

Preface

One of the areas for which the International Law Association is best known is the articulation of cogent and compelling statements of the customary international law relating to fresh water resources. Working over a span of nearly 50 years, the Association has produced a series of rules addressing various topics relating to the overall field of international water law. The adoption of a new set of water rules by the Association at its Berlin Congress in August 2004 provide states with a guide to their obligation on managing water resources.

Berlin rules are the result of revision of the Helsinki and other International Law Association rules on international water resources. The authors of draft rules (Professor Joseph Dellapenna, Rapporteur of the Water Resources Committee, drafted these rules with help of several members of Committee) noted that “first, . . . these *Rules* both express rules of law as they presently stands and, to a small extent, rules not yet binding legal obligations but which, in the judgment of the Association, are emerging as rules of customary international law. In other words, some of these *Rules* express the progressive development of the relevant international law. Following the recent practice of International Law Commission and reflecting the conclusion of the Committee that such progressively developed *Rules* will become settled customary international law in the near future, all *Rules* are expressed as present legal obligations (“shall”), leaving identification of *Rules* as progressive developments to the commentary. Second, most of the *Rules* contained herein are applicable to all waters—meaning all surface waters and groundwater other than marine waters—regardless of whether the waters in question are found in an international drainage basin».

However, the new rules do not have the full support of those involved with the water resources committee. Four members of the committee (Slavko Bogdanovic, Charles Bourne, Stefano Burchi, and Patricia Wouters) tabled a dissenting opinion in Berlin offering a number of criticisms of the rules.

INTERNATIONAL LAW ASSOCIATION BERLIN CONFERENCE (2004) WATER RESOURCES LAW

Members of the Committee:

Dr Gerhard Loibl (Austria): *Chair*
Professor Joseph W Dellapenna (USA): *Rapporteur*
Professor Malgosia Fitzmaurice (UK): *Secretary*

Dr Slavko J Bogdanovic (HQ)
Professor Charles B Bourne (Canada)
Dr Janos Bruhacs (Hungary)
Dr Stefano Burchi (Italy)
Professor Paulo Canelas de Castro (HQ)
Professor B R Chauhan (India)
Dr L Del Castillo de Laborde (Argentina)
Mr Anil B Divan (India)
H E Ambassador Aziza Fahmi (HQ)
Professor Robert D Hayton (USA)
Dr Harald Hohmann (Germany)

Professor Frank Maes (Belgium-Luxembourg)
HE Ambassador A K H Morshed (Bangladesh)
Professor Andre Nollkaemper (Netherlands)
Alternate: Mr K W Cuperus
Professor Kazimierz Rowny (Poland)
HE Ambassador Robbie Sabel (Israel)
Dr Salman Salman (HQ)
Professor Surya P Subedi (UK)
Professor Christoph Vedder (Germany)
Dr Patricia Wouters (Canada)

Consultants:

Professor Alan E Boyle (UK)
Ms Kerstin Mechlem (Germany)

BERLIN RULES ON WATER RESOURCES

CHAPTER I SCOPE

Article 1 Scope

1. These Rules express international law applicable to the management of the waters of international drainage basins and applicable to all waters, as appropriate.
2. Nothing in these Rules affects rights or obligations created by treaty or special custom.

Article 2 Implementation of These Rules

1. States shall, where appropriate, enact laws and regulations to accomplish the purposes set forth in these Rules and shall adopt efficient and adequate administrative measures, including management plans, and judicial procedures for the enforcement of these laws and regulations.
2. States shall undertake educational and research programs as necessary to assure the technical capacity necessary for State and communal authorities to fulfill the obligations specified in this Chapter and in other Rules.

Article 3 ***Definitions***

For the purposes of these Articles, these terms have the following meanings:

1. "Aquatic environment" means all surface waters and groundwater, the lands and subsurface geological formations connected to those waters, and the atmosphere related to those waters and lands.
2. "Aquifer" means a subsurface layer or layers of geological strata of sufficient porosity and permeability to allow either a flow of or the withdrawal of usable quantities of groundwater.
3. A "basin State" is a State the territory of which includes any portion of an international drainage basin.
4. "Damage" includes:
 - a. loss of life or personal injury;
 - b. loss of or injury to property or other economic losses;
 - c. environmental harm; and
 - d. the costs of reasonable measures to prevent or minimize such loss, injury, or harm.
5. "Drainage basin" means an area determined by the geographic limits of a system of interconnected waters, the surface waters of which normally share a common terminus.
6. "Ecological integrity" means the natural condition of waters and other resources sufficient to assure the biological, chemical, and physical integrity of the aquatic environment.
7. "Environment" includes the waters, land, air, flora, and fauna that exist in a particular region at a particular time.
8. "Environmental harm" includes:
 - a. injury to the environment and any other loss or damage caused by such harm; and
 - b. the costs of reasonable measures to restore the environment actually undertaken or to be undertaken.
9. "Flood" means a rising of water to levels that have detrimental effects on or in one or more basin States.
10. "Flood control" means measures to protect land areas from floods or to minimize damage therefrom.
11. "Groundwater" means water beneath the surface of the ground located in a saturated zone and in direct contact with the ground or soil.
12. "Hazardous substances" means substances that are bio-accumulative, carcinogenic, mutagenic, teratogenic, or toxic.
13. An "international drainage basin" is a drainage basin extending over two or more States.
14. "Management of waters" and "to manage waters" includes the development, use, protection, allocation, regulation, and control of waters.
15. "Person" means any natural or juridical person.
16. "Pollution" means any detrimental change in the composition or quality of waters that results directly or indirectly from human conduct.
17. "Regional economic integration organization" means an organization constituted by sovereign States of a given region, to which its member States have transferred competence in respect of matters governed by these Rules.
18. "State" means a sovereign State or a regional economic integration organization.
19. "Sustainable use" means the integrated management of resources to assure efficient use of and equitable access to waters for the benefit of current and future generations while preserving renewable resources and maintaining non-renewable resources to the maximum extent reasonably possible.
20. "Vital human needs" means waters used for immediate human survival, including drinking, cooking, and sanitary needs, as well as water needed for the immediate sustenance of a household.
21. "Waters" means all surface water and groundwater other than marine waters.

