both within the lake and that entering from various tributaries.

#### **Substantive comments:**

- (4) Increasing use of Jordan Lake as a municipal water source highlights the need to protect its watershed. Millions of dollars of municipal funds and state Clean Water Fund monies have been spent protecting the New Hope Creek watershed upstream from Jordan Lake. Moreover, close attention has been paid during land regulatory processes to impacts on the watershed. The Jordan Lake plan should present detailed data on the lake's water quality, including as much information as possible on what tributary streams are contributing the greatest pollutant load and how that may have changed over time. With regard to water quantity, we understand that a long term management plan should not focus on the current (2007-08) regional drought. However, such a plan should treat issues of water supply and drought response in general, and put Jordan Lake's role into the context of future population growth and into alternative scenarios of rainfall and water use.
- (5) The New Hope Creek Open Space Master Plan calls for construction of a trail on Corps land between Old Chapel Hill Road and Rt. 54, as well as connecting trails between Leigh Farm Park and the Corps lands. In the mid-1990s, the land now comprising Leigh Farm park was acquired at a cost of \$1.25 million in state (Heritage Trust Fund), county, city, and private funds. Since that time, the Durham Parks and Recreation Department has been developing the area as a historic and natural park, with past or programmed expenditures of well over \$1 million. Future management of Corps lands in this area should be coordinated with plans for park and trail development. We also reference and support the comments you will receive from the Durham Open Space and Trails

Commission regarding specific trail management issues. The NHCCAC coordinates closely with DOST, and one of our ex officio members represents DOST.

- (6) The New Hope corridor also represents a rich biological resource. We suggest that the Jordan Lake master plan include references and links to the many biological studies that have been done in the area, as well as to the inventory documents done by local governments and other groups.
- (7) The Durham Park and Recreation Department has developed a major city park adjacent to Githens Middle School. A trail has been constructed between US 15-501 and Old Chapel Hill Road that parallels the Corps-owned corridors and sometimes intersects with it, particularly in providing access to the creek.
- (8) Although we recognize that hunting is a legitimate form of recreation, and is needed to control the area's deer herd, there is the potential for dangerous conflicts between hunting use and (1) the increasing number of trail users in the area between 15-501 and Rt. 54 (2) the large number of new residents of the area, including the students at Githens Middle School.
- (9) Chapter 8 should label "Green Construction" as a needed and highly justified "guiding principle".
- (10) To the extent that the NHCCAC, Durham Open Space and Trails Committee, Triangle Land Conservancy, New Hope Audubon Society and other public and private entities will serve as "partners" with the Corps in building and maintaining trails and other common endeavors, the Plan should discuss how to implement more signage aimed at giving credit to and pointing out the roles of various partners. Signage and interpretive displays could also be helpful (e.g. at Leigh Farm Park) in educating the public regarding Jordan Lake and the Corps management mandates.
  - (11) Abandoned solid waste dumps, sometimes not appearing on maps, have the potential to leach contaminants into New Hope creek and its tributaries and from there into Jordan Lake. We are aware of only one such dump in our own planning area, the "construction debris" mound on the west side of Garrett Road, between 15-501 and Old Chapel Hill Road. However, a long-time Durham resident who is a member of our committee notes that one could "quickly identify several, potentially dangerous, abandoned municipal solid waste, university medical waste and general construction waste sites. I expect that we could also confirm rather quickly that at least one or more of these have been leaking." He also notes that "The contaminated water supplies on Rogers Road near the Eubanks

landfill exemplify what can and is already happening with regard to our valuable ground water." We suggest that an inventory be performed over the entire New Hope watershed to identify abandoned dump sites and to determine whether they are having a negative impact on water quality. The recent availability of GIS technology and information from remote sensing, as well as improvements in hydrologic modeling, make it possible to acquire and use much more information on this subject than was possible even in the recent past.

- (12) Although North Carolina's ambitious Mountains-to-Sea trail does not itself cross Jordan Lake lands, there is interest in making a connection between the MST trail and a terminus around Harris Lake. This should be noted in the plan, and comments solicited from relevant hiking, cycling and trail organizations.
- The formal coverage of the 1992 New Hope Creek Open Space Master (13)Plan takes Rt. 54 as its southern boundary. This boundary was chosen because we believed that the very significant amount of Corps land ownership south of Rt. 54 was sufficient to protect important natural resources and public values. However, as it gained experience in advising on implementation of the Plan, the New Hope Creek Corridor Advisory Committee came to realize that our boundaries did not encompass many important problems of the New Hope watershed. In 2000, the Committee issued an interim report (available at http://newhopecreek.org/pdf/10yearreport.pdf noting (p. 15) the rapid rate of development of non-Corps land south of Rt. 54 and suggesting that "with the extensive development that is underway in this area, it seems prudent for the governing bodies to consider charging a group with specifically attending to protection of the creek south of NC 54". This recommendation has not been implemented, but the history of post-2000 development in the area and the impacts on water quality and habitat values underlines the relevance of this comment, which we repeat again here. The authorizing legislation for Jordan Lake listed water supply as a major purpose of the dam, and we believe that the Corps has a responsibility to continually test the waters of the lake, to identify potential sources of pollution (including patterns of land development) and to take proactive measures to protect water quality.
- (14) The Corps has tremendous technical expertise in such areas as hydrologic modeling and the economics of water supply. Although a sustainable future for Jordan Lake involves collaborative planning between federal, state and local agencies, the ability of the Corps to supply information and guidance should not be underestimated. We reference the recent National Research Council study U.S. Army Corps of Engineers Water Resources Planning: A New Opportunity for Service (2004)

which offers some valuable historical context and recommendations for a proactive future role for the Corps.

**Submitted by:** 

Robert G. Healy, co-chair, New Hope Creek Corridor Advisory Committee