

Tijuana River Watershed Binational Protection Research Report on Establishment of Fundamental Concepts for the Binational Protection of the Tijuana River Watershed as Related to Law, Governance, Institutions, and Politics

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**Prepared for the Fundación La Puerta*

“Geography suggests that, by virtue of its physical unity, a river basin should be developed as a single, indivisible whole, irrespective of political divisions.”¹

ABSTRACT

The purpose of this study is to find material data and models that will guide regional stakeholders, leaders, and experts in developing a practical idea for an institution that will manage—with objectives clearly linked to sustainable development, conservation, and preservation—the Tijuana River Watershed.

We have identified “the place,” we have described it and its importance,² we have identified the threats to the place,³ and we have mapped it in detail with GIS.⁴ Because it is binational in scope—30% of the watershed is in the United States, and 70% is in Mexico—we must look for unique but effective ways to protect it.

We do know that the status quo is not acceptable. Taking no action will result in the continued degradation of water supply; degradation of habitat; decreases in the quantity of water, habitat, and wildlife; loss of recreation opportunities; and loss of aesthetic aspects of life including tranquility. We can divide these impacts into two main categories:

- Overuse or depletion of natural resources—land, water, biodiversity, loss of solitude
- Pollution (as a human and ecosystem health issue)—air, water, waste production, nuclear waste, food safety, noise⁵

Maintaining the status quo is the same as a declining border environment with serious consequences for the political and social stability of the region. And furthermore, the more acute the degradation, the more difficult it will be to recover from the environmental damage, and at some point the region’s environmental capital will be lost for good. In other words, to replace our regional ecosystem’s natural services is cost prohibitive and probably beyond our capability.

However, we also know that “environmental management is particularly problematic in border areas. Many political borders apportion natural systems to two or more nations, imposing different and sometimes conflicting management regimes on holistic

systems.”⁶ These different management regimes can result in a number of competing natural resources management values:

- Conflict versus cooperation
- Openness versus secrecy
- Established cabals versus public values
- Use versus environmental protection
- Overuse versus conservation
- Sustainability versus immediate economic gain⁷

The good news is that the “constituencies for sustainable development are today influential stakeholders in the border water community. These groups want water used differently, envisioning more efficient uses of water resources, better water conservation, long-term forecasting and contingency planning, and reallocations favoring urban needs or nontraditional projects. Though often advocating different uses, these groups share an intense concern with regard to water quality.”⁸

Unfortunately, the “jurisdictional ‘mismatches’ clearly necessitate a carefully constructed high-level resolution by the two nations.”⁹

Proposal

It would appear, based on this study, that a formal binational Tijuana River Watershed management treaty should be negotiated and that the treaty should explicitly address conservation, protection, and/or restoration. The treaty should create a semi-autonomous intergovernmental organization responsible for long-term planning, as well as manage human activities within the watershed. The organization should have management autonomy and a combined political and technical focus. As a starting point, we can make use of the framework of the Convention on the Law of the Non-Navigational Uses of International Watercourses of 1997. Attracting some third party involvement and funding may make a difference. It might be helpful for Mexico to receive multilateral financial support to balance the U.S. role and relative economic power. Either the treaty and/or the organization should have a well-developed and autonomously funded implementation and strategic plan.

The organization should:

- Build local capacity
- Foster public participation, including bottom-up and multi-stakeholder decisionmaking
- Emphasize openness, transparency, and accountability
- Have, at least, review authority for zoning regarding land use

It should have priorities that include:

- Equalization of ecological and social factors with economic development in land and water use planning decisions with a goal of sustainable use of resources, rather than short term gain
- Prioritization of conservation, instead of just resource extraction
- Reversal of the overuse of natural resources and systems

- Optimization of an institutional long-term view, including the use of long-term indicators of human and ecosystem health
- Adoption of real measurements for qualitative outcomes, rather than simple quantitative outcomes

Both federal governments must be involved and must strive for real cooperation. Tribal, state, and local governments should be represented as stakeholders, as should agriculture and industry users of watershed resources and conservation organizations that care about in-stream uses and sustainable development.

To begin the process of reaching a treaty and the development of an organization, this paper concludes with a proposal for a legal workshop designed to take us to the next step in the development of the concepts, and address issues raised regarding extant U.S.-Mexican border institutions.

La Cuenca del Río Tijuana Reporte de Protección Binacional sobre el Establecimiento de Conceptos Fundamentales para la Protección Binacional de la Cuenca del Río Tijuana en Relación con Ley, Gobierno, Instituciones y Política

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“ La geografía sugiere que, por la virtud de su unidad física, una cuenca de río debería ser desarrollada como un todo indivisible, sin distinción de divisiones políticas.”¹

RESUMEN

El propósito de este estudio es el encontrar datos materiales y modelos que guiarán a líderes, actores clave regionales, y expertos en el desarrollo de una idea práctica para una institución que manejará—con objetivos claramente vinculados con el desarrollo sostenible, la conservación, y la preservación—la Cuenca del Río Tijuana.

Hemos identificado “el lugar,” lo hemos descrito y su importancia, ²hemos identificado las amenazas a el sitio, ³y hemos trazado un mapa de ello en detalle con GIS. ⁴Porque es binacional en lo general—30% de la cuenca está en los Estados Unidos, y 70% en México—debemos buscar formas originales pero efectivas para protegerlo.