CHAPTER II **PRINCIPLES OF INTERNATIONAL LAW GOVERNING** **THE MANAGEMENT OF ALL WATERS** **Article 4**

Participation by Persons

States shall take steps to assure that persons likely to be affected are able to participate in the processes whereby decisions are made concerning the management of waters.

Article 5

Conjunctive Management

States shall use their best efforts to manage surface waters, groundwater, and other pertinent waters in a unified and comprehensive manner.

Article 6

Integrated Management

States shall use their best efforts to integrate appropriately the management of waters with the management of other resources.

Article 7

Sustainability

States shall take all appropriate measures to manage waters sustainably.

Article 8

Minimization of Environmental Harm

States shall take all appropriate measures to prevent or minimize environmental harm.

Article 9

Interpretation of These Rules

1. All of these Rules are to be interpreted consistently with the principles of this Chapter.
2. References to States in these Rules encompass States acting individually or jointly States and States acting with or through international organizations, as appropriate.

**CHAPTER III
INTERNATIONALLY SHARED WATERS**

Article 10

Participation by Basin States

1. Basin States have the right to participate in the management of waters of an international drainage basin in an equitable, reasonable, and sustainable manner.
2. Basin States shall define the waters to which an international agreement regarding the management of waters of an international drainage basin applies; such an international agreement may apply to all or part of the waters of an international drainage basin or to a particular project or use, except that a use by one or more basin States shall not cause a significant adverse effect on the rights of or uses in another basin State without the latter State's express consent.

Article 11

Cooperation

Basin States shall cooperate in good faith in the management of waters of an international drainage basin for the mutual benefit of the participating States.

Article 12

Equitable Utilization

1. Basin States shall in their respective territories manage the waters of an international drainage basin in an equitable and reasonable manner having due regard for the obligation not to cause significant harm to other basin States.
2. In particular, basin States shall develop and use the waters of the basin in order to attain the optimal and sustainable use thereof and benefits therefrom, taking into account the interests of other basin States, consistent with adequate protection of the waters.

Article 13

Determining an Equitable and Reasonable Use

1. Equitable and reasonable use within the meaning of Article 12 is to be determined through consideration of all relevant factors in each particular case.
2. Relevant factors to be considered include, but are not limited to:
 - a. Geographic, hydrographic, hydrological, hydrogeological, climatic, ecological, and other natural features;
 - b. The social and economic needs of the basin States concerned;
 - c. The population dependent on the waters of the international drainage basin in each basin State;
 - d. The effects of the use or uses of the waters of the international drainage basin in one basin State upon other basin States;
 - e. Existing and potential uses of the waters of the international drainage basin;
 - f. Conservation, protection, development, and economy of use of the water resources of the international drainage basin and the costs of measures taken to achieve these purposes;
 - g. The availability of alternatives, of comparable value, to the particular planned or existing use;
 - h. The sustainability of proposed or existing uses; and
 - i. The minimization of environmental harm.
3. The weight of each factor is to be determined by its importance in comparison with other relevant factors. In determining what is a reasonable and equitable use, all relevant factors are to be considered together and a conclusion reached on the basis of the whole.

Article 14

Preferences among Uses

1. In determining an equitable and reasonable use, States shall first allocate waters to satisfy vital human needs.
2. No other use or category of uses shall have an inherent preference over any other use or category of uses.

Article 15

Using Allocated Water in Other Basin States

1. Allocation by agreement or otherwise to one basin State does not prevent use by another basin State to the extent that the basin State to which the water is allocated does not in fact use of the water.
2. Use of a water for purposes of this Article includes water necessary to assure ecological flows or otherwise to maintain ecological integrity or to minimize environmental harm.
3. Use of water by a basin State other than the one to which the water is allocated does not preclude the basin State to which the water is allocated from using the water when it chooses to do so.

Article 16

Avoidance of Transboundary Harm

Basin States, in managing the waters of an international drainage basin, shall refrain from and prevent acts or omissions within their territory that cause significant harm to another basin State having due regard for the right of each basin State to make equitable and reasonable use of the waters.

