

ASCE STANDARD

American Society of Civil Engineers

Comprehensive Transboundary International Water Quality Management Agreement

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Environmental and Water Resources Institute
American Society of Civil Engineers

Comprehensive Transboundary International Water Quality Management Agreement

Includes balloted revisions by the ASCE BIWQ Standards Committee in 1999 and 2000.



ASCE

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ABSTRACT

The purpose of *Comprehensive Transboundary International Water Quality Management Agreement* is to provide a model for comprehensive water quality planning and management of shared water resources. This model agreement is based on the concept of shared sovereignty and is appropriate only for those situations in which the Parties are prepared to relinquish a significant degree of sovereignty over their portion of the shared water resource.

The agreement is extensive and considers most aspects of planning and management of water resources. The objective of this comprehensive, integrated agreement is to achieve allocation based on equitable utilization. The intent of this agreement is to be sufficiently flexible for use on an international scale and in a variety of geopolitical settings.

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STANDARDS

In April 1980, the Board of Direction approved ASCE Rules for Standards Committees to govern the writing and maintenance of standards developed by the Society. All such standards are developed by a consensus standards process. The consensus process includes balloting by the balanced standards committee made up of Society members and nonmembers, balloting by the membership of ASCE as a whole, and balloting by the public. All standards are updated or reaffirmed by the same process at intervals not exceeding 5 years.

The following Standards have been issued.

- ANSI/ASCE 1-82 N-725 Guideline for Design and Analysis of Nuclear Safety Related Earth Structures
- ANSI/ASCE 2-91 Measurement of Oxygen Transfer in Clean Water
- ANSI/ASCE 3-91 Standard for the Structural Design of Composite Slabs and ANSI/ASCE 9-91 Standard Practice for the Construction and Inspection of Composite Slabs
- ASCE 4-98 Seismic Analysis of Safety-Related Nuclear Structures
- Building Code Requirements for Masonry Structures (ACI 530-99/ASCE 5-99/TMS 402-99) and Specifications for Masonry Structures (ACI 530.1-99/ASCE 6-99/TMS 602-99)
- ASCE 7-98 Minimum Design Loads for Buildings and Other Structures
- ANSI/ASCE 8-90 Standard Specification for the Design of Cold-Formed Stainless Steel Structural Members
- ANSI/ASCE 9-91 listed with ASCE 3-91
- ASCE 10-97 Design of Latticed Steel Transmission Structures
- SEI/ASCE 11-99 Guideline for Structural Condition Assessment of Existing Buildings
- ANSI/ASCE 12-91 Guideline for the Design of Urban Subsurface Drainage
- ASCE 13-93 Standard Guidelines for Installation of Urban Subsurface Drainage
- ASCE 14-93 Standard Guidelines for Operation and Maintenance of Urban Subsurface Drainage
- ASCE 15-98 Standard Practice for Direct Design of Buried Precast Concrete Pipe Using Standard Installations (SIDD)
- ASCE 16-95 Standard for Load and Resistance Factor Design (LRFD) of Engineered Wood Construction
- ASCE 17-96 Air-Supported Structures
- ASCE 18-96 Standard Guidelines for In-Process Oxygen Transfer Testing
- ASCE 19-96 Structural Applications of Steel Cables for Buildings
- ASCE 20-96 Standard Guidelines for the Design and Installation of Pile Foundations
- ASCE 21-96 Automated People Mover Standards—Part 1
- ASCE 21-98 Automated People Mover Standards—Part 2
- SEI/ASCE 23-97 Specification for Structural Steel Beams with Web Openings
- SEI/ASCE 24-98 Flood Resistant Design and Construction
- ASCE 25-97 Earthquake-Actuated Automatic Gas Shut-Off Devices
- ASCE 26-97 Standard Practice for Design of Buried Precast Concrete Box Sections
- ASCE 27-00 Standard Practice for Direct Design of Precast Concrete Pipe for Jacking in Trenchless Construction
- ASCE 28-00 Standard Practice for Direct Design of Precast Concrete Box Sections for Jacking in Trenchless Construction

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PREFACE

The purpose of the Comprehensive Transboundary International Water Quality Management Agreement is to provide a model for comprehensive water quality planning and management of shared water resources. This model agreement is based on the concept of shared sovereignty and is appropriate only for those situations in which the Parties are prepared to relinquish a significant degree of sovereignty over their portion of the shared water resource. The Parties should also show an interest in achieving optimal water quality management of the resource.

