

Supplementary material: Treaty 1

**TEMPLATE FOR A MODEL TRANSBOUNDARY AGREEMENT FOR
INTERNATIONAL RIVER BASINS**

Title: Treaty for Doe River Cooperation

Parties: State X, State Y, State Z

Basin: Doe

Date: 12/12/12

State X – State Y – State Z: Treaty For Doe River Cooperation

Preamble

State X, State Y, and State Z (“Contracting States”) of the Doe River Basin,
Conscious of the importance of the integrated management of the water
resources for social well-being and economic development for the peoples of the
States of the Doe River Basin, which includes the surface water bodies and
subsurface waters (i.e., groundwater) of the Basin, regardless of whether or not the
groundwater is hydrologically connected to surface water;

Inspired by the common goal to promote the harmonious development of the
Doe River Basin, to permit an equitable distribution of the benefits of said

development among the Basin States so as to raise the standard of living of their peoples;

Conscious that both socioeconomic development and conservation of the water resources and associated ecological habitat are inherent responsibilities in the sovereignty of each State, and that it is vital to maintain a balance between economic growth and environmental protection;

Convinced that it is in their mutual interest to establish an organization to promote the management and sustainable development of the Doe River Basin for the benefit of all;

Mindful of the global initiatives for promoting cooperation on integrated management and sustainable development of the water resources,

Resolve to sign the following Treaty:

Article 1

Scope of the Treaty

This Treaty addresses the use, development, protection, conservation and management of the Doe River Basin water resources and associated ecological habitat, and establishes an institutional mechanism for cooperation among the Contracting States (Nile 2010).

Article 2

Use of Terms

For the purposes of this Treaty:

(a) "*Watercourse*" means a system of surface waters and groundwaters constituting by virtue of their physical proximity – and not necessarily their hydrologic connectivity - a unitary whole (modified from United Nations 2008; SADC 2000; United Nations 1997; Rosenstock 1993, 1994).

(b) "*International Watercourse*" means a watercourse, parts of which are situated in different States;

(c) "*Doe River Basin*" means the geographical area determined by the watershed limits of the Doe River System of waters; this term is used where there is reference to environmental protection, conservation or development;

(d) "*Doe River System*" means the Doe River and the surface waters and groundwaters that are related to the Doe River, which includes groundwater aquifers that may extend beyond the geographic boundary of the Doe River Basin;

(e) "*Treaty*" means this Treaty and its Annexes;

(f) "*Contracting States*" are the Doe River Basin States, which are the signatory parties of this Treaty, i.e., States, X, Y, and Z.

(g) "*Water security*" means the right of all Doe River Basin States to reliable access to and use of the Doe River System for health, agriculture, livelihoods, development and environment.

(h) "*International Union*" is a fictitious international group of countries, of which States X, Y and Z are a part.

(i) "*Metropolitan City, State X*" is a fictitious city and state.

(j) "*Conjunctive Water Use*" refers to simultaneous use of surface water and groundwater to meet demand.

(k) "*Panel*" or "*Dispute Resolution Panel*" refers to a third party organization formed to conduct dispute resolution.

(l) "*Commission*" or "*Doe River Basin Commission*" is the governing body of this Treaty. It is comprised of (i) Conference of Heads of State and Government, (ii) Council of Ministers, (iii) Joint Water Board, (iv) Sectoral Advisory Committees, and (v) Secretariat.

(m) "*Conference*" or "*Conference of Heads of State and Government*" is composed of Heads of State and Government of Doe River Basin States, and shall be the supreme policy-making organ of the Commission.

(n) "*Council*" or "*Council of Ministers*" is composed of the Minister for Water Affairs of each Doe River Basin State and other ministers according to the agenda of the Commission, and is the governing body of the Commission.

(o) "*Board*" or "*Joint Water Board*" refers to the group designated by the Contracting States to address all relevant water management issues as defined under this Treaty.

(q) “*Committees*” or *Sectoral Advisory Committees*” refer to groups that will address specific sectoral matters within the competence of the Commission.

(r) “*Secretariat*” refers to the organization that includes the Executive Secretary, which manages the administration and finances of the Commission.

Article 3

Effective Date and Duration of Treaty

1. Effective Date. This Treaty, after legislative ratification by each of the signatory Contracting States, shall become operative and enter into force on the sixtieth day following the date of ratification. The original of the present Treaty, of which the English and Spanish texts are equally authentic, shall be deposited with the International Union, which shall send certified true copies thereof to the Contracting States.

2. Registration. In conformity with Article 102 of the Charter of the United Nations, the Treaty shall be registered by State X with the Secretariat of the United States (Columbia 1961).

3. Duration. The initial term of the Treaty shall be twenty-five (25) years from its effective date. No later than two (2) years prior to the expiration of the initial or any renewal term, the Contracting States shall notify the International

Union whether they propose (a) an additional twenty-five year (25) or other length term without any change in the Treaty's provisions; (b) an additional twenty-five year (25) or other length term with certain amendments to the Treaty, which shall have been approved by the Contracting States and shall accompany the notification; or (c) termination of the Treaty, accompanied by the proposed terms of such termination, which shall include, at a minimum, proposals to satisfy the requirements of this Article 3. Whichever option is exercised shall require unanimous approval of the Contracting States (Muys et al. 2007).

4. Termination. Termination of the Treaty shall be subject to the following conditions (Muys et al. 2007), at a minimum:

- (a) Satisfaction of all outstanding financial obligations of the Contracting States;
- (b) Preservation of all valid existing rights derived from this Treaty in the waters covered by the Treaty; and
- (c) Preservation of all environmental protection obligations assumed by the Contracting States.

5. Modification or Amendment. This Treaty may be modified or amended by the unanimous action of the all Contracting States. Any signatory party may withdraw from this Treaty upon two (2) years' notice to the other signatory parties and the International Union.

PART 1. GENERAL PRINCIPLES

Article 4

General Principles

The Doe River System shall be protected, used, conserved and developed in accordance with the following general principles, consistent with the overriding Basin-wide objectives of responsible management of the water resources and associated ecological habitat.