**CHAPTER IV
RIGHTS OF PERSONS**

Article 17

The Right of Access to Water

1. Every individual has a right of access to sufficient, safe, acceptable, physically accessible, and affordable water to meet that individual's vital human needs.
2. States shall ensure the implementation of the right of access to water on a nondiscriminatory basis.
3. States shall progressively realize the right of access to water by:
 - a. Refraining from interfering directly or indirectly with the enjoyment of the right;
 - b. Preventing third parties from interfering with the enjoyment of the right;
 - c. Taking measures to facilitate individuals access to water, such as defining and enforcing appropriate legal rights of access to and use of water; and
 - d. Providing water or the means for obtaining water when individuals are unable, through reasons beyond their control, to access water through their own efforts.
4. States shall monitor and review periodically, through a participatory and transparent process, the realization of the right of access to water.

Article 18

Public Participation and Access to Information

1. In the management of waters, States shall assure that persons subject to the State's jurisdiction and likely to be affected by water management decisions are able to participate, directly or indirectly, in processes by which those decisions are made and have a reasonable opportunity to express their views on plans, programs, projects, or activities relating to waters.
2. In order enable such participation, States shall provide access to information relevant to the management of waters without unreasonable difficulty or unreasonable charges.
3. The information subject to access under this Article includes, without being limited to, impact assessments relating to the management of waters.
4. In providing information consistently with this Article, States need not provide access to information that would compromise:
 - a. Intellectual property rights, including commercial or industrial secrets;
 - b. Rights of individual privacy;
 - c. Criminal investigations or trials;
 - d. National security; and
 - e. Information that could endanger ecosystems, historic sites, and other naturally or culturally important objects or locations.

Article 19

Education

States shall undertake education at all levels to promote and encourage understanding of the issues that arise under these Rules.

Article 20

Protection of Particular Communities

States shall take all appropriate steps to protect the rights, interests, and special needs of communities and of indigenous peoples or other particularly vulnerable groups likely to be affected by the management of waters, even while developing the waters for the benefit of the entire State or group of States.

Article 21

Duty to Compensate Displaced by Water Projects or Programs

States shall compensate persons or communities displaced by a water program, project, or activity and shall assure that adequate provisions are made for the preservation of the livelihoods and culture of displaced persons or communities.

CHAPTER V
PROTECTION OF THE AQUATIC ENVIRONMENTS

Article 22
Ecological Integrity

States shall take all appropriate measures to protect the ecological integrity necessary to sustain ecosystems dependent on particular waters.

Article 23
The Precautionary Approach

1. In implementing obligations under this Chapter, States shall apply the precautionary approach.
2. States shall take all appropriate measures to prevent, eliminate, reduce, or control harm to the aquatic environment when there is a serious risk of significant adverse effect or to the sustainable use of waters even without conclusive proof of a causal relation between an act or omission and its expected effects.

Article 24
Ecological Flows

States shall take all appropriate measures to ensure flows adequate to protect the ecological integrity of the waters of a drainage basin, including estuarine waters.

Article 25
Alien Species

States shall take all appropriate measures to prevent the introduction, whether intentionally or otherwise, of alien species into the aquatic environment if the alien species might have a significant adverse effect on an ecosystem dependent on the particular waters.

Article 26
Hazardous Substances

States shall take all appropriate measures to prevent the introduction of hazardous substances into the waters subject to its jurisdiction or control.

Article 27
Pollution

1. States shall prevent, eliminate, reduce, or control pollution in order to minimize environmental harm.
2. When there is a relevant water quality standard established pursuant to Article 28, States shall take all appropriate measures to assure compliance with that standard.
3. States shall ensure that wastes, pollutants, and hazardous substances are handled, treated, and disposed of using the best available techniques or the best environmental practices, as appropriate to protect the aquatic environment.

Article 28
Establishing Water Quality Standards

1. States shall establish water quality standards sufficient to protect public health and the aquatic environment and to provide water to satisfy needs, in particular for:
 - a. Providing drinking water of sufficiently good quality for human health;
 - b. Preserving ecosystems;

- c. Providing water for agriculture, including irrigation and animal husbandry; and
 - d. Providing for recreational needs with due regard for sanitary and aesthetic requirements.
2. Standards established under this Article shall include, among others:
- a. Specific quality objectives for all waters within a State's jurisdiction or control, taking into account the uses of the particular waters;
 - b. Specific quality objectives applicable to a particular basin or part of a basin.

CHAPTER VI IMPACT ASSESSMENTS

Article 29

The Obligation to Assess Environmental Impacts

1. States shall undertake prior and continuing assessment of the impact of programs, projects, or activities that may have a significant effect on the aquatic environment or the sustainable development of waters.
2. Impacts to be assessed include, among others:
 - a. Effects on human health and safety;
 - b. Effects on the environment;
 - c. Effects on existing or prospective economic activity;
 - d. Effects on cultural or socio-economic conditions; and
 - e. Effects on the sustainability of the use of waters.

Article 30

Participation in Impact Assessments in Another State

A person who suffers or is under a serious threat of suffering damage from programs, projects, or activities relating to the waters in another State shall be entitled in the other State to the same extent and on the same conditions as a person in that State to participate in an environmental impact assessment procedure.