Sabemos que su estado actual no es aceptable. El no actuar resultará en la degradación continua del abastecimiento de agua; el deterioro del hábitat; disminuciones en los volúmenes de agua, hábitat, y vida silvestre; pérdida de oportunidades de recreación; y la pérdida de aspectos estéticos de vida incluyendo la tranquilidad. Podemos dividir estos impactos en dos categorías principales:

- La sobreexplotación o el agotamiento de los recursos naturales—suelo, agua, biodiversidad pérdida de aislamiento
- La contaminación (como un problema de salud ambiental y pública) - el aire, el agua, la producción de residuos, los desechos nucleares, la sanidad alimentaria, ruido⁵

Mantener el estado actual de las cosas equivale a un ambiente fronterizo declinante con consecuencias serias para la estabilidad política y social de la región. Es más, mientras más aguda la degradación, más difícil será el recobrase del daño ambiental, y en algún punto el capital ambiental de la región se perderá para siempre. En otras palabras, el reemplazar los servicios naturales de nuestro ecosistema regional es asunto prohibitivo en costos y algo que probablemente excede a nuestra capacidad.

Sin embargo, también sabemos que “el manejo ambiental es particularmente problemático en zonas fronterizas. Muchas fronteras políticas comparten sistemas naturales para dos o más naciones, imponiendo regímenes de gestión diferentes y algunas veces conflictivos en sistemas holísticos.”⁶ Estos regímenes diferentes de manejo pueden resultar en un número de valores de gestión de recursos naturales competitivos:

- El conflicto *versus* la cooperación
- La transparencia *versus* la confidencialidad
- Cábalas establecidas *versus* valores públicos
- El uso *versus* la protección ambiental
- La sobreexplotación *versus* la conservación
- Sustentabilidad *versus* ganancia económica inmediata⁷

Las buenas noticias son que “los distritos para el desarrollo sustentable hoy son actores influyentes en la comunidad del agua fronteriza. Estos grupos quieren que el agua sea usada diferentemente, visualizando usos más eficientes de los recursos hídricos, mejor conservación de agua, predicciones de largo plazo y planeación de contingencias, y reubicaciones favoreciendo necesidades urbanas o proyectos no tradicionales. Sin embargo apoyando a menudo usos diferentes, estos grupos comparten una preocupación intensa respecto a la calidad del agua.”⁸

Desafortunadamente, las “inconsistencias jurisdiccionales requieren claramente de una resolución cuidadosamente construida por ambas naciones.”⁹

Propuesta

Pareciera, basado en este estudio, que debería negociarse un tratado binacional formal de manejo de la Cuenca del Río Tijuana y que el tratado debería ocuparse explícitamente de la conservación, protección, y/o restauración. El tratado deberá crear una organización intergubernamental semi-autónoma responsable de la planeación a largo plazo, así como también del manejo de las actividades humanas alrededor de la Cuenca. La organización deberá tener autonomía de gestión y un enfoque político y técnico combinado. Como punto de partida, podemos hacer uso del marco de la Convención sobre la Ley de Uso no Navegacional de los Medios Acuáticos Internacionales de 1997. El atraer la participación de terceros y financiamiento pueden

hacer una diferencia. Podría ser de ayuda para México el recibir apoyo financiero multilateral para balancear el papel de los E.U. y su poder económico relativo. Ya sea el tratado y / o la organización deberán tener plan estratégico bien desarrollado y autónomamente financiado.

La organización deberá:

- Construir capacidades locales
- Fomentar la participación pública, incluyendo la toma de decisiones de la base-arriba y con actores múltiples
- Enfatizar apertura, transparencia, y confiabilidad
- Tener, al menos, autoridad de revisión para zonificar respecto al uso del suelo

Deberá tener prioridades que incluyan:

- La igualación de factores ecológicos y sociales con el desarrollo económico en las decisiones de planeación del uso del suelo y agua con un objetivo de uso sustentable de recursos, en vez de ganancia de corto plazo
- Priorización de conservación, en lugar de solo la extracción de recurso
- Revertir el empleo excesivo de recursos naturales y los sistemas
- La optimización de una visión institucional de largo plazo, incluyendo el uso de indicadores de salud ambiental y pública
- La adopción de medidas reales para los resultados cualitativos, en vez de los resultados cuantitativos simples

Ambos gobiernos federales deberán estar involucrados y deben luchar por una cooperación real. Los gobiernos indígenas, estatales y locales deberán ser representados como actores clave, así como los usuarios agrícolas e industriales de los recursos de la cuenca y organizaciones de conservación preocupadas por el uso eficiente y el desarrollo sustentable.

Para empezar el proceso de llegar a un tratado y el desarrollo de una organización, este escrito concluye con una propuesta para un taller legal diseñado para llevarnos al siguiente paso en el desarrollo de los conceptos, y la atención de asuntos surgidos referentes a las instituciones existentes en la frontera México-E.U.

EXAMPLES OF BINATIONAL WATERSHED COOPERATION MECHANISMS, INCLUDING LEGAL INSTITUTIONS AND STRUCTURES, FROM ELSEWHERE IN THE WORLD

There are “more than 300 river basins—accounting for nearly 50% of the Earth’s land surface—[that] are shared by two or more countries.”¹⁰ However, there have been few studies of binational watershed cooperation mechanisms.

Research Methodology

For this report, we examined the 34 watershed cooperation mechanisms listed in Table 1 below¹¹ based on the following 13 criteria:

- (1) Is the basis of the management a formal international (binational or multilateral) agreement?
- (2) Does the agreement address conservation, protection, and/or restoration of the watershed?

- (3) Does the agreement create an intergovernmental organization?
- (4) Is there any third party organization involvement (i.e. World Bank, United Nations [UN])?
- (5) Does the organization have management autonomy?
- (6) Is it a political or technical organization?
- (7) Does the structure allow for stakeholder participation?
- (8) Is it a project or on-going organization?
- (9) What is the number of participating countries?
- (10) Does the agency engage in long-term planning (more than 50 years)?
- (11) Is there autonomy of funding?
- (12) Does the structure encourage transparency?
- (13) Is there instability in the region as a result of watershed conflict?

