Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence

AGENCY: Environmental Protection Agency.

ACTION: Notice of availability.

SUMMARY: The U.S. Environmental Protection Agency (EPA) is announcing the availability of the final report titled, “Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence” (EPA/600/R-14/475F). The purpose of this report is to summarize the current understanding about the connectivity and mechanisms by which streams and wetlands affect the physical, chemical, and biological integrity of downstream waters.

The report is available via the Internet on the EPA Office of Research and Development (ORD), National Center for Environmental Assessment’s website (www.epa.gov/ncea) under the Recent Additions and Publications menu.

DATES: The Agency is releasing the report publicly on January 15, 2015.
ADDRESSES: The report is available primarily via the Internet on the EPA Office of Research and Development (ORD), National Center for Environmental Assessment’s website (www.epa.gov/ncea) under the Recent Additions and Publications menu. A limited number of paper copies will be available from the Information Management Team, National Center for Environmental Assessment; telephone 703-347-8561; facsimile: 703-347-8691. If you are requesting a paper copy, please provide your name, your mailing address, and the document title.

FOR FURTHER INFORMATION CONTACT: For additional information concerning the assessment, contact EPA National Center for Environmental Assessment, Dr. Laurie Alexander, telephone 703-347-8630 or email Alexander.Laurie@epa.gov.

SUPPLEMENTARY INFORMATION:

Information about the Project/Document

The U.S. Environmental Protection Agency (EPA) Office of Research and Development (ORD) developed this report to review and synthesize the peer-reviewed scientific literature on the connectivity or isolation of streams and wetlands relative to large water bodies such as rivers, lakes, estuaries, and oceans. The purpose of the report, “Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence,” is to summarize the current understanding about the connectivity and mechanisms by which streams and wetlands, singly or in aggregate, affect the physical, chemical, and biological integrity of downstream waters. The report addresses three main questions related to connectivity:
(1) What are the physical, chemical, and biological connections to, and effects of, ephemeral, intermittent, and perennial stream on downstream waters?

(2) What are the physical, chemical, and biological connections to, and effects of, riparian or floodplain wetlands and open-waters on downstream waters?

(3) What are the physical, chemical, and biological connections to, and effects of, wetlands and open-waters in non-floodplain settings on downstream waters?

This report informs development of a rule proposed by EPA and the U.S. Army Corps of Engineers to clarify the definition of waters of the United States under the Clean Water Act (http://www2.epa.gov/uswaters).

Lynn Flowers
Dated: December 30, 2014.
Acting Deputy Director, National Center for Environmental Assessment