Article 31

The Impact Assessment Process

Assessment of the impacts of any program, project, or activity shall include, among others:

- a. Assessment of the waters and the environments likely to be affected;
- b. Description of the proposed activity and its likely effects, with particular emphasis on any transboundary effects;
- c. Identification of ecosystems likely to be affected, including an assessment of the living and non-living resources of the relevant water basin or basins;
- d. Description of mitigation measures appropriate to minimize environmental harm;
- e. Appraisal of the institutional arrangements and facilities in the relevant drainage basin or basins;
- f. Assessment of the sources and levels of pollutants in the relevant drainage basin or basins, and of their effects on human health, ecological integrity, and amenities;
- g. Identification of human activities that are likely to be affected;
- h. Explanation of predictive methods and underlying assumptions as well as the relevant data used, including identification of gaps in knowledge and uncertainties encountered in compiling the required information, including assessment of the risk of major accidents;
- i. Where appropriate, an outline for monitoring and management programs and plans for post-project analysis;
- j. A statement of the reasonable alternatives, including a non-action alternative; and
- k. An adequate non-technical summary.

**CHAPTER VII
EXTREME SITUATIONS**

Article 32

Responses to Extreme Conditions

1. States shall take all appropriate measures to prevent, reduce, eliminate, or control all conditions of waters, whether resulting from human conduct or otherwise, that pose a significant risk:
 - a. To human life or health;
 - b. Of harm to property; or
 - c. Of environmental harm.
2. States, promptly and using the most expeditious means available, shall notify other potentially affected States and competent international organizations of any harmful condition of waters under this Article that originates within its jurisdiction or control.
3. States shall develop notification systems and contingency plans for responding to harmful conditions under this Article.

Article 33

Polluting Accidents

1. States shall take all appropriate measures as quickly as possible to reduce, eliminate, or control pollution resulting from accidental events.
2. States shall use the most expeditious method available to notify other affected States and competent international organizations of accidents that pose a significant risk of serious pollution to waters within another State's jurisdiction or control, in particular when pollution involves hazardous substances.
3. States shall develop notification systems and contingency plans for responding to accidents under this Article.

Article 34

Floods

1. States shall cooperate in developing and implementing measures for flood control, having due regard to the interests of other States likely to be affected by the flooding.
2. States likely to be affected by flooding shall use the most expeditious method available to communicate among themselves and with international organizations as soon as possible regarding any events likely to create floods or dangerous rises of water levels in their territory, establishing:
 - a. An effective system of transmission in order to fulfill this obligation;
 - b. Measures to ensure priority to the communication of flood warnings in emergency cases; and
 - c. A special system of translation, if necessary, between the basin States.
3. States shall jointly develop contingency plans for responding to foreseeable flood conditions.
4. In addition to contingency plans, cooperation with respect to flood control shall, by agreement between affected States and when appropriate international organizations, include among other matters:
 - a. The collection and exchange of relevant data;
 - b. The preparation of surveys, investigations, studies, and flood plain maps, and their mutual exchange;
 - c. The planning and designing of relevant measures, including flood plain management and flood control works;
 - d. The execution, operation, and maintenance of flood control measures;
 - e. Flood forecasting and communication of flood warnings;
 - f. Developing or strengthening necessary legislation and appropriate institutions for achieving these goals; and
 - g. The setting up of a regular information service charged to transmit the height of water levels and the discharge quantities.
5. States shall maintain all flood control measures in good order, and shall ensure the prompt execution of repairs or other emergency measures taken to assure the minimization of damage from flooding.

6. The use of the channel of rivers and lakes for the discharge of excess waters shall be free and not subject to any limitation provided such discharge is not incompatible with the object of flood control and does not adversely affect the rights or interests of other states.

Article 35

Droughts

1. States shall cooperate in the management of waters to prevent, control, or mitigate droughts, having due regard to the interests of other basin States.
2. Cooperation with respect to drought shall, by agreement between affected States and when appropriate with international organizations, include among other matters:
 - a. An integrated strategy for addressing the physical, biological, and socio-economic aspects of the drought;
 - b. The definition of criteria that activate the provisions of this Article;
 - c. An integrated strategy for mitigating the effects of drought and moving towards the sustainable use of waters;
 - d. The development or strengthening necessary legislation and appropriate institutions for achieving these goals; and
 - e. The allocation of adequate resources to achieve these goals in accordance with their circumstances and capabilities.
3. States likely to be affected by drought shall promptly communicate among themselves and with competent international organizations whenever the criteria specified pursuant to paragraph 2(b) are met.
4. Nothing in this Article limits the rights of States to protect themselves unilaterally from the effects of droughts so long as the measures taken do not violate obligations under these Rules or otherwise violate the rights of other States.

CHAPTER VIII GROUNDWATER

Article 36

Application of These Rules to Aquifers

1. The Rules of this Chapter apply to all aquifers, including aquifers that do not contribute water to, or receive water from, surface waters or receive no significant contemporary recharge from any source.
2. States, in managing aquifers, are subject to all Rules expressed in these Articles, taking into account the special characteristics of groundwater.