1. Cooperation, and Community of Interest. The principle of cooperation between the Contracting States and the principle of a community of interest amongst the States of the Doe River Basin, on the basis of sovereign equality, mutual benefit and good neighborliness in order to obtain optimal utilization, adequate protection and conservation of the Doe River Basin as the States pursue social and economic development.

2. Equitable and Reasonable Utilization. The principle of equitable and reasonable utilization, by each Basin State within its territory, of the surface waters and groundwaters of the Doe River System.

3. Obligation to Not Cause Significant Harm. The principle of an obligation to not cause significant harm to the Contracting States of the Doe River Basin.

4. Ecological Protection, Conservation & Sustainability. The principle that the Contracting States take all appropriate measures, individually and, where appropriate, jointly, for the protection, conservation and sustainable development of the Doe River Basin and its ecosystems.

5. Navigation. The principle of freedom of movement on the entire navigable portion of the watercourse and the responsibility of maintenance of that portion of the watercourse within the respective riparian's jurisdiction.

6. Subsidiarity. The principle of subsidiarity, whereby development of the Doe River Basin water resources recognizes the utility of sub-basin organizations and arrangements;

7. Exchange of Information and Data. The principle that the Contracting States execute the regular and reciprocal exchange of information and data on planned measures and on existing measures related to the condition of the water resources of the Basin, where possible in a form that facilitates its utilization by the States to which it is communicated.

8. Environmental and Social Impact Assessments and Audits. The principle of environmental and social impact assessment of planned measures, and auditing of measures in progress or completed.

9. Peaceful Resolution of Disputes. The principle of the peaceful resolution of disputes through the Joint Water Board or, if necessary, a third party body

(“Dispute Resolution Panel”) consisting of representatives selected by the Contracting States (see Article 32).

10. Prevention and Mitigation of Harmful Conditions and Management of Emergency Conditions. The principle of reduction or elimination of harmful conditions from human activity such as disease or natural causes such as floods, and establishment of contingency plans.

11. Protection in Times of Armed Conflict. The principle that facilities and installations associated with water resources shall enjoy the protection of established rules of international law during times of armed conflict.

12. Water Security. The principle that each Contracting State has the right to reliable access to and use of the Doe River System for health, environmental protection including agricultural production, livelihoods, and economic development.

PART II. RIGHTS AND OBLIGATIONS

Article 5

Equitable and Reasonable Utilization

1. Contracting States shall, in their respective territories, utilize the water resources of the Doe River System and the Doe River Basin in an equitable and reasonable manner. Each Basin State is entitled to an equitable and reasonable

share in the beneficial uses of the water resources, and this entitlement must be balanced with an obligation to not cause significant harm (Article 6) in the establishment of each riparian's share. In particular, the volume of the water resources shall be used fairly and proportionately, and developed by the Basin States with the objective of attaining optimal and sustainable utilization, and in a manner consistent with environmental protection of those water resources. Fundamentally, equitable and reasonable utilization of the resource involves the maintenance of stream and river flow levels to meet the vital human needs of the populations of the Contracting States and the Basin ecosystem.

2. To ensure that the Contracting States utilize the water resources in an equitable and reasonable manner, the Basin States shall, as facilitated by the Joint Water Board, take into account the following (ILA 1966, Article V):

- a. Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character;
- b. The social and economic needs of the Contracting States;
- c. The population dependent on the water resources in each Basin State;
- d. The effects of the use or uses of the water resources in one Basin State on other Basin States;
- e. Existing and potential uses of the water resources;

- f. Conservation, protection, development and economy of use of the water resources and the costs of measures taken to that effect;
- g. The availability of alternatives, of comparable value, to a particular planned or existing use;
- h. The volumetric contribution of each Basin State to the waters of the Doe River System, with regard to water allocation, and with regard to water diversion or storage projects for flood control or agriculture or hydroelectric power development (Annex I);
- i. The extent and proportion of the drainage area in the territory of each Basin State.

3. The weight to be given to each factor a. through i. is to be determined by its importance in comparison with that of 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 (ILA 1966).

Article 6

Obligation to Not Cause Significant Harm

1. Doe River Basin States shall, in utilizing Doe River System water resources in their territories, take all appropriate measures to prevent the causing of significant harm to other Basin States (United Nations 1997).

2. Doe River Basin States shall, individually and, where appropriate, jointly through cost-sharing by the Contracting States that may be affected, make every effort to take all appropriate measures to prevent or mitigate conditions related to the Doe River System that may be harmful to the Contracting States, whether resulting from human conduct or natural causes, such as flood conditions, invasive water weeds, water-borne diseases, siltation (silting), erosion, drought, or desertification. In implementing this provision, Doe River Basin States shall take into account guidelines to be developed by the Joint Water Board (Annex II).

3. Where significant harm nevertheless is caused to another Doe River Basin State, the State, whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures, having due regard to the provisions of Article 4 above, in consultation with the affected State, to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation (United Nations 1997).

(a) The Contracting States will be liable to the other and shall make appropriate compensation to the other with respect to any act, failure to act, omission or delay amounting to a breach of the Treaty or of any of its provisions, other than an act, failure to act, omission or delay occurring by reason of war, strike, major calamity, act of God, uncontrollable force or maintenance curtailment (Columbia 1961).

(b) Except as provided in (a), none of the Contracting States shall be liable to the other or to any person in respect of any injury, damage or loss occurring in the territory of another Contracting States caused by any act, failure to act, omission or delay under the Treaty whether the injury, damage or loss results from negligence or otherwise (Columbia 1961).

(c) The Commission will establish procedures and criteria for compensation (ILA 1980). In the case of floods, a basin State is not liable to pay compensation for damage caused to another basin State by floods originating in that basin State unless it has acted contrary to what could be reasonably expected under the circumstances, and unless the damage caused is substantial (ILA 1972). In the case of a breach of a State's international obligations relating to water pollution in an international drainage basin, that State shall cease the wrongful conduct and shall pay compensation for the injury resulting therefrom (ILA 1982).

4. When one or more of the Contracting States allege substantial harm by another Contracting State, based upon documented observation or monitoring, or substantial verified factual evidence from a reliable, identified third party, the Commission shall request the representative for that State to respond to such allegation in writing within 30 days. The enforcement process, beginning with providing the allegation in writing, is presented in Annex III. If the allegation is

not resolved, the dispute resolution process provided in Annex IV will then be invoked.