We searched electronic sources to find existing multilateral agreements, supporting documents and articles, and organization web pages. Specifically, we developed a set of key search terms to find all international watershed management agreements and searched a variety of electronic sources including multiple web search engines as well as databases available at the University of California, San Diego such as ABI, ISI, Emerging Markets, and Academic Universe. Drawing upon these sources, we found information available on multilateral watershed management agreements including:

- The text of the agreement
- Articles providing analysis of the agreements
- Information providing insight into the supporting multilateral institutions created from the treaties, when possible taken from the organizational website itself

We then analyzed the treaties and related documentation to assess the 13 criteria for evaluation, putting the most weight in the analysis on the formal treaty as an original source document. If there was any doubt as to the results on one of our criterion, the criterium was marked as unclear. Such lack of clarity in the formal treaty is probably a good proxy for the lack of priority for that criterion's inclusion in the watershed's management, but is also probably an indicator of the need for further research. To cumulate the results for a quantitative analysis, we simply added up the criteria outcomes. Please note that individual results with comments are provided in Appendix A.

Although, as is discussed below, we were not able to examine each institution in detail, nor the "on the ground" impacts of each agreement, we did operate with the following general concepts of what constituted a successful institution or agreement. Successful institutions must:

- Have the active support of and long-term commitment from top political leaders.
- Mobilize available expertise
- Be based on domestic governmental structures capable of effective international cooperation¹²
- Have some capacity to make decisions (organizational management autonomy)
- Have some capacity to borrow or issue debt

- Have some capacity to resolve conflicts among the parties to the agreement, as well as among stakeholders

Meanwhile, for our purposes, a successful agreement would:

- Create a positive balancing of economic, social, and ecological interests (the three traditional prongs of sustainable development)
- Take a long-term (seven generations) view
- Geographically cover the entire watershed
- Have vertical and horizontal integration of different levels of governance
- Provide for informed stakeholder participation
- Promote transparency in decision making and access to information
- Promote the rule of law

Table 1. List of Agreements Analyzed

	Name	Parties
1	Amazonian Cooperation Council	Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, Venezuela
2	Aral Sea Basin Program	Kazakhstan, Kyrgystan, Tajikistan, Turkmen, Uzbekistan
3	Autonomous Authority of the Lake Titicaca (ALT)	Bolivia, Peru
4	Binational Association of Lake Itaipu	Brazil, Paraguay
5	Binational Commission for the Development of the Upper Bermejo River and Grande de Tarija River Basins	Argentina, Bolivia
6	Comision Trinacional para el Desarrollo de la Cuenca del Rio Pilcomayo	Argentina, Bolivia, Paraguay
7	Estonian-Russian Joint Commission on Transboundary Waters	Estonia, Russia
8	Finish-Swedish Frontier Rivers Commission	Finland, Sweden
9	Gambia River Development Organization	Gambia, Guinea, Senegal
10	Great Lakes Commission	Canada, US
11	Helsinki Commission	Denmark, Estonia, the European Community, Finland, Germany, Latvia, Lithuania, Poland, Russia, Sweden
12	Indo-Bangladesh Joint River Commission	Bangladesh, India
13	Inter-Islamic Network on Water Resources Development and	Bangladesh, Egypt, Iraq, Jordan, Lebanon, Malaysia, Mali, Niger,

	Management (INWRDAM)	Oman, Pakistan, Sudan, Syria, Tunisia, Turkey, Yemen
14	International Boundary and Water Commission	US, Mexico
15	International Commission between Spain and Portugal	Spain, Portugal
16	International Commission for the Danube River Protection Basin	Austria, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Moldova, Romania, Slovak Republic, Slovenia, Ukraine
17	International Commission for the Protection of the Elbe	Czech Republic, Germany, Slovakia, EU
18	International Commission for the Protection of the Rhine River	Denmark, Switzerland, France, Luxembourg, Germany, Netherlands
19	International Joint Commission	Canada, US
20	Joint Technical Committee (Euphrates, Tigris Rivers)	Iraq, Syria, Turkey
21	Lake Chad Basin Commission	Cameroon, Central African Republic, Chad, Niger, Nigeria
22	Lake Victoria Environmental Management Program	Kenya, Tanzania, Uganda
23	Mahakali River Commission	India, Nepal
24	Mekong River Commission	Cambodia, Lao PDR, Thailand and Vietnam (with regular dialogue with upper countries of China & Myanmar)
25	Niger Basin Authority	Benin, Burkina Faso, Cameroon, Cote d'Ivoire, Guinea, Niger, Mali, Nigeria, Chad
26	Nigeria-Niger Joint Commission	Nigeria, Niger
27	Nile Basin Initiative	Burundi, Rwanda, Tanzania, Kenya, Uganda, DR of Congo, Ethiopia, Sudan, Egypt
28	Okavango River Basin Commission (OKACOM)	Angola, Botswana, Namibia
29	Organization for the Development of the Senegal River basin (OMVS)	Mali, Mauritania, Senegal
30	Permanent Water Commission of Namibia and South Africa	Namibia, South Africa
31	Plata Basin Intergovernmental Coordinator Committee	Argentina, Bolivia, Brazil, Paraguay, Uruguay
32	Ramsar Convention on Wetlands	Belgium, Denmark, Finland, France, Germany, India, Iran, Ireland, Jordan, Netherlands, Pakistan, South Africa, Spain, Sweden,

		Switzerland, Turkey, Russia, UK
33	Trilateral Wadden Sea Cooperation	Germany, Netherlands, Denmark
34	Zambezi Intergovernmental Monitoring and Coordinating Committee (ZIMCC) of the Zambezi Action Plan	Botswana, Mozambique, Tanzania, Zambia, Zimbabwe

Cumulative Data on Agreements Reviewed

The following is a summary of accumulated data, which is presented to note commonalities and is not a substitute for analysis of factors that lead to success (or not).