Article 37

Managing Aquifers Generally

States shall manage groundwater conjunctively with the surface waters of any basin of which it is a part, taking into account any interconnections between aquifers or between an aquifer and a body of surface water, as well as any impact on aquifers caused by activities within the State's jurisdiction or control.

Article 38

Precautionary Management of Aquifers

States, in accordance with the precautionary approach, shall take early action and develop long-term plans to ensure the sustainable use of groundwater and of the aquifers in which the groundwater is contained.

Article 39

Duty to Acquire Information

In order to comply with this Chapter, States shall take all appropriate steps to acquire the information necessary to manage groundwater and aquifers efficiently and effectively, including:

- a. Monitoring groundwater levels, pressures, and quality;

- b. Developing aquifer vulnerability maps;
- c. Assessing the impacts on groundwater and aquifers of industrial, agricultural, and other activities; and
- d. Any other measures appropriate to the circumstances of the aquifer.

Article 40

Sustainability Applied to Groundwater

1. States shall give effect to the principle of sustainability in managing aquifers, taking into account natural and artificial recharge.
2. The rule in paragraph 1 does not preclude the withdrawal of groundwater from an aquifer that is receiving no significant contemporary recharge.

Article 41

Protecting Aquifers

1. States shall take all appropriate measures to prevent, insofar as possible, any pollution of, and the hydraulic integrity of, aquifers.
2. States in fulfilling their obligation to prevent pollution of an aquifer shall take special care to prevent, eliminate, reduce, or control:
 - a. The direct or indirect discharge of pollutants, whether from point or non-point sources;
 - b. The injection of water that is polluted or would otherwise degrade an aquifer;
 - c. Saline water intrusion; or
 - d. Any other source of pollution.
3. States shall take all appropriate measures to abate the effects of the pollution of aquifers.
4. States shall integrate aquifers into their programs of general environmental protection, including but not limited to:
 - a. The management of other waters;
 - b. Land use planning and management; and
 - c. Other programs of general environmental protection.
5. States shall specially protect sites where groundwater is withdrawn from or recharged to an aquifer.

Article 42

Transboundary Aquifers

1. The Rules applicable to internationally shared waters apply to an aquifer if:
 - a. It is connected to surface waters that are part of an international drainage basin; or
 - b. It is intersected by the boundaries between two or more States even without a connection to surface waters that form an international drainage basin.
2. Whenever possible and appropriate, basin States sharing an aquifer referred to in paragraph 1 shall manage an aquifer in its entirety.
3. In managing the waters of an aquifer referred to in paragraph 1, basin States shall consult and exchange information and data at the request of any one of them and shall cooperate in the collection and analyzing additional needed information pertinent to the obligations under these Rules.
4. Basin States shall cooperate according to the procedures in Chapter XI to set drawdown rates in order to assure the equitable utilization of the waters of an aquifer referred in paragraph 1, having due regard for the obligation not to cause significant harm to other basin States and to the obligation to protect the aquifer.
5. Basin States sharing an aquifer referred to in paragraph 1 shall cooperate in managing the recharge of the aquifer.
6. Basin States sharing an aquifer referred to in paragraph 1 shall refrain from and prevent acts or omissions within their territory that cause significant harm to another basin State, having due regard to the right of each basin State to make equitable and reasonable use of the waters.

CHAPTER IX NAVIGATION

Article 43

Freedom of Navigation

1. Subject to the limitations or qualifications in this Chapter, each riparian State is entitled to freedom of navigation on the entire watercourse to which they are riparian on a basis of equality and nondiscrimination.
2. A “riparian State” for purposes of this Chapter is a State traversed by or separated from another State by the navigable portion of a watercourse.
3. A “watercourse” for purposes of this Chapter is a river, lake, or other surface body of water on which navigation is possible from one riparian State to another or from a riparian State to the high seas.
4. A watercourse is “navigable” for purposes of this Chapter if, in its natural or canalized condition, the watercourse is currently used for commercial navigation or is capable of being so used in its natural condition.
5. “Freedom of navigation” for the purposes of this Chapter includes:
 - a. Freedom of movement on the entire navigable course of the watercourse;
 - b. Freedom to enter ports and to make use of plants and docks; and
 - c. Freedom to transport goods and passengers, directly or through transshipment, between the territory of one riparian State and the territory of another riparian State and between the territory of a riparian State and the open sea.

Article 44

Limitations on Freedom of Navigation

1. Absent special arrangements, only vessels of a riparian State are entitled to exercise freedom of navigation.
2. Movement by vessels exercising freedom of navigation shall be continuous and expeditious, and not prejudicial to the peace, good order, or security of the riparian State.
3. Stopping or anchoring is allowed when incidental to ordinary navigation or if necessary because of *force majeure*, distress, or for the rendering of assistance to persons, ships, or aircraft in danger or distress.
4. Riparian States may restrict or prohibit the loading by vessels of a foreign State of goods and passengers in its territory for discharge in such territory.
5. Nondiscriminatory fees may be charged by a riparian State to recover the costs of services provided to vessels exercising freedom of navigation.