Article 7

Ecological Protection, Conservation and Sustainability

1. Doe River Basin States shall take all appropriate measures, individually or jointly, to protect, conserve, sustain, and where necessary, rehabilitate the Doe River Basin and its ecosystems, in particular, by:
 - (a) protecting and conserving water quality within the Doe River Basin;
 - (b) preventing the introduction of species, alien or new, into the Doe River System which may have effects detrimental to the ecosystems of the Doe River Basin;
 - (c) protecting and conserving biological diversity within the Basin;
 - (d) protecting and conserving wetlands within the Basin; and
 - (e) restoring and rehabilitating the degraded natural resource base.

2. The Contracting States shall, through the Joint Water Board, take steps to harmonize their policies in relation to the provisions of this Article.

Article 8

Navigation

1. This Article refers to those river and lake portions which are both navigable and separate or traverse the territories of two or more of the Contracting States (ILA 1966, Articles 12-20).

2. Rivers or lakes are navigable if in their natural or canalized state they are currently used for commercial navigation or are capable by reason of their natural condition of being so used.

3. In this Article, the term “riparian State” refers to a Contracting State through or along which the navigable portion a river flows or a lake lies.

4. Subject to any limitations or qualifications referred to in this Treaty, each riparian State is entitled to enjoy rights of free navigation on the entire course of a river or lake.

5. “Free navigation,” as this term is used in this Article, includes the following freedoms for vessels of a riparian State on the basis of equality:

- (a) freedom of movement on the entire navigable course of the river or lake;
- (b) freedom to enter ports and to make use of plants and docks; and
- (c) freedom to transport goods and passengers, either directly or through trans-shipment, between the territory of a riparian State and the open sea.

6. A riparian State may exercise rights of police, including but not limited to the protection of the public safety and health, over that portion of the river or lake subject to its jurisdiction, provided the exercise of such rights does not unreasonably interfere with the enjoyment of the rights of free navigation defined in this Article.

7. Each riparian State may restrict or prohibit the loading by vessels of a foreign State of goods and passengers in its territory for discharge in such territory.

8. A riparian State may grant rights of navigation to non-riparian States on rivers or lakes within its territory.

9. Each riparian State is, to the extent of the means available or made available to it, required to maintain in good order that portion of the navigable course of a river or lake within its jurisdiction.

10. The rules stated in this Article are not applicable to the navigation of vessels of war or of vessels performing police or administrative functions, or, in general, exercising any other form of public authority.

11. In time of war, other armed conflict or public emergency constituting a threat to the life of a State, a Contracting State may take measures derogating from its obligations under this Article to the extent strictly required by the exigencies of the situation, provided that such measures are not inconsistent with its other obligations under international law. The Contracting State shall in any case facilitate navigation for humanitarian purposes.

Article 9

Subsidiarity

Contracting States shall plan, implement and develop the Doe River Basin water resources at the most efficient level by:

- (a) recognizing the utility of sub-basin organizations and arrangements;
- (b) allowing all those within a State who will or may be affected by a project in that State to participate in an appropriate way in the planning and implementation process;
- (c) make every effort to ensure that the project and any related agreement is consistent with the overriding Basin-wide objectives of responsible management of the water resources and associated ecological habitat.

Article 10

Regular Exchange of Data and Information

1. In pursuance of their cooperation concerning the use, development and protection of the Doe River Basin and its water resources, Doe River Basin States shall on a regular basis exchange readily available and relevant data and information through the Joint Water Board, on both planned and existing measures and on the condition of water resources of the Basin, where possible in a form that facilitates its utilization by the States to which it is communicated. Planned measures will be subject to a Public Comment Procedure, which is described in Article 26 (3).

2. If a Doe River Basin State is requested by another Basin State to provide data or information that is not readily available, it shall employ its best efforts to comply with the request but may condition its compliance upon payment by the

requesting State of the reasonable costs of collecting and, where appropriate, processing such data or information.

3. In the implementation of their obligations under Paragraph 1 and 2, Doe River Basin States agree to observe procedures to be developed by the Joint Water Board.

Article 11

Environmental and Social Impact Assessments and Audits

1. For planned measures that may have significant adverse environmental effects, Doe River Basin States shall, at an early stage, undertake a comprehensive assessment of those effects with regard to their own territories and the territories of the other Contracting States.

2. The criteria and procedures for determining whether a planned measure is likely to have significant adverse environmental and social effects shall be developed by the Joint Water Board.

3. Where circumstances so warrant, according to criteria to be developed by the Joint Water Board, a Contracting State that has implemented measures of the kind referred to in paragraph 1 shall conduct an audit of the environmental and social impacts of those measures. That State shall enter into consultations relating to the audit with the Contracting States affected by the measures upon their request.

4. The Joint Water Board, taking into account legislation that pertains to the Contracting States, shall adopt criteria for carrying out audits of measures that exist at the date of the entry into force of this Treaty.

5. Contracting States shall carry out audits of measures existing at the date of the entry into force of this Treaty in accordance with legislation that pertains to the Contracting States, and in accordance with criteria adopted by the Joint Water Board under this Treaty.

Article 12

Prevention and Mitigation of Harmful Conditions and Management of Emergency Conditions

1. The Contracting States shall, individually and, where appropriate, jointly through cost-sharing by the Doe River Basin State or States that may be affected, make every effort to take all appropriate measures to prevent or mitigate conditions related to the Doe River System that may be harmful to other Basin States, whether resulting from human conduct or natural causes, such as flood conditions, invasive water weeds, water-borne diseases, siltation (silting), erosion, drought or desertification. In implementing this provision, the Basin States shall take into account guidelines to be developed by the Joint River Board.

2. For the purposes of this provision, “emergency” means a situation that causes, or poses an imminent threat of causing, serious harm to Doe River Basin

States or other States and that results suddenly from natural causes, such as floods, landslides or earthquakes, or from human conduct, such as industrial accidents.

(a) Contracting State shall immediately notify other potentially affected States and competent international organizations of any emergency in its territory.