Of the agreements examined, 13 involved two nations, 13 included three to five nations, six encompassed five to ten nations, and two counted more than 10 nations. About 44% of the agreements involve geographic locations in which there is (or could be) instability in the region as a result of a watershed conflict.

None of the agreements are engaged in truly long-term planning, which is a clear prerequisite for sustainable development. Unfortunately, two other tenants of sustainable development—stakeholder participation and transparency—are also uncommon. Only 29% of the agreements clearly prioritize stakeholder participation, and somewhat less than half (44%) seem to value transparency.

A slim majority of the 34 agreements reviewed in this study, 56%, have some involvement by third parties such as the World Bank or a UN agency. Although it is not necessarily overlapping, this same percentage of agreements appear to have organizational management autonomy. An interesting split is evident regarding the type of organization formed. Nine may be characterized as political, nine as technical, and 14 as both. It appears that only four (12%) have an autonomous source of funding.

Most of the 34 agreements had four factors in common. Thirty-two, or 94%, of the agreements, are formal international treaties. Nearly 75% of the agreements address conservation, protection, and/or restoration of their respective watershed. All of them have formed an intergovernmental organization and 88%, or 30 of the agreements, can be characterized as ongoing programs (as opposed to short-term projects).

We note at this point that the distinction between ongoing programs or permanent institutions and short-term projects can be difficult to determine. There are, of course, the stable, long-term institutions such as the U.S.-Mexico International Boundary and Water Commission created in 1944. Other institutions, however, have been created with the premise that they are on-going, such as the Indo-Bangladesh Joint River Commission, but have written provisions for both the reevaluation and the opportunity for either party to terminate the agreement on a fixed time-line of every five years.

In other instances, particularly involving those watershed management activities funded by third parties, there is only funding for a fixed project, such as the Lake Victoria Environmental Management Program (with a five-year timeline) or the Lake Chad Basin Commission. However, in both of these cases, despite it being a project, a multilateral institution was created. Also, it is important to note that in some cases, projects can turn into ongoing institutions. An example of this would be the Nile Basin Initiative (whose cooperative framework has been drafted but not yet ratified). In 1967 cooperative efforts in the Nile Basin began with a short-term project called Hydromet that was supported by the UNDP.

It also seems that there may be an underlying assumption that institutions/programs/projects may evolve through time so as best to address water management issues. Cases that highlight how institutions evolve over time include:

- 1) The Senegal River Basin—The Bamako Convention for the Development of the Senegal River Basin was first signed in 1972 and was replaced by the Senegal River Water Charter signed in May 2002
- 2) The 1957 Committee for Coordination of Investigations of the Lower Mekong Basin was replaced by the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin of April 1995

Additionally, this process of evolution sometimes allows the opportunity for an institution to improve upon its organizational structure and start afresh. For example, the River Niger Commission was started in 1964 and is one of the oldest African Intergovernmental Organizations. It functioned for 17 years before it was decided that the results achieved were insufficient. As a result, the member states chose to replace it with a new organization, the Niger Basin Authority, which received all the assets, debts, and programs began by the River Niger Commission.

Evaluating the Agreements for Success in Conservation of Watershed Resources

Before going further, we can almost conclude there are no success stories regarding conservation of watershed resources in the 34 cases examined. As was noted above, none of the agreements are engaged in long-term planning, and few make stakeholder participation and transparency a priority. As these three items are key elements for sustainable development, it is unlikely that very many of these agreements have succeeded in improving conservation.

In addition, single common factors of “success” in binational watershed management agreements in relation to sustainable development, conservation, and preservation are difficult to isolate, given the different environmental, political, and economic factors in the regions. Some countries (i.e. the United States and Europe) have strong democracies, transparent institutions, stable political systems, and are developed enough to be able to focus on conservation and environmental issues. They also have precedents for public participation, a key factor when addressing conservation given the necessity of involving local stakeholders in the process.

A focus on conservation is sometimes viewed as a luxury by developing countries that are too preoccupied with short-term economic growth and material survival to devote attention to global environmental concerns. However, this choice is a myth as was discussed in more detail in Paul Steinberg's recent book on the subject.¹³ This said, projects and programs in developing countries that are funded by developed countries directly, or indirectly through the World Bank or a UN agency third party, seem to have more refined environmental provisions in their agreements. However, given the controversial history of the environmental record of multilateral development banks, the inclusion of the right kind of language in agreements does not guarantee positive results.

The following may be some examples for success:

- If you are looking at longevity, the U.S.-Mexico International Water and Boundary Commission has been in place since 1944 (but its success with sustainable development or natural resource conservation is doubtful)
- The Mekong River Commission was commended for its water management approach
- There are many organizations that have written in stakeholder participation and conservation measures (i.e. Organization for the Development of the Senegal River Basin); whether these actually are working is unclear

There is no single institution that can serve as an ideal model for future U.S.-Mexican agreements, encompassing the unique environmental, political, social, economic, and legal realities of the border region. Several institutional structures, however, may serve as useful models. These include the International Joint Commission (Canada and the United States) the Great Lakes Commission, (also Canada and the United States), and the Danube River Commission (the Border Environment Cooperation Commission as a special model is discussed below). These multilateral institutions have been noted for their success in promoting effective decision-making and for their efforts in addressing transboundary watershed management issues.