Article 45

Regulating Navigation

In order to achieve good order in the navigable portion of a watercourse within its jurisdiction, a riparian State may regulate, limit, or suspend navigation, as appropriate for the purposes of protection of public safety, health, or the environment, over that portion of the watercourse within its jurisdiction, provided the State does not discriminate against the shipping of another riparian State and does not unreasonably interfere with the enjoyment of the rights of freedom of navigation defined in Articles 43 and 44.

Article 46

Maintaining Navigation

Each riparian State is, to the extent of the means available, required to maintain in good order that portion of a navigable watercourse within its jurisdiction.

Article 47

Granting the Right to Navigate to Non-Riparian States

Riparian States, individually or jointly, may grant rights of navigation to non-riparian States on watercourses or other waters within its or their territory.

Article 48

Exclusion of Public Vessels

Freedom of navigation does not apply to the navigation of warships or of a government vessel used for non-commercial purposes except by agreement of the States concerned.

Article 49

Effect of War or Similar Emergencies on Navigation

1. In time of war, other armed conflict, or public emergency constituting a threat to the security of a riparian State, it may take measures derogating from its obligations under this Chapter to the extent strictly required by the exigencies of the situation.
2. No measures taken under this Article are to violate a State's other obligations under international law.
3. Riparian States shall in any case facilitate navigation for humanitarian purposes.

CHAPTER X

**PROTECTION OF WATERS AND WATER INSTALLATIONS DURING WAR
OR ARMED CONFLICT**

Article 50

Rendering Water Unfit for Use

Combatants shall not poison or render otherwise unfit for human consumption water indispensable for the health and survival of the civilian population

Article 51

Targeting Waters or Water Installations

1. Combatants shall not, for military purposes or as reprisals, destroy or divert waters, or destroy water installations, if such actions would cause disproportionate suffering to civilians.
2. In no event shall combatants attack, destroy, remove, or render useless waters and water installations indispensable for the health and survival of the civilian population if such actions may be expected to leave the civilian population with such inadequate water as to cause its death from lack of water or force its movement.
3. In recognition of the vital requirements of any party to a conflict in the defense of its national territory against invasion, a party to the conflict may derogate from the prohibitions contained in paragraphs 1 and 2 within such territories under its own control where required by imperative military necessity.
4. In any event, waters and water installations shall enjoy the protection accorded by the principles and rules of international law applicable in war or armed conflict and shall not be used in violation of those principles and rules.

Article 52

Ecological Targets

Combatants shall not, for military purposes or as reprisals, destroy or divert waters, or destroy water installations, when such acts would cause widespread, long-term, and severe ecological damage prejudicial to the health or survival of the population or if such acts would fundamentally impair the ecological integrity of waters.

Article 53

Dams and Dikes

1. In addition to the other protections provided by these Rules, combatants shall not make dams and dikes the objects of attack, even where these are military objectives, if such an attack may cause the release of dangerous forces and consequent severe losses among the civilian population.
2. This protection ceases if the dam or dike is used for other than its normal function and in regular, significant, and direct support of military operations and such attack is the only feasible way to terminate such use.

Article 54

Occupied Territories

1. An occupying State shall administer water resources in an occupied territory in a way that ensures the sustainable use of the water resources and that minimizes environmental harm.
2. An occupying State shall protect water installations and ensure an adequate water supply to the population of an occupied territory.

Article 55

Effect of War or Armed Conflict on Water Treaties

1. Treaties creating legal regimes for an international watercourse or part thereof are not terminated by war or armed conflict between the parties to the treaty.
2. Such Treaties or parts thereof shall be suspended only where military necessity requires suspension and where suspension does not violate any provision of this Chapter.

CHAPTER XI

INTERNATIONAL COOPERATION AND ADMINISTRATION

Article 56

Exchange of Information

1. Basin States shall regularly provide to other basin States all relevant and available information on the quantity and quality of the waters of a basin or aquifer and on the state of the aquatic environment and the causes for any changes in waters, in an aquifer, or in the aquatic environment, including, but not limited to, a list of all known water withdrawals and sources of pollution.
2. Basin States shall employ their best efforts to collect and, where appropriate, to process data and information in a manner that facilitates its use by other basin States to which it is to be communicated.
3. The exchange of information under this Article shall include all relevant technical information for a program, plan, project, or activity, including the results of any relevant impact assessment.
4. Basin States shall cooperate with other basin States to provide as much information as possible under the circumstances having due regard for the provisions of paragraph 5.
5. States need not provide information that would compromise:
 - a. Intellectual property rights, including commercial or industrial secrets;
 - b. Rights of individual privacy;
 - c. Criminal investigations or trials;
 - d. National security; and
 - e. Information that could endanger ecosystems, historic sites, and other naturally or culturally important objects or locations.

Article 57

Notification of Programs, Plans Projects, or Activities

1. Basin States shall promptly notify other States or competent international organizations that may be affected significantly by a program, plan, project, or activity.
2. Basin States shall also promptly inform other States or competent international organizations whenever necessary to accomplish obligations set forth in these Rules.