(b) The Contracting State within whose territory an emergency originates shall, in cooperation with potentially affected States and, where appropriate, competent international organizations, immediately take all practicable measures necessitated by the circumstances to prevent, mitigate and eliminate harmful effects from the emergency

(c) The Joint Water Board (JWB) will develop contingency plans (Annex II) for responding to emergencies in cooperation with other affected States and supportive international organizations.

Article 13

Protection of the Doe River Basin and Related Installations in Time of Armed

Conflict

In times of armed conflict, the Doe River System and its associated facilities shall enjoy the protection accorded by the principles and rules of international law and international humanitarian law, whether the conflict occurs within a respective State or internationally, or whether the conflicting parties originate from one or more States.

Article 14

Water Security

Mindful of the provisions of Articles 4 and 5, the Contracting States acknowledge the vital importance of maintaining water security, defined as the right to reliable access to and use of the Doe River System for health, environmental protection including agricultural production, livelihoods, and economic development. The States also acknowledge the necessity for cooperative management and development of waters of the Doe River System, in order to achieve water security. Therefore, the Contracting States agree to work cooperatively through the Joint Water Board, and all other appropriate means, to achieve and sustain water security.

PART III. INSTITUTIONAL STRUCTURE

SECTION A. THE DOE RIVER BASIN COMMISSION

ARTICLE 15

Establishment

The Doe River Basin Commission is hereby established by the Doe River Basin States.

ARTICLE 16

Purpose and Objective

The purpose and objective of the Commission is to:

- (a) serve as an institutional framework that will facilitate and promote closer cooperation among the Contracting States.
- (b) facilitate and promote the principles, rights, and obligations provided for in this Treaty.

ARTICLE 17

Organs

The Doe River Basin Commission (“Commission”) is comprised of:

- (a) Conference of Heads of State and Government
- (b) Council of Ministers
- (c) Joint Water Board
- (d) Sectoral Advisory Committees
- (e) Secretariat

ARTICLE 18

Headquarters

The headquarters of the Commission shall be situated in Metropolitan City, State X.

ARTICLE 19

Legal Status

1. The Commission is established as an intergovernmental organization and shall enjoy international legal personality, with such legal capacity as may be necessary for the performance of the functions, in particular, the capacity to enter into agreements, to incur obligations, to receive donations, to enforce the provisions of the Treaty, and to sue and be sued in its own name.
2. The Commission and its officials shall, in the territory of each Contracting State, enjoy such privileges and immunities as are necessary for the performance of their functions under this Treaty.
3. The privileges and immunities referred to under this article shall be provided for in detail in a Protocol to this Treaty.

SECTION B. THE CONFERENCE OF HEADS OF STATE AND GOVERNMENT

Article 20

Structure and Procedure

1. The Conference of Heads of State and Government (“the Conference”) is composed of Heads of State and Government of Doe River Basin States.
2. The Conference shall establish its own rules and procedures.

Article 21

Functions

The Conference shall be the supreme policy-making organ of the Commission.

SECTION C. THE COUNCIL OF MINISTERS

Article 22

Structure

The Council of Ministers (the “Council”) shall be composed of the Minister for Water Affairs of each Doe River Basin State and other ministers according to the agenda of the Commission.

Article 23

Procedures

1. Except as otherwise provided, the Council shall establish its own rules and procedures.

2. The Council shall convene once a year in regular session and in special session at the request of any Doe River Basin State.

3. Unless the Council decides otherwise, the venue of regular sessions shall rotate among the Doe River Basin States in alphabetical order, in English. The venue of a special session shall be the same as that of the preceding regular session.

4. Regular sessions shall be chaired by the Doe River Basin State in which they are held. Special sessions shall be chaired by the State that chaired the next preceding regular session.

5. Decisions of the Council shall be taken by consensus.

6. Decisions of the Council are binding on all Doe River Basin States.

Article 24

Functions

1. The Council is the governing body of the Doe River Basin Commission (“Commission”). It may refer matters to the Conference of Heads of State for decision.

2. The Council oversees the effective implementation of the Treaty, serves as a forum for discussion of matters within the scope of its functions and the Treaty, and promotes the full and effective application of the Treaty.

3. The Council adopts, keeps under review and revises as necessary, plans for the coordinated, integrated, and sustainable management and development of the Doe River Basin. Similarly, the Council adopts, keeps under review and revises as necessary rules, procedures, guidelines and criteria for the implementation of the provisions of this Treaty.

4. The Council may establish, and assign responsibilities to any ad hoc committees it considers to be necessary for the proper fulfillment of its functions.

5. The Council approves the annual work programs of the Commission.

6. The Council ensures the financial sustainability of the Commission.

7. The Council approves rules and procedures governing the operations of the Joint Water Board, and the Secretariat, as well as its work program and financial and staff regulations.

8. The Council appoints the Executive Secretary and other senior staff of the Commission.

9. The Council makes determinations concerning the staffing and organizational structure of the Secretariat.

10. The Council examines and makes decisions regarding the determination of equitable and reasonable use of water in each riparian country taking into consideration the factors provided in Article 5, paragraph 2.

11. The Council decides upon a sliding scale of contributions of Doe River Basin States for the financing of the budget of the Commission, and approves the budget of the Commission.

12. Where appropriate, the Council decides upon formulas for cost and benefit sharing by the Contracting States regarding joint projects within the Doe River Basin.

13. The Council decides upon reasonable methods of enforcement of provisions of the Treaty (Annex III).

14. The Council oversees the effective implementation of the Dispute Resolution Panel (Annex IV).

15. The Council will perform other functions where consistent with the purposes of the Commission as it may decide.

SECTION D. THE JOINT WATER BOARD

Article 25

Structure and Procedures

1. The Joint Water Board (the “JWB”) shall be composed of two members from each Contracting State, who shall be senior officials. Delegates may bring

other experts to meetings of the JWB as necessary to deal with special questions. These experts should be knowledgeable in fields such as ecology, human resources, planning, and economics, as well as hydraulic engineering.

2. The JWB may establish specialized Working Groups to deal with matters within its competence.

3. The JWB shall propose, for the approval of the Council, its own rules and procedures.

Article 26

Functions

1. The JWB shall prepare for the consideration of the Council cooperative programs for the integrated and sustainable management and development of the Doe River Basin. The JWB shall advise the Council on technical matters relating to the use, development, protection, conservation and management of the Basin and the Doe River Basin System, including protection from drought and floods.