The Danube River Commission is comprised of 13 European countries and focuses on integrated basin-wide management of water quality. Institutional framework and strategic planning has had to address income disparity between riparian states as well as varying norms and regulatory frameworks, legal provisions and technical monitoring and informational gathering capacities. Factors that have contributed to the success of this agreement include a:

- Shared commitment and vision—high priority issues were jointly identified through a formal Transboundary Diagnostic Analysis
- Focus on harmonizing legal provisions, regulations, and standards
- Focus on developing compatible monitoring and data collections standards
- Common strategy—Joint Action Program defines project priorities for member countries and provides a common platform for the development of national policies
- Forums for Public and NGO participation—the Environmental Program for the Danube River has been recognized as successfully engaging and promoting public and NGO participation and awareness in the planning process

- Management is based on a realistic view of the development and environmental context—a Strategic Action Plan identifies objectives and outlines a series of actions to meet them, laying out a framework for regional action, to be carried out through National Action Plans; these actions are manageable components derived from the larger action plan and take into account the varying contexts in which the countries operate
- Effective monitoring and evaluation methods
- Transparent and accessible information exchange—a database was established to provide a forum for each country to account for the status of its interventions, measure progress of reforms, and access information on pollution reduction efforts and the current environmental status of the river according to agreed upon standards

International Joint Commission and the Great Lakes Commission (United States and Canada) includes a:

- Framework for the commission is stable but provides for flexibility—the water council developed 20 specialized boards, dividing research tasks
- Model that allows for joint monitoring and evaluations between both governments
- High level of political commitment
- High level of public participation

Also relevant is the fact that the different treaties have different planning, structures, and methods for achieving conservation. Our review of the agreements as reflected in the Appendix A spreadsheet simply had conservation as a factor but we were not able to quantify it. We had hoped our literature search would turn up studies that did so. Except for those few studies discussed in the next section of this report, we found little information. Thus, this is an unmet research need. To quantify the success of each of the agreements in the areas of sustainable development or conservation would be time consuming and costly, and is beyond the scope of this study.

WHAT FUNCTIONS ARE REQUIRED TO PROTECT A BINATIONAL CONSERVATION AREA?

Given that our goal is to design an institution that will manage—with objectives clearly linked to sustainable development, conservation, and preservation—the Tijuana River Watershed, we now move to an examination of the functions required to protect a binational conservation area.

Based on the examination of the analytical literature and legal theories and a quick review of the two extant border institutions in this section of the report, and from our prior examinations of the role of institutions in achieving sustainable development, we can list some attributes a binational watershed cooperation mechanism should probably manifest and that we propose for the binational management of the Tijuana River Watershed:

- A formal international treaty for binational watershed management cooperation that addresses conservation, protection, and/or restoration of the watershed
- A semi-autonomous intergovernmental organization for the ongoing management of the watershed, with a multi-stakeholder board

- A watershed management organization that builds local capacity and fosters public participation
- A watershed management organization that introduces transparency and accountability (public access to documents, information, and meetings)
- A watershed management organization that has, at least, review authority for zoning regarding land use
- Bottom-up and multi-stakeholder decisionmaking (projects that come from the community)
- Equalization of ecological and social factors with economic development in land and water use planning and apportionment decisions
- A well developed and autonomously funded implementation and strategic plan and/or the ability to borrow or issue debt instruments
- An optimized institutional long-term view, including the use of long-term indicators of human and ecosystem health
- Adopt real measurements for qualitative outcomes, rather than simple quantitative outcomes
- A capacity for conflict resolution and an obligation to cooperate

Literature Review

The following is a brief listing of selected readings that were helpful in compiling this report.

A 1995 paper on economic models developed for river basin planning and management confirmed that the historical approaches to watershed management have lead to inefficient resource use, economic losses, and environmental degradation.¹⁴

In 1998, the German Foundation for International Development undertook a round table approach to look at the experiences of international river and lake commissions in transboundary water management to identify lessons learned, challenges, and issues for the future. While water quality was a part of this analysis, there was little else in the way of sustainable development elements evaluated. The round table did conclude there were no fixed models, that legal instruments are essential, that management structures must be carefully designed, and that financial capacity must be guaranteed by the parties to a management agreement.¹⁵

Also in 1998, Milich and Varady ,who analyzed three river basin accords, identified six common failings:

- Top-down “decisions are usually made in national capitals”
- “There is little public participation in the decisionmaking process”
- “The accords often reflect political and economic imbalances among the participating members”
- “Implementation is often inadequately provided for”
- “The accords often reflect a scientific or technical bias”
- “The accords tend to reflect an inflexible regulatory approach”¹⁶

In June 1999, the World Bank hosted its third workshop on River Basin Institutional Development and a paper was presented that compared two water basin management projects to identify key characteristics and isolate how bank initiatives contribute to the process of institutional development. A paper from this meeting strongly emphasized the need for an organization with a foundation and mandate in legislation; authority, responsibility, and accountability; a planning and implementation focus; and dynamic process for communication, coordination, and cooperation.¹⁷

In 2000, the American Center for Sanitary Engineering and Environmental Sciences published a study setting forth a framework with guidelines for integrated water resources management for use by development bank officers and government agencies to facilitate watershed management project design.¹⁸

A 2001 paper published by the International Journal of Global Environmental Issues presented a comparative analysis of institutions involved in the management of transboundary water resources that contrasted three levels of commitment (high, medium, and low). This report found that all three categories provided poor models. However, this paper did not address conservation issues.¹⁹

