

Appendix 3A. Carrboro Bolin Creek Sites, June 2012

Bolin Creek sites are numbered from most upstream (Site 1) to most downstream (Site 4). Samples from Bolin Creek and Morgan Creek were collected in June 2012; tributary sites were sampled in April 2012. The 2012 sites were collected later in the year compared to the 2011 collections. There was better flow in 2012 and less filamentous algae at most sites.

Bolin Creek 1. Site 1 was located upstream of the Winmore development, near the power line crossing. This site drains a largely rural and residential landscape; it is intended as a control site for the higher density residential areas further downstream. This portion of the stream may go completely dry during droughts.



Bolin Creek Site 1, June 2012.

This part of Bolin Creek averaged about 4-5 meters wide, with a substrate mainly composed of gravel and rubble. Both the substrate composition and the width, however, were highly variable. There were no significant habitat problems in this section of Bolin Creek.

Bolin Creek 2. Site 2 is located downstream of the Winmore development at SR 1777. There is private residence on one side of the stream that lacks a buffer zone. Consequently, there is significant bank erosion on one side of the stream.

Habitat problems included fewer riffles, bank erosion, lack of a buffer on one side and a decrease in habitat diversity. The very abundant filamentous algae that was observed in 2011 was not seen in the June 2012 collections.



Bolin Creek Site 2, June 2012.

A beaver dam was observed slightly upstream of this site.

Bolin Creek 3. Site 3 is located near Waterside Drive. This section of Bolin Creek is very scenic, with a hiking and biking path along one side of the stream.



Bolin Creek Site 3, June 2012.

There are no significant habitat problems in this portion of the stream, but there was a lack of good bank habitat.

Bolin Creek 4. Site 4 was moved slightly downstream into Chapel Hill (Village Dr) in 2011, so that data from this site could be used by both towns.



Bolin Creek Site 4, June 2012.

This portion of Bolin Creek is similar to the site on Estes Drive, having good rocky substrate. Attached filamentous algae was very abundant at the Village Drive site in March 2011, but was not a problem in 2012

Morgan Creek at NC 54. Morgan Creek was chosen as a reference site, although this stream had also been affected by droughts. Prior surveys by the NC Division of Water Quality generally produced a Good or Excellent bioclassification for this site.



Morgan Creek, NC 54, June 2012.

This catchment has a largely rural character, with some minor impacts from nonpoint source runoff. Habitat quality, stream width and substrate composition are similar to Bolin Creek, but with less residential land use.