2. The JWB shall propose to the Council rules, procedures, guidelines and criteria provided for in this Treaty. The JWB shall make proposals to the Council concerning appointment of the Executive Secretary and senior technical staff of the Secretariat, and supervises the Secretariat.

3. The JWB shall administer a Public Comment Procedure concerning planned measures. The Procedure shall provide a process to collect input from

citizens in the respective countries, followed by evaluation of input by the JWB, and amendments to the planned measures as appropriate.

The Procedure shall provide for the public distribution of the draft project measures (“project plan”) in newspapers, regional libraries and online. Supporting documents shall be made available online and at libraries. The public distribution announcement shall be made thirty days prior to the date of a public meeting, and the public shall be invited to provide comments prior to the meeting. The public meeting shall be hosted by technical experts, who shall describe the draft project plan and respond to public comments received to that point. Public comments at the meeting shall be recorded, and additional public comment shall be requested at this initial meeting.

A second and final public meeting shall be held sixty days after the initial meeting. Public comments received during this period shall be posted online so the public can view citizens’ comments. Technical experts shall evaluate comments submitted during this period prior to the meeting; present a summary of the comments at the meeting; and deliver a presentation of the final project plan that describes those comments incorporated into the final project plan.

4. The JWB shall make recommendations to the Council on the implementation of the provisions of this Treaty. The JWB recommendations will include decisions regarding the determination of equitable and reasonable use of

water by each of the Contracting States, taking into consideration the factors provided in Article 5, paragraph 2. The JWB shall make recommendations to the Council concerning rules and procedures governing the operations of the Secretariat, as well as its work program. When directed to do so by the Council, the JWB shall make recommendations to the Council concerning the modification of the Treaty or the elaboration of protocols.

5. The JWB shall perform such other functions as may from time to time be assigned to it by the Council.

SECTION E. SECTORAL ADVISORY COMMITTEES

Article 27

1. Sectoral Advisory Committees (“SACs”) may be established by the Council to address specific sectoral matters within the competence of the Commission.

2. Unless the Council decides otherwise, a SAC shall be comprised of one member from each of the Contracting States who is an expert in the field of activity of the SAC in question.

3. SACS shall be governed by the rules and procedures applicable to the Commission, given that operational changes will be made as needed.

4. The Council may establish a SAC charged with establishing linkage between sub-basin organizations and the Commission.

Article 28

SACs shall address the tasks assigned to them by the Council.

SECTION F. THE SECRETARIAT

Article 29

Structure

1. The Secretariat shall be headed by an Executive Secretary, who shall be appointed for a three year term by the Council.
2. The Executive Secretary shall be accountable to the Conference through the Council.
3. The Executive Secretary and the officials of the Secretariat shall enjoy in Doe River Basin States the privileges and immunities necessary for the performance of their functions.
4. The staff and structure of the Secretariat shall be determined by the Council on the recommendation of the Conference, taking into account the principle of geographic distribution.
5. The office of the Secretariat shall be situated at the Headquarters of the Commission.

Article 30

Functions

1. The Executive Secretary shall represent the Commission as to matters specified in the rules and procedures governing its operations and in particular in its relations with international and bilateral assistance institutions and with any Doe River sub-basin institutions or arrangements.

2. The Executive Secretary shall serve as the secretariat for meetings of all organs of the Commission.

3. The Executive Secretary shall be responsible for the administration and finances of the Commission. The Executive Secretary shall prepare a proposed budget of the Commission and submits it to the Council for review.

4. The Executive Secretary shall prepare, taking into account any relevant information provided by the Contracting States, and shall submit reports to the Council concerning the annual work programs of the Commission.

5. The Secretariat shall assist the JWB with the preparation of a plan for the coordinated, integrated, and sustainable management and development of the Doe River Basin.

6. The Executive Secretary shall be responsible for the carrying out of studies and the performance of other activities proposed by the JWB and authorized by the Council. The Executive Secretary may engage consultants with the approval of the JWB to assist in the performance of these functions.

7. The Secretariat shall compile available data and information and coordinates monitoring of information relating to the Doe River Basin, including information concerning water resources, the environment and socio-economic matters, reviews and synthesizes the information with a view to integrating it into basin-wide databases and establishing standards, and develops mechanisms for the regular exchange of information where needed.

8. The Secretariat shall receive reports from sub-basin organizations and transmits the reports to the Council for its consideration.

9. The Secretariat shall perform any other functions assigned to it by the Council.

10. The Secretariat shall provide other assistance to all organs of the Commission, on their request, concerning matters related to the discharge of their functions.

PART IV. SUBSIDIARY INSTITUTIONS

Article 31

Sub-Basin Organizations and Arrangements

1. The Contracting States shall recognize the utility of sub-basin organizations and arrangements.

2. The Contracting States that are also members of sub-basin organizations or arrangements shall undertake to ensure that the purposes, functions and activities of such organizations and arrangements: Are consistent with those of the Doe River Basin Commission; are consistent with the principles and rules set out in or adopted under this Treaty; and will work in close cooperation with the Doe River Basin Commission.

3. The Doe River Basin Commission shall maintain regular contact, and shall cooperate closely, with any sub-basin organization or arrangement.

PART V. MISCELLANEOUS PROVISIONS

Article 32

Settlement of Disputes

1. In the event of a dispute between two or more Contracting States concerning the interpretation of application of the present Treaty, the States concerned shall, in the absence of an applicable agreement between them, seek a settlement of the dispute by peaceful means in accordance with the following provisions:

(a) If the States concerned cannot reach agreement by negotiation requested by one of them, within a period of six months from the date of filing, they may jointly

seek resolution by a Dispute Resolution Panel ("Panel"), whose membership will be established within 90 days of the execution of this Treaty.

(b) The Panel will consist of one member selected by each riparian State. In the case where there is an even number of States, one additional member will be selected by agreement from all States (Indus 1960; Columbia 1961); if an agreement cannot be reached on the appointment of an additional member, the Council of Ministers will appoint that member.

(c) The appointed Panel must reach a decision within six months of written receipt of the dispute (Annex IV).