The proceedings of a 2001 conference on environmental conventions included a paper by Roll and Lopman that examined Baltic Sea regional cooperation and concluded that joint management of common pool natural resources requires development of institutional frameworks.²⁰

A 2002 report to U.S. Agency for International Development (USAID) set forth an examination of legal and institutional issues that might inform water management in the South Caucasus.²¹

We also examined 11 case studies of river basin management compiled by the World Wildlife Fund (WWF), which resulted in its 2002 publication of guiding principles for effective integrated river basin management.²² An associated WWF discussion paper highlighted the urgent need to improve watershed management to address poverty, achieve sustainable development, and eliminate the wasteful use of scarce water resources.²³

Another 2002 paper synthesized the perspectives of watershed managers from Latin America and the Caribbean, concluding that inadequate institutional frameworks, insufficient funding, and conflicting interests complicate international watershed management.²⁴

This report also informed a U.S.-Mexico Binational Council 2003 report on the Rio Grande, which concluded that a continued failure to address binational watershed management could lead to destabilizing conflicts within and between the United States and Mexico. It further found that progress would require a comprehensive interdisciplinary approach to achieve equitable and sustainable transboundary water management.²⁵

Legal Theories

“International law plays a role in managing international watercourses. While the rule of law does not in the end of itself provide solutions for water utilization, conservation or protection issues, it certainly contributes to the means of finding and reaching solutions to international water problems. Bringing with it stability and predictability, it contributes both to the avoidance and settlement of disputes. International law cannot guarantee cooperation over international watercourses. However, cooperation is very unlikely to be put in place and sustained without legal support.”²⁶

To provide us with a legal context, there are five prominent theories regarding the law of watershed management obligations and rights:

1. Principle of absolute sovereignty—Historically, states have exercised absolute sovereignty over the use of rivers located within the state’s territory, no matter how it might impact a neighboring state. “This principle of absolute territorial sovereignty is referred to as the Harmon Doctrine applied in 1895 to a dispute between the United States and Mexico over the polluting of the Rio Grande River. Under the Harmon Doctrine, and upstream State can freely deplete or utilize a river’s flow within its boundaries without considering the effect of its actions on a downstream State.” Understandably, this is much less favored for resolution of disputes today.²⁷
2. Principle of prior appropriation—The state that puts the water to use first has superior rights to its neighbors regardless of whether it is upstream or not. This concept is not used much today. It is rather unworkable and ignores in-stream uses as a prior appropriation.²⁸
3. Absolute territorial integrity—“A riparian may not develop a portion of a shared rivercourse if it will cause harm to another riparian State.” This doctrine is not favored because it only limits upstream users, but not downstream users.²⁹
4. Restricted territorial sovereignty and restricted territorial integrity— These are drawn from the customary international law concept of *sic utere tuo it alienum non laedas*, or use for yourselves as far as you do not spoil it for others. “Every state is free to use its territorial water, provided that it in no way prejudices the rights and uses of other riparian states.”³⁰ Again, this doctrine only really limits upstream users.
5. Community of interests concept—This is the modern, or most progressive, legal response. It “treats the entire river as one hydrological unit that should be managed as an integrated whole.” Unfortunately, not all states have evolved to this level. This concept has been incorporated in the International Law Association’s Helsinki Rules on the Uses of the Waters of International Rivers by stating that “each basin State is entitled, within its territory, to a reasonable and equitable share in the beneficial uses” of a drainage basin’s waters.³¹ Since the International Law Association first adopted this set of rules in 1966, we believe it has influenced many treaties negotiated thereafter, but this is difficult to confirm. The Helsinki Rules are also in the process of being codified as international law in

the Convention on the Law of the Non-Navigational Uses of International Watercourses of 1997 (not yet in force).³²

We should look to this convention for assistance as it was intended to provide a framework for agreements adjusted for specific cases such as our need for a binational watershed management agreement, including but not limited to its call for equitable and reasonable utilization and participation (Article 5) and for an obligation not to cause significant harm (Article 7).³³ See Appendix B to this report for a copy of this treaty.

Through using this framework we can:

- Create a general obligation to cooperate
- Establish criteria for water apportionment (that is embedded in a holistic ecosystem approach)
- Protect the environment
- Involve non-state actors
- Promote dispute settlement and dispute avoidance
- Promote environmentally sustainable development³⁴

Is the Border Environment Cooperation Commission a Model?

The original design of the Border Environment Cooperation Commission (BECC) avoids most of the Milich and Varady six listed binational watershed management cooperation failings. BECC:

- Had a multi-stakeholder board
- Promoted projects that came from communities
- Required public participation starting at the project design phase
- Required public access to documents, information, and meetings
- Exercised a flexible approach to problem solving
- Engaged in capacity building, including technical assistance to less endowed communities

As a result of having these elements, I reached the conclusion in previous institutional studies that BECC had the greatest possibility to succeed in making sustainable development happen in the U.S.-Mexican border region.³⁵ However, many of these positive design elements were recently eliminated or limited as a result of the Bush and Fox administrations merging of BECC into the North American Development Bank (NADBank), which broadly resulted from an unfounded attitude that public participation and stakeholder representation were burdensome and inefficient processes.

Is the IBWC a barrier to a new agreement?