The agreement is extensive and considers most aspects of planning and management of water resources. The objective of this comprehensive, integrated agreement is to achieve allocation based on equitable utilization. It requires that the Parties restrict practices to the reasonable use of water and provide sufficient data to the other Parties to verify reasonable and beneficial use. Since the data collection, environmental assessment, and inventories of basin water user efforts are to be systemic in nature and integrated across the Basin, the agreement suggests costs of the collection efforts be apportioned.

The agreement is based on the elements of the *ASCE Shared Use of Transboundary Water Resources Model Water Sharing Agreement (Comprehensive), TAB C (Draper, 2000, in progress)*, which is based on the *Delaware River Basin Compact (DRBC, 1961)*, and its amendments. The Delaware Compact has been extraordinarily successful in resolving interstate conflicts over the water rights and water quality management of the Basin between and among the States of New York, Pennsylvania, New Jersey, and Delaware.

The intent of this agreement is to be sufficiently flexible for use on an international scale and in a variety of geopolitical settings. The major definitions and general provisions for the document are provided in Article 2. Defining the terms in this way avoids the need to include similar language at numerous points throughout the Agreement. Many definitions were taken from *The Regulated Riparian Model Water Code: Final Report of the Water Laws Committee of the Water Resources Planning and Management Division (ASCE 1997, Edited by Joseph Dellapenna)*.

Blanks _____ within the text are used when the readers are to choose the material that is appropriate for their situation. If numbers are underscored (20) within the text, these are the samples used in other cases throughout the world. The basic rules pertaining to vested property rights are found in Part

2 of Article 2. Some of the articles or sub-articles are optional and have been labeled accordingly.

The EWRI/ASCE Border International Water Quality Standards Committee (BIWQ SC) that is within the Standards Development Council of the Society is divided into three subcommittees. The subcommittees are labeled International Agreement (IA), Management Plan (MP), and WQ Standard (WQS). The members of the BIWQ SC are:

Raymundo Aguirre—Chair of the WQS subcommittee
Fernando Cadena—member of the IA & WQS subcommittees
Robert T. Chuck—member of the MP subcommittee
Harold J. Day—member of the MP subcommittee
David J. Eaton—member of the MP and WQS subcommittees
Thomas G. Gebhard, Jr.—member of the IA subcommittee
Conrad G. Keyes, Jr.—Chair of the BIWQ SC, Chair of the IA subcommittee
Mark W. Killgore—Secretary of the BIWQ SC and the IA subcommittee, VC of MP subcommittee
April Lander—member of the WQS subcommittee
David H. Merritt—Vice Chair of the BIWQ SC and Chair of the MP subcommittee and member of the IA subcommittee
Percival A. Miller—member of the WQS subcommittee
Bernardino Olague—Treasurer of the BIWQ SC and member of the MP subcommittee
Rhea L. Williamson—VC of the WQS subcommittee
Richard V. Wyman—member of the WQS subcommittee

Conrad G. Keyes, Jr., Chair of the IA subcommittee submitted the first draft of the agreement. The first draft outline was recommended by Lorenzo Ariaga, Fernando Cadena, Thomas G. Gebhard, Jr., and Keyes during a working meeting of the committee in September 1997. One major review meeting occurred in Chicago in June 1998 and Keyes, Gebhard, Mark W. Killgore, and David H. Merritt provided input to version 1.1 of the draft agreement that came from