3. A basin State that has reasonable grounds to conclude that a program, project, or activity to be undertaken or already undertaken within another State may involve a significant effect on waters or the aquatic environment within the first State shall so inform the other State, providing documentary support for the conclusion, and request the other State to exchange information under Article 56 and to consult under Article 58.

Article 58 ***Consultations***

1. Basin States shall consult one another and with competent international organizations on actual or potential issues relating to their shared waters or to the aquatic environment in order to reach, by methods of their own choice, a solution consistent with their rights and duties under international law.
2. Basin States that conclude that a program, plan, project, or activity would significantly adversely affect them shall promptly notify the State responsible for the program, plan, project, or activity of those conclusions along with corroborating documentation. Upon receipt of such a claim, the interested States shall promptly consult each other.
3. In conducting consultations and negotiations under paragraphs 1 and 2, basin States shall proceed in good faith to give reasonable regard to the rights and legitimate interests of the other basin States involved, and if necessary, to coordinate approaches to the program, plan, project, or activity in order to arrive at an equitable and sustainable resolution of the situation.
4. During consultations, a basin State planning a program, project, or activity shall, if requested the another interested State, refrain from implementing or allowing the implementation of the program, plan, project, or activity for a reasonable period.
5. Consultation shall not be used to delay unreasonably the implementation of programs, plans, projects, or activities that are the subject of the consultation.

Article 59 ***Failure to Consult***

1. If a State subject to a duty to consult pursuant to Article 58 does not enter into consultations or negotiations within a reasonable time, the other interested States may implement a proposed program, plan, project, or activity so long as it is consistent with the State's obligations under these international law.
2. A State's obligation to pay compensation for violations of customary international law to another interested State may be offset by expenses incurred by the obligated State as result of the other State's failure to respond.

Article 60 ***Requests for Impact Assessments or Other Information***

1. A basin State, at the request of another basin State likely to be affected by a program, plan, project, or activity envisaged to occur or occurring within the requested State, shall undertake an impact assessment of the program, plan, project, or activity on an ongoing basis.
2. A basin States, at the request of another basin State likely to be affected by a program, project, or activity envisaged to occur within the requested State, shall provide all relevant information in the requested State's possession or which the requested State can acquire through reasonable efforts, limited as in Article 56(2).
3. A basin State requested by another basin State to provide information or to conduct an impact assessment pursuant to this Article shall employ its best efforts to comply with the request but may condition its compliance upon reciprocal exchanges by the requesting State or upon reimbursement for the reasonable costs of collecting and processing the information.

Article 61 ***Urgent Implementation of Programs, Plan, Projects, or Activities***

1. When implementation of a program, plan, project, or activity is of the utmost importance to the public health, public safety, or similar interests, the basin State considering the program, project, or activity may proceed immediately to implement the program, project, or activity within awaiting the completion of the consultation process, but without violating the other obligations expressed in these Articles.
2. A basin State that undertakes to implement a program, plan, project, or activity pursuant to this Article shall immediately notify other basin States and shall disclose all relevant data and information.
3. Notwithstanding a basin State's decision to implement a program, plan, project, or activity pursuant to this Article, the implementing basin State shall, at the request of another interested basin State, consult and negotiate as provided in Article 58.

Article 62

Harmonization of National Laws and Policies

In enacting national laws pursuant to this Article, basin States shall consult other interested States with a view to harmonizing the laws and policies regarding the equitable use and sustainable development of waters and of the aquatic environment.

Article 63

Protection of Works

1. Basin States shall, within their territories, use their best efforts to maintain and protect installations, facilities, and other works related to the management of waters of an international drainage basin.
2. Basin States shall, at the request of another basin State that has reasonable grounds to conclude that its interests may be significantly adversely affected by an installation, facility, or other work related to waters or the management of waters, enter into consultations regarding:
 - a. The safe operation and maintenance of the installation, facility, or other work; and
 - b. The protection of the installation, facility, or other work from intentional or negligent acts or the forces of nature.

Article 64

Establishing Basin Wide or Other Joint Management Arrangements

1. When necessary to ensure the equitable and sustainable use of waters and the prevention of harm, basin States shall establish a basin wide or joint agency or commission with authority to undertake the integrated management of waters of an international drainage basin.
2. When appropriate, basin States shall establish other joint mechanisms for the management of waters.
3. The establishment of basin wide management mechanism is without prejudice to the creation, existence, or designation of any joint management agency, conciliation commission, or tribunal by the basin States for the resolution of any question or dispute relating to the present or future management of transboundary waters.

Article 65

Minimal Requirements for Joint Management Arrangements

1. A basin wide management mechanism under Article 64 shall have authority over:
 - a. The coordination and pooling of their scientific and technical research programs;
 - b. Establishment of harmonized, coordinated, or unified networks for permanent observation and control; and
 - c. Establishment of joint or harmonized water quality objectives and standards for the whole of or each significant part of a basin.
2. An agreement creating a mechanism under Article 64 shall provide expressly for the mechanism's:
 - a. Objective and purpose;
 - b. Nature and composition;
 - c. Form and duration;

- d. Legal status;
- e. Area of operation;
- f. Functions and powers; and
- g. Financial arrangements.