While it may be ideal to negotiate a formal international treaty for binational watershed management cooperation that addresses conservation, protection, and/or restoration of the watershed, it may not be easy to do so in the U.S.-Mexican border region context. As evidence of the difficulty of negotiating a treaty regarding management of the Tijuana River Watershed, Mumme points out that “Changing the mandate [of the International Boundary and Water Commission] has proved beyond the means of any president on either side of the border, singly or in tandem.”³⁶

Unfortunately, the 1944 treaty that created the current version of the IBWC does not “recognize habitat preservation or environmental uses of treaty waters while privileging navigation and hunting. Overappropriation of treaty waters is the core problem, however, since biodiversity protection demands attention to in-stream flows as well as to water quality.”³⁷

Mumme also implies that the IBWC occupies the field, exercising “a virtual monopoly on agreements dealing with transboundary water management.”³⁸ Thus, he raises the question of what reforms “are feasible to enable the IBWC to advance sustainable development in border water management”?³⁹

The IBWC has tremendous clout, which comes from being situated within the foreign relations departments of each nation. As such it is surprising to learn that it was recently evaluating the merits of river basin councils.⁴⁰ Because of this clout, and its evaluation of the council model (which parallels the advisory council being developed for the Tijuana River Watershed), it seems worthwhile to attempt to enlist the IBWC in this effort to come up with a new, modern kind of institutional response to watershed conservation. Even though changing the IBWC’s mandate has been difficult in the past, we should not just assume it is impossible. It is merely a formidable exercise. Perhaps the increasingly obvious environmental degradation and potential for related political and social instability in the border region’s watersheds will give sufficient leverage for change.

At the time he wrote his paper, Mumme demonstrated a belief that because the IBWC is now enmeshed “in Border XXI and BECC, the IBWC can no longer dominate the water agenda or sidestep grassroots politics. Fewer issues can be solved top-down.”⁴¹ However, Mumme’s analysis is probably out of date. Border XXI has expired and is being replaced by a much weaker border management plan, and BECC has been merged with the NADBank, thus producing a new institutional structure that eliminates much of BECC’s potential to evade the failures identified by Milich and Varady. For example, the BECC/NADBank structure was unique and was designed to avoid mistakes of other development banks, which were bad for the environment, leading to unsustainable long-term outcomes. There were two main reasons for these mistakes: (1) failure to consider the environment, and (2) a lack of transparency and public participation. By merging the BECC and NADBank institutions and their boards, we can no longer ensure transparency and public participation or that only environmentally sound projects ever make it to final consideration. As a result, we expect to see environmental evaluation that is in the same hands as those making the decision on the financiability of the projects, which creates a key conflict of interest. Among the changes in the merged board structure is the elimination of the guaranteed seat on the BECC board for each of the U.S. and Mexican IBWC commissioners. This elimination of direct IBWC participation together with these overall reverses in IBWC’s partner organizations will significantly reduce the pressure on the IBWC for positive change.

This said, there may still be a glimmer of hope. Mumme agrees that the BECC/NADBank merger certainly alters the context. He also notes that as a result of

the Bush administration's weak commitment to sustainable development practices and its current friction with the Mexican government over Iraq, there is certainly no higher-level incentive to move to strengthen IBWC's commitment to public participation, transparency, etc., the citizen's forum initiatives notwithstanding. However, even though the context has changed it will be difficult for the IBWC to radically backtrack from the formal commitments it has made at this point. The fact that Mexico's section of the IBWC (known as CILA) is going forward with its own sustainable development mission statement is a good sign. Mexico's Commissioner Arturo Herrera appears committed to this. So most of the formal advancements will stay on the books, even if the U.S. side is not pushing them forward or trying to innovate.⁴²

Mumme also notes an interesting opportunity as the result of the history of the agreement that formed the IBWC: So far as a Tijuana River Watershed treaty is concerned, the fact that the 1944 International Boundary Treaty anticipated the realization of such an agreement (the initiative was laid aside to get closure on the main elements in 1943-44) is a resource that could be leveraged by California state authorities if they chose to do so. Thus far Californians have made no effort to do so.⁴³

WHO ARE THE STAKEHOLDERS AND WHICH INSTITUTIONS/AGENCIES HAVE LEGAL JURISDICTION AND POLITICAL POWER TO MAKE DECISIONS REGARDING THIS SPECIFIC PLACE, THE TIJUANA RIVER WATERSHED?

In regard to watershed management, one author has classified the key stakeholders as follows:

- Water users—consumptive and non-consumptive uses
- Water polluters—agriculture, industry, domestic, etc.
- Water managers—organizational and operational level
- Water policy and law makers—constitutional level
- Civil society—general interests represented by government and specific interests represented by NGOs⁴⁴

In Appendix C to this report we have attempted to list many of the key stakeholders (except for water users and water polluters) including:

- Local and municipal agencies
- State agencies
- Federal agencies
- Indian tribes
- Binational and trinational institutions
- Academic institutions
- ENGOs
- Funders

The environmental administration and regulation in the border region is a confusing web of international, federal, tribal, state, and local agencies and jurisdictions. It is often not easy to determine which agency is responsible for which environmental problems. Two very different political systems meet at the border. Mexico is highly centralized and thus there are few direct governmental and administrative counterparts across the border.⁴⁵

There are many government actors in the border region: U.S. and Mexican federal agencies, tribal governments, state agencies, local and municipal agencies in the border region. This is not to mention the non-governmental organizations, the academic sector and the private sector, or the binational and trinational institutions that may bring all these actors together.

At the local level, a number of San Diego County as well as San Diego and Tijuana city agencies are involved in border environmental issues. In addition, the cities of San Diego and Tijuana signed a 1993 memorandum of understanding to create a binational advisory board, which includes an environmental advisory committee. There is also ongoing city-to-city cooperation on air pollution through the San Diego-Tijuana Clean Air Alliance.