Article 33

Supplementary Instruments

1. The Contracting States may adopt bilateral or multilateral instruments that supplement the present Treaty, concerning portions of the Doe River Basin or the Doe River System, such as sub-basins and tributaries, or concerning individual projects or programs relating to the Doe River Basin or the Doe River System, or portions thereof.

2. The supplementary instruments referred to in paragraph 1 shall apply the principles of, and be consistent with, the present Treaty.

3. Supplementary instruments may be adopted as Protocols to the present Treaty by consensus by the Contracting States.

PART VI. FINAL CLAUSES

Article 34

Amendment of the Framework or Protocols

1. Amendments to this Treaty may be proposed by any of the Contracting States. Amendments to any protocol may be proposed by any State to that protocol.

2. Amendments to either this Treaty or any protocol shall be adopted at a meeting of the Contracting States.

3. Articles 1, 2, 3, 4, 5, 6, 10, 11, 14, 23, 24, and 32 of the present Treaty may be amended only by consensus. As to proposed amendments to other articles or to any protocol, the Contracting States shall make every effort to reach agreement by consensus. If all efforts at consensus have been exhausted, and no agreement is reached, the amendment shall as a last resort be adopted by a two-thirds majority vote of the Contracting States to the instrument in question present and voting at the meeting, and shall be submitted by the Depositary to all Contracting States for ratification, acceptance or approval.

Article 35

Adoption and Amendment of Annexes

1. The annexes to this Treaty or to any protocol shall form an integral part of the Treaty or of such protocol, as the case may be, and, unless expressly provided otherwise, a reference to this Treaty or its protocols constitutes at the same time a reference to any annexes thereto. Such annexes shall be restricted to procedural, scientific, technical and administrative matters agreed upon by the Contracting States.

2. Except as may be otherwise provided in any protocol with respect to its annexes, the following procedure shall apply to the proposal, adoption and entry into force of additional annexes to any protocol:

- (a) Annexes to this Treaty or to any protocol shall be proposed and adopted according to the procedure described in Article 35. In particular, any annex relating to one of the articles listed in paragraph 3 of Article 35, which may be amended only by consensus, must be adopted by consensus;
- (b) Any of the Contracting States that are unable to approve an additional annex to this Treaty or an annex to any protocol to which it is party shall so notify the Depositary, in writing, within one year from the date of the communication of the adoption by the Depositary. The Depositary shall without delay notify all Contracting States of any such declaration of objection received. A State may at

any time withdraw a previous declaration of objection and the annexes shall thereupon enter into force for that State subject to subparagraph (c) below;

(c) On the expiry of one year from the date of the communication of the adoption by the Depositary, the annex shall enter into force for the Contracting States of this Treaty or to any protocol concerned which have not submitted a notification in accordance with the provisions of subparagraph (b) above.

3. The proposal, adoption and entry into force of amendments to annexes to this Treaty or to any protocol shall be subject to the same procedure as for the proposal, adoption and entry into force of annexes to the Treaty or annexes to any protocol.

4. If an additional annex or an amendment to an annex is related to an amendment to this Treaty or to any protocol, the additional annex or amendment shall not enter into force until such time as the amendment to the Treaty or to the protocol concerned enters into force.

Article 36

Relationship Between This Treaty and its Protocols

1. A State may not become a party to a protocol to this Treaty unless it is, or becomes at the same time, a party to this Treaty.

2. Decisions under any protocol shall be taken only by the Contracting States that are party to the protocol concerned. Any Doe River Basin State that has not

ratified a protocol may participate as an observer in any meeting of the parties to that protocol.

Article 37

Functions of the Depositary

The Depositary shall, in particular, inform the Contracting States:

(a) of the deposit of instruments of ratification or accession, or of any other information, declarations or other instruments provided for in the present Treaty.

(b) of the date of the entry into force of the present Treaty.

IN WITNESS WHEREOF the undersigned plenipotentiaries, being duly authorized by their respective Governments, have signed the present Treaty.

Done at _____, this ____ day of _____, 2012.

.....

Name, Title and Ministry,

State X

.....

Name, Title and Ministry,

State Y

.....
Name, Title and Ministry,

State Z

ANNEX I

Management of the Interdependent Surface Water and Groundwater

Resource

1. The utilization of the water resources in an equitable and reasonable manner (United Nations 2008; United Nations 1997) involves acknowledgement that the Doe River System consists of: 1a) a surface water resource, and 1b) a groundwater resource. The management of the interdependent nature of these resources by the Contracting States is addressed in (1c).

1a)The surface water resource is defined as those lakes, ponds, reservoirs, rivers, streams, tributaries, and canals that are situated within the geographic entity known as the Doe River Basin.

1b) The groundwater resource consists of two types. One type includes water that seeps into the ground and eventually flows into surface water bodies, thus displaying a hydrologic connection between groundwater and surface water. A

second type is defined as water that seeps into the ground but does not interact with surface water; this type is termed “confined groundwater” or “fossil water.”

1c) i. Groundwater Communication. The waters of an aquifer that is intersected by the boundary between two or more States are international groundwaters and such an aquifer with its waters forms an international basin or part thereof. Those States are Basin States regardless of whether the aquifer communicates with surface water, or whether the aquifer does not interact with surface water and exists as fossil water (ILA 1986).

1c) ii. Groundwater Pollution. Basin States shall prevent or abate the pollution of international groundwaters in accordance with international law applicable to existing, new, increased and highly dangerous pollution. Special consideration shall be given to the long-term effects of the pollution of groundwater (ILA 1986).

1c) iii. Information Exchange. Basin States shall consult and exchange relevant available information and data at the request of any one of them for:

- the purpose of preserving the groundwaters of the Basin from degradation and protecting from impairment of the geologic structure of the aquifers, including recharge areas;
- the purpose of considering joint or parallel quality standards and environmental protection measures applicable to international groundwaters and their aquifers (ILA 1986);

- the purpose of preserving the surface waters of the Basin from degradation;
- the purpose of considering joint or parallel quality standards and environmental protection measures applicable to international surface waters;
- the purpose of establishing equitable and reasonable water allocation among the Contracting States, whether for the purpose of consumption, or water diversion or storage projects for flood control or agriculture, or electric power development. It is acknowledged that the first critical step in the allocation and management of any international water resource is the development of a common set of data, collected on an ongoing basis, and analysis of that data (1c.iv and 1c.v).