Article 66
Compliance Review

Basin States shall undertake recurring review at regular intervals of the implementation of their commitments under agreements relating to waters, including, when applicable, their implementation of joint management mechanisms, in either event including in the review:

- a. Assessment, on the basis of all information available, of the overall affects of measures relating to the management of waters or of the aquatic environment;
- b. Examination of the obligations of the States involved in a joint management mechanism in light of the objectives for which the mechanism was established and of the evolution of scientific and technological knowledge;
- c. Promotion of appropriate responses by States involved to climate change;
- d. Facilitation of the refinement of methodologies for the effective implementation of the joint management mechanism or other agreements;
- e. Establishment of subsidiary bodies as necessary or proper for the implementation of the joint management mechanism or other agreements;
- f. Mobilization of additional financial resources as necessary and as available for the joint management mechanism or for other agreements;
- g. Arrangement, where appropriate, for the services or cooperation of international organizations, of intergovernmental bodies, and of non-governmental bodies; and
- h. Recommendations regarding any matters necessary or proper for the implementation of the joint management mechanism or other agreements.

Article 67
Sharing Expenses

1. Expenses for the collection and exchange of relevant information and other joint activities, including the establishment and operation of a basin wide management mechanism, shall be allocated among the basin States based upon:
 - a. Receipt of economic benefits;
 - b. Receipt of environmental benefits; and
 - c. Ability to pay.
2. Expenses for special works undertaken by agreement in the territory of one State at the request of another State shall be borne by the requesting State, unless otherwise agreed.

CHAPTER XII
STATE RESPONSIBILITY

Article 68
State Responsibility

States are responsible for breaches of international law relating to the management of waters or to the aquatic environment in accordance with the international law of State responsibility.

CHAPTER XII
LEGAL REMEDIES
Article 69

Access to Courts or Administrative Authorities

1. A person who suffers or is under a serious threat of suffering damage from the management of water or the aquatic environment in a State shall be entitled to institute proceedings before a competent court or administrative authority of that State in order to obtain an appropriate remedy as specified in Article 70.
2. Public bodies and non-governmental organizations with a proven interest regarding waters or the aquatic environment in a State shall be entitled, under appropriate terms and conditions, to institute proceedings or to participate in proceedings instituted by others.

Article 70

Remedies for Damage to Persons

1. States shall take all appropriate steps to ensure the availability of effective administrative and judicial remedies for persons whose legal rights have been violated and who suffer or are under a serious threat of suffering damage arising from plans, programs, projects, or activities relating to waters or to the aquatic environment subject to the State's jurisdiction or control.
2. Remedies under this Article shall, as appropriate, provide for:
 - (a) Determination whether the damaging plan, program, project, or activity should be permitted;
 - (b) Preventive remedies;
 - (c) Compensation for damage; and
 - (d) Any other proper remedy.

Article 71

Remedies for Persons in Other States

1. In providing access to courts and remedies to persons who suffer or are under a serious threat of suffering damage, States shall not discriminate on the basis of the nationality or residence of the person claiming damage or the place where the damage occurred or may occur.
2. States shall take all appropriate measures to ensure cooperation between their courts and authorities to ensure that persons who suffer or are under a serious threat of suffering damage resulting from actions in another State relating to the waters of an international drainage basin shall have access to such information as is necessary to enable them to exercise their right to a remedy in a prompt and timely manner.
3. Public bodies and non-governmental organizations with a proven interest regarding waters or the aquatic environment in States other than the States in which they are established shall be entitled on to institute proceedings or participate in procedures in that other State to the same extent and on the same conditions as public bodies and non-governmental associations established in the other State.
4. States shall provide, by agreement or otherwise, relative to proceedings involving persons or events in more than one State for:
 - a. The jurisdiction of courts or administrative bodies;
 - b. The determination of the applicable law; and
 - c. The enforcement of judgments.

CHAPTER XIII

SETTLEMENT OF INTERNATIONAL WATER DISPUTES

Article 72

Peaceful Settlement of International Water Disputes

1. States shall resolve disputes concerning issues within the scope of these Rules through peaceful means.
2. States involved in the dispute shall consult one another and, when appropriate, competent international organizations, in order to reach, by methods of their own choice, a solution consistent with their rights and duties under international law.

3. Where the facts are in dispute, the States involved in the dispute shall appoint a body to investigate and to determine the disputed facts, the decision of the fact-finding body binding the States only if they have consented to such binding effect.
4. In any procedure to resolve the dispute, the States involved shall invite other States likely to be affected by resolution of the dispute to present their views at an appropriate early stage in the dispute.
5. The means of settlement referred to in this Article are without prejudice to recourse to means of settlement recommended to, or required of, members of regional arrangements or agencies or other international organizations.

Article 73

Arbitration and Litigation

1. If the procedures set forth in Article 72 of these Rules have not succeeded in resolving the dispute, the States or international organizations involved shall agree to submit their dispute to an *ad hoc* or permanent arbitral tribunal, or to a competent international court.
2. Recourse to arbitration or litigation implies an undertaking by the States involved in the dispute to accept any resulting award or judgment as final and binding.