

1-1-1999

## George Cole, Water Boundaries

Anna Litaker

Follow this and additional works at: <https://digitalcommons.du.edu/wlr>

---

### Custom Citation

Anna Litaker, Book Note, George Cole, Water Boundaries, 2 U. Denv. Water L. Rev. 301 (1999).

This Book Notes is brought to you for free and open access by the University of Denver Sturm College of Law at Digital Commons @ DU. It has been accepted for inclusion in Water Law Review by an authorized editor of Digital Commons @ DU. For more information, please contact [jennifer.cox@du.edu](mailto:jennifer.cox@du.edu), [dig-commons@du.edu](mailto:dig-commons@du.edu).

The final chapter compares ecocentric rights to rights that have emerged through law and policy. In answer to the question, "Can the environment have rights?" Miller concludes that recognition of inherent environmental rights has yet to occur; however, as the environment is the sole source of human physiological need satisfaction, humans must recognize the general duty to respect it. In closing, Miller states that, "[i]f treating the environment . . . as if it were a rights-bearing entity assists a recognition of the corresponding duties, so be it; but it cannot make them optional or less onerous."

*Candace Deen*

**GEORGE COLE, WATER BOUNDARIES**, John Wiley & Sons, New York, New York (1997); 193pp; \$59.95; ISBN 0-471-17929-9, hardcover.

*Water Boundaries* is a comprehensive legal and technical examination of water boundaries. Although authored primarily for surveying students and practicing surveyors, it will aid and interest anyone involved in coastal land or submerged land legal and policy issues. Each chapter explores a different water boundary issue, providing charts, graphs and tables for a more comprehensive understanding.

Chapter One explores boundary definitions in tidal waters. This chapter demonstrates techniques for locating tidal boundaries by focusing on tidal constituents, tidal datum planes, local variation, sea level changes, datum computations, and tide gauging techniques, among other tidal data sources. To illustrate the application of the theories discussed, Chapter One concludes with two case studies.

In Chapter Two, Cole explores boundary definitions in nontidal waters by exploring techniques for locating nontidal boundaries. The chapter explains some methods for determining nontidal boundaries, including examination of changes in soil composition, examination of geomorphological features, and review of botanical and hydrological evidence. Chapter Two also concludes with case studies illustrating the techniques discussed.

Next, Cole addresses riparian rights associated with upland boundaries in Chapter Three. This chapter highlights the general guidelines for determining the boundaries of exclusive riparian rights associated with upland tracts. It begins with a discussion of division lines for rights within adjacent waters, focusing on rivers, lakes and generally applicable rules. The chapter concludes by discussing upland owners' rights to newly formed land.

Chapter Four explores historic boundary locations. Cole notes that some situations necessitate examining historic shoreline positions. He begins with a discussion on shoreline changes and moves into techniques used to locate historic shorelines. Cole also provides some detailed sources of information for locating historic shorelines, including shoreline topographic maps, other coastal survey products, Bureau of Land Management surveys, and aerial photography, among other

sources. Cole concludes by discussing interpretation of historic shoreline maps and surveys.

Chapter Five discusses the use of government land office meander lines as boundaries. This chapter explores the decision to meander or not, providing pertinent instructions and the legal significance of meandering. It also explores the location of meander lines.

Chapter Six outlines the general criteria for determining sovereign waters. It discusses water bodies that are navigable-in-law versus navigable-in-fact. This chapter also explores nonnavigable coves, tributaries, and floodplains adjoining navigable waters.

Cole discusses boundaries between water bodies in Chapter Seven. He notes that the question of where one water body ends and another begins is often a difficult and intensely contested issue. This chapter begins by focusing on boundaries between adjacent navigable water bodies. It details the definition of bays, entrance points and obstructed entrances. The chapter concludes with a discussion on the limits of tidal influence in defining boundaries between water bodies.

Cole reviews the background and history of state and federal water boundaries in Chapter Eight. This chapter also explores boundary definitions and techniques for locating state and federal water boundaries.

Chapter Nine explores lateral water boundaries of states, commencing with a discussion of the various types of lateral boundaries. Cole follows this discussion with an examination of the construction of equidistant and median lines. He also examines the proportionality test as a method often used to evaluate lateral and other common boundaries. The chapter concludes with a case study illustrating the principles and problems of evaluating lateral water boundaries.

Chapter Ten explores national water boundaries, beginning with an historic overview. The chapter then reviews baselines for national boundaries, providing a brief look at the rigid guidelines for baselines for various coastal configurations developed by the United Nations Law of the Sea Conferences. The chapter concludes by exploring techniques for locating national boundaries.

Finally, Chapter Eleven discusses boundaries in nonsovereign waters. This chapter explores water bodies whose submerged lands are privately owned and frequently used as boundaries because they offer a relatively permanent and easily recognized monument. This chapter focuses on boundaries in streams and lakes and concludes with a discussion on changes in nonsovereign water boundaries.

*Water Boundaries* is a valuable tool for anyone involved in water boundary issues. It provides a basic understanding of the legal and technical aspects of this specialized area.

*Anna Litaker*