1c) iv. Groundwater Data Collection. Basin States shall co-operate, through the Joint Water Board (JWB), for the purpose of collecting and analyzing – on a continuous basis - additional needed information and data pertinent to the international groundwaters or their aquifers. This will include development of a database that identifies all existing groundwater wells, whether used for drinking water, agriculture, or environmental monitoring. A program of water level measurement shall be planned and implemented by the JWB within 90 days upon the execution of this Treaty. Water levels will initially be collected on a monthly basis from each well, and eventually on a weekly basis, if possible. The JWB will manage the collection and interpretation of water level data, and will publicize this information. The JWB will work to eventually establish a program that collects

water quality data such as temperature, pH, and conductivity, and chemical concentration data for contaminants such as metals, fuel constituents, and solvent constituents.

1c) v. Surface Water Data Collection. Basin States shall co-operate, through the JWB, for the purpose of collecting and analyzing – on a continuous basis – additional needed information and data pertinent to the international surface waters of the Basin. Analysis of the water resource includes the measurement of water levels (“stream gauging”) in streams and tributaries of the basin on a daily basis. The purpose of stream gauging is to facilitate making better estimations of seasonal flow and annual flow, which will in turn support JWB engineering studies necessary to plan and implement water allocation measures, including flood control measures and possible water diversion projects. The JWB will manage the collection and interpretation of water level data, and will publicize this information. The JWB will work to eventually establish a program that collects water quality data such as temperature, pH, and conductivity, and chemical concentration data for contaminants such as metals, pesticides, fuel constituents, and solvent constituents.

1c) vi. Conjunctive Water Resource Planning and Management. The JWB shall interpret the collected data and develop a basinwide Conjunctive Water Resources Management Program establishing construction or implementation priorities for

the components of the Contracting States' proposed programs (conjunctive water use refers to simultaneous use of surface water and groundwater to meet demand)(ILA 2004; ILA 1986).

The development of the Conjunctive Water Resources Management Program (CWRMP) will be based upon the collected data and submittals from the Contracting States. The submittals will consist of (a) the respective State's estimated water requirements for specific projects or categories of uses, including adequate stream flows, for the next five (5) years; (b) the assumptions underlying such estimates, including population projections; and (c) the estimated water supply available to meet such needs identified as to the sources of such supply, whether from surface flows, subsurface waters hydrologically connected to surface flows, non-tributary subsurface waters, imported waters, or developed waters (Muys et al. 2007).

Each State shall also provide the JWB with its plans to supplement such supplies, e.g., construction of new storage, diversion, desalination, watershed restoration, recycling/reuse, or wastewater treatment projects; expansion of existing projects; increased conservation; intrastate, interstate, or interbasin transfers; or other actions, along with the timing, location, increased yield, estimated cost, and impact on water quality of each component (Muys et al. 2007).

1c) vii. Water Allocation. The Basin States, through the JWB, shall utilize the following water allocation methodology, or a similar methodology, to present annual apportionment of quantities of water to each Contracting State from Basin waters within that state considered adequate to (1) first maintain stream flows to fulfill the requirements of this Treaty and other applicable international agreements, and to maintain a healthy and productive Basinwide ecosystem in designated reaches of the system, in such amounts, and for such seasons or duration as defined by the JWB and (2) provide additional flows to satisfy base apportionment use requirements of the Contracting States as defined by the JWB (Muys et al. 2007).

As depicted in the table below, the requirements to satisfy these uses and certain non-consumptive uses, such as hydroelectric power generation, have been converted to a percentage of flows of the waters of the Doe River Basin. This Treaty further provides for future supplemental apportionment by the JWB of reasonably predictable supplies in excess of the base apportionment to each State on a percentage basis. Supplemental apportionment shall be implemented without fee, or if deemed appropriate by the JWB, at a reasonable price to be determined by the JWB, based primarily on comparable transactions in the Basin (Muys et al. 2007).

Base Flow Apportionments

River X	State	Base	Percentage of Flows
	A	___ AF	_____ percent
	B	___ AF	_____ percent
	C	___ AF	_____ percent
River Y			
	A	___ AF	_____ percent
	B	___ AF	_____ percent
	C	___ AF	_____ percent

The Basin's estimated safe annual yield of _____ acre feet (AF) to satisfy the base apportionments is based on an analysis of the average annual and seasonal flows for the entire period of record, the driest 10-year period of record, and the wettest 10-year period of record, taking into account existing surface and underground storage facilities.

Entire period of record	___ AF
Driest ten-year period	___ AF
Wettest ten-year period	___ AF

Consequently, the base apportionment of _____ AF of flows is determined to be reasonably secure, as is the availability of excess water for further supplemental apportionments. If future availability deviates substantially from these water supply estimates so that the base or supplemental apportionments cannot be satisfied, the JWB is authorized to make appropriate equitable reductions (Muys et al. 2007).

The JWB shall also develop criteria for the allocation of such shortages among the Contracting States and specific triggers for the implementation of such use curtailments. If unanticipated impacts of an individual State's programs should substantially, disproportionately, and adversely affect another State's apportionment, the JWB shall allocate that burden pro rata among all of the Contracting States based on their respective shares of the total Basin apportionments unless the Contracting States agree on another formula (Muys et al. 2007).

1c) viii. Water Allocation Documentation. The Contracting States, through the JWB, are hereby mandated to create a record of the actual data and the projections relied upon by negotiators of the States in the course of establishing water allocation amounts assigned to each State. Creating a record of this information

will insure that there can be no disagreement if and when the States' expectations are not realized, and adjustments are deemed necessary (Muys et al. 2007).

1c) ix. Transfers of Apportionments. Contracting States may make such portion of their unused base apportionments or any supplemental apportionments available to other states or to the Commission for such periods, upon such terms and conditions, and for such consideration, if any, as the parties may negotiate unless the JWB after notice and hearing disapproves the transfer after determining that it would cause substantial injury to another signatory party (Muys et al. 2007).

