

## **NCBELS Statement re: Surveying After a Major Flood Event**

The flooding caused by Hurricane Helene has altered the landscape of Western North Carolina by moving or creating new riparian boundaries. How should a surveyor react to these changed circumstances per the Standards of Practice?

Surveyors must decide whether the location of a riparian boundary changed because of erosion, reliction, accretion, or avulsion. Erosion is the gradual destruction or diminution by wind, water, or other natural agents. Reliction is the gradual recession of water leaving land permanently uncovered. Accretion denotes the act of depositing, by gradual process, of solid material in such a manner as to cause that to become dry land which was before covered with water. It is the opposite of avulsion, which is the sudden and perceptible gain or loss of riparian land. Avulsion usually results from sudden, powerful, natural forces, such as a flood or a hurricane.

**North Carolina follows the general rule that avulsion does not change the location of a riparian boundary and works no change in legal title. See *State v. Johnson*, 278 N.C. 126, 146, 179 S.E.2d 371, 384 (1971).**

Due to the flooding caused by Hurricane Helene, rivers and creeks may have suddenly changed course, and the location of the rivers or creeks **prior to** Helene will remain the true boundary line. However, a surveyor must make that determination—and perhaps ultimately a court of law—based on the evidence gathered, which may include prior survey maps, legal descriptions, photographic evidence, or parol evidence.

Surveyors should keep in mind the following Board Rules:

1. Rule .0701(c): A licensee shall perform services only in areas of the licensee's competence. In this situation, the surveyor must be competent in riparian boundaries.
2. Rule .1602(a): A Professional Land Surveyor shall spend the necessary time and effort to make investigations to determine if there are encroachments, gaps, lappages, or other irregularities along each line surveyed. As said above, in the aftermath of Helene, surveyors will need to decide whether the change in location of a river or creek is the result of avulsion. If so, the surveyor must gather sufficient evidence to show the location of the creek or river **prior to** Helene, as required by Rule .1602(c).
3. Rule .1602(f): The results of a survey shall be reported to the user of that survey as a map or report of survey and, whether in written or graphic form, shall be prepared in a clear and factual manner. Given that a change in a boundary line due to avulsion is in part a legal determination, for a map to be clear and factual, the surveyor may need to show both the pre-Helene location of the stream and the post-Helene location. In effect, the change in location due to avulsion may be viewed as creating a gap or overlap, and a court of law may have to determine the true location of the boundary line.

The Board's rules and the Standards of Practice of Surveying still apply to the unusual circumstances created by Helene. These changed circumstances do not relieve surveyors of their statutory and regulatory obligations. If you have more questions, please contact Board Counsel, Wes Tripp, at [wtripp@ncbels.org](mailto:wtripp@ncbels.org) or 919-791-2000, ext. 111.