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OFFICE OF SURFACE WATER TECHNICAL MEMORANDUM NO. 2006.02

SUBJECT: Quality-Assurance Plan for Discharge Measurements Using Acoustic Doppler Current Profilers (Scientific Investigations Report 2005-5183), by Kevin A. Oberg, Scott E. Morlock, and William S. Caldwell

This memorandum announces the availability of the report *Quality-Assurance Plan for Discharge Measurements Using Acoustic Doppler Current Profilers* (Scientific Investigations Report 2005-5183), by Kevin A. Oberg, Scott E. Morlock, and William S. Caldwell. This report describes the quality-assurance practices implemented by the U.S. Geological Survey (USGS) for discharge (streamflow) measurements using acoustic Doppler current profilers (ADCPs). The report supercedes Open-File Report 95-701, *Quality assurance plan for discharge measurements using broad-band acoustic Doppler profilers* and addresses the many changes in ADCP technology and procedures since 1995.

This report describes the standards, policies, and procedures to be used by USGS personnel for the collection, processing, storage, and analysis of streamflow data using ADCPs. This report focuses on discharge-measurement procedures and quality-assurance issues common to ADCPs. The report contains information on data archiving, office procedures, field procedures, instrument configuration, moving bed tests, review of ADCP measurements, and other topics. Standard quality-assurance procedures, as provided in this report, should be rigorously followed to ensure that the quality of data collected is commensurate with USGS standards for the measurement of velocities and discharge.

The Office of Surface Water gratefully acknowledges the USGS Southeastern Region Hydroacoustics Committee (SRHC) for their efforts drafting the initial version of this report.

Copies of the report will be mailed to each Water Science Center. Additional copies of this report are available by contacting the Office of Surface Water at (703) 648-5301 or by e-mail request to Maria Calderon (mccalder@usgs.gov). The report is also available electronically in the Reports section of the Hydroacoustics Web pages http://hydroacoustics.usgs.gov

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