1c) x. Monitoring of Apportionment Usage. The JWB shall monitor water usage throughout the Basin and enforce the Treaty apportionments, giving credit for the use of imported or developed water. It shall provide de minimis exemptions for various kinds of uses, recognize a reasonable margin of error in measurement methodology, employ a system of debits and credits for under- and over-uses or deliveries with provision for a quantity limitation on such debits and requiring overuse payback over a reasonable period, and establish similar reasonable rules and procedures to monitor the apportionments in an equitable and efficient fashion (Muys et al. 2007).

ANNEX II

Flood Control and Emergency Contingency Plans

1.Flood Control Operating Plan. Utilizing data collected and interpreted in Annex I, the Joint Water Board (JWB) will prepare, within one year of the ratification of this Treaty, a draft Flood Control Operating Plan. The primary purpose of the Plan is to identify those areas within the Doe River Basin that are most susceptible to flood hazards and pose the most risk to human health and ecological concerns, and to develop a plan to prepare for and reduce risk during flood events.

2.Emergency Contingency Plans. In order to reduce risk to human health and ecological concerns, in response to not only floods but other natural or man-induced disasters, the JWB and/or their designated organizations will develop Contingency Plans within one year of the ratification of this Treaty.

The Contingency Plans shall provide for:

- (a) pre-emergency preparedness and training; the emergency period management; and post-emergency management and recovery.
- (b) initial and ongoing communications by word-of-mouth through trained emergency staff and message reader boards at designated community locations in undeveloped areas; and a telephone emergency number and radio station and computer emergency messaging.
- (c) evacuation plans; and operation of active emergency centers and staging areas to send and receive victims, staff, and provisions.

3. Flood Control Facilities. The JWB will oversee the construction and operation of projects and facilities deemed necessary or desirable for flood damage prevention or reduction. The JWB shall store and release waters within the Basin, in such manner, at such times, and under such regulations developed in consultation with sub-basin organizations, as it deems appropriate to meet various flood conditions (Muys et al. 2007).

4. Flood Plain Zoning. The JWB may determine the extent of the flood plains in the Basin and may establish encroachment lines and delineate the areas subject to flood, including a classification of lands with reference to relative risk of flood and the establishment of standards for flood plain use that will safeguard the public health, safety, and property. The JWB may facilitate one or more Contracting State's entry into agreements to provide technical and financial aid to another Contracting State or its political subdivisions for the administration and enforcement of any ordinances or regulations implementing such standards (Muys et al. 2007).

5. Flood Control Standards. The JWB may establish standards governing the uses of land in areas subject to flooding by waters in the Basin. Such standards shall not restrict the power of the Contracting States or their political subdivisions to adopt more restrictive standards.

5. Land Ownership for Flood Control. If unanimously agreed to by the Contracting States, the Doe River Basin Commission may acquire any interest in lands and improvements thereon within an established flood plain for the purpose of restricting the use of such property so as to minimize flood hazards and to implement its flood plain restrictions. The JWB will facilitate such acquisitions and oversee the management of such property.

ANNEX III

Enforcement

1. Alleged Violation and Response. Upon the basis of documented observation or monitoring, or substantial verified factual evidence from a reliable, identified third party that a Contracting State is (a) not maintaining required stream flows, (b) impermissibly exceeding its Treaty apportionment, or (c) permitting point source discharges or non-point source land use practices or activities that are violating Treaty approved water quality standards, the Commission shall request the representative for that State to respond to such allegation in writing within 30 days. Such response shall either (a) concede the accuracy of the facts underlying the allegation, but assert that the situation is attributable to specified actions or force majeure events beyond its control; (b) concede the accuracy of the allegation and propose a schedule for detailed remedial action to be funded solely by such

member; or (c) dispute, with specification, the allegation in whole or part and request further consultation with the Commission (Muys et al. 2007).

2. Concession. A member's formal concession of a violation before the Commission and implementation of a Commission-approved plan for remedial action shall excuse such member from liability to any Commission member or that member's State for any damages sustained as a result of such violation, provided that nothing herein shall adversely affect the rights of private parties to damages (Muys et al. 2007).

3. Resolution. The Commission member's response shall be promptly referred to the Conference of Heads of State and Government ("the Conference"), the supreme policy-making organ of the Commission, for review and submittal of a recommended course of action to the Commission within 30 days. With respect to the concessions in (1), the Conference shall recommend that either (a) the alleged violation be excused by the Commission as beyond the member's control, (b) the member's proposed remedial action be approved, or (c) the member's proposed remedial action be modified and approved in whole or part (Muys et al. 2007).

4. Dispute Resolution. With respect to the member's disputation of the allegation, if further discussions do not resolve the dispute within 45 days, the dispute resolution procedures detailed in Annex IV may be initiated by any

Commission member. No Contracting State shall sue for damages during the pendency of such proceedings before the Commission (Muys et al. 2007).

5. Sanctions. Failure to resolve the dispute through the dispute resolution process shall authorize the Commission to (a) suspend the voting rights of the alleged offending party under the Treaty; (b) suspend any ongoing or planned implementation of Commission projects or programs benefitting that party, including supplemental apportionments; or (c) as a last resort, take appropriate judicial action through the International Court of Justice for injunctive relief to remedy the alleged violation and allow the Contracting States to seek damages for such violation (Muys et al. 2007).

ANNEX IV

Dispute Resolution Panel

1. The Dispute Resolution Panel (“Panel”) will consist of one member selected by each Contracting State. In the case where there is an even number of States, one additional member will be selected by agreement from all States.

2. The Panel will elect a Chairman by simple majority vote. The Chairman will also be one of the members selected by each Contracting State. In the selection of Chairman, each member will vote for a Chairman, and in the event of a tie, the Council of Ministers will appoint the Chairman.

3. The Panel shall determine its own procedure.

4. The Contracting States concerned have the obligation to provide the Panel with such information as it may require and, on request, to permit the Panel to have access to their respective territory and to inspect any facilities, plant, equipment, construction or natural feature relevant for the purpose of its inquiry.

5. The Panel shall adopt its report by a simple majority vote, with each member empowered with one vote, and shall submit that report to the States concerned within six months of written receipt of the dispute, setting forth its findings and the reasons therefore and such recommendations as it deems appropriate for an equitable solution of the dispute, which the States concerned shall consider in good faith.

6. The expenses of the Panel shall be borne equally by the States concerned.

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