The two leading state agencies are:

- California Environmental Protection Agency (Cal-EPA)
- Baja California's Dirección General de Ecología (DGE) (Ecology Department)

The two states have coordinated some of their border environmental infrastructure planning, at least at the needs-assessment level, through CalBECC (California Border Environmental Cooperation Committee).

The two federal lead agencies on border environmental issues are:

- U.S. Environmental Protection Agency (EPA)
- Mexico's Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT)

However, technically they must work through the U.S. Department of State and the Mexican Ministry of Foreign Relations.

Tribal natural resources are considered under U.S. federal law and policy to be the property of the tribes. In the contiguous United States, most Indian people live on or near reservations that are held by the United States in trust for the tribes. This trust land, although federally owned and ultimately subject to federal law, is not public land and is subject to different law and policy, although it may often be checkerboarded or abutting public land controlled by a federal agency such as the National Park Service, U.S. Forest Service, or Bureau of Land Management. Of critical significance are the facts that tribal governments are the primary managers of tribal trust land and tribal natural resources located both on and off current reservations; and that all federal agencies and departments must consult with Indian tribes on a government-to-government basis before taking any action that affects tribal members, lands, or other resources.⁴⁶

In Mexico, tribes do not have the same recognition as in the United States. Officially, only those persons who do not speak Spanish are considered to be indigenous. Tribes view this differently and are currently seeking autonomy in some form. However, at

present, Indians and Indian land in Baja California is governed by federal, state, and local environmental laws.

GENERAL RECOMMENDATIONS

The following are some potential actions from which the Tijuana River Watershed would probably benefit. Further research would be needed to determine which of these are feasible. The incentive for the administrations of Presidents Fox and Bush will have to be well developed to ensure any success.

Establish a Vision

Bring together the area's most respected business, academic, government and non-government leaders to agree upon and oversee implementation of a watershed vision for biodiversity conservation and sustainable development. A key element of the vision should be the creation of new natural protected areas (NPAs), in locations critical for conserving the Tijuana River Watershed's biodiversity and natural capital services. The leaders must pursue their vision and persuade the government to declare NPAs and to enact other conservation measures.

Currently, the Tijuana River Watershed presents great potential in its separate areas, but there is little synergy in the region, which is under a complex mix of authority from the federal government, state government, county government and a number of municipalities. Poorly planned economic development, often the result of poor coordination between these authorities, is one of the greatest threats to the Tijuana River Watershed.

To facilitate well-planned, sustainable development, it is important to build a common regional vision among government agencies, academic institutions, conservation organizations, and business leaders. Paul Ganster and his Institute for the Regional Study of the Californias (IRSC) has been working to develop a strong partnership with key leaders in the watershed region. IRSC conducted an inaugural meeting on November 12, 2002, to discuss and to build agreement on shared goals and outcomes for conserving the Tijuana River Watershed. This first meeting brought together a binational team of researchers and practitioners to develop baseline information and identify key stakeholders in the transborder watershed. The stakeholders will be convened to begin to develop a vision for the Tijuana River Watershed, and to devise strategies and options for achieving that vision.⁴⁷ The planned outcome is the creation of a Tijuana River Border Watershed Council. IRSC will play a significant role in order to provide the broadest continuity in relation to the institute's prior projects related to the Tijuana River Watershed (including that which was done in collaboration with Fundación la Puerta).

The council process is being funded from California State Proposition 13 Bond monies, and is also supported by the San Diego County Planning Department. The State of California and the San Diego County already have cooperation agreements with Baja California and the Municipality of Tijuana. In addition, the Mexican Consulate in San Diego is very interested in the development of a binational mechanism to address

watershed issues. There is also an interest in looking at how this watershed initiative can fit into, or benefit from, the federal governments' Border 2012 program. IRSC will also examine the usefulness of the existing San Diego-Tijuana-Tecate Border Liaison Mechanism (BLM) that was established by the consuls general of the United States and Mexico for this purpose.⁴⁸

The Tijuana River Border Watershed Council is intended to develop a watershed plan, similar to that developed for rivers within California. However, because of the binational sensitivities, they will avoid calling this a watershed plan. No one wants it to appear that California is dictating to Mexico a plan for a watershed primarily in Mexico.

Thus, the council will first develop a "vision" for the future of the watershed. It will then develop an implementation plan that includes provisions for government coordination and cooperation.

IRSC's first step is to pull together all previous work, studies, maps, etc., regarding the watershed and make them available in a usable form. This will include a comprehensive web site. They plan to develop a workplan with concrete action steps.

Meanwhile, IRSC is recruiting appropriate people to be members of the Advisory Council who will have the *gravitas* to lend to the council so that its advice will be more likely to be taken up by the two states, as well as county and local level governments. The second Advisory Council meeting took place on 24 April 2003.

Pursue Binational Management Activities

- Develop and implement a Strategic Action Plan to promote environmentally sustainable development. Including the identification of environmental zones for resources management and conservation as well as regional sustainable development.
- Create and fund an endowment to support implementation of the Strategic Action Plan.
- Create an authoritative technical, scientific forum, or group of advisors as the basis for future political discussions and decisions. Such a group can help define priorities for study and for environmental protection.
- Where definitive science is lacking, employ the precautionary principle and require best environmental practices and best available technologies.
- Foster cooperation among Federal, State, Tribal and Local agencies, including the exchange of watershed monitoring data between Mexico and the United States.
- Evaluate a possible role for the United Nations (UNEP, UNDP), World Bank and/or GEF as sponsor for a watershed management program (as was done for the Aral Sea). Third party neutrality may be beneficial in creating a forum for binational cooperation including the negotiation of a binational watershed management agreement, but may be more important for fiscal support.
- Evaluate the social and human health consequences of environmental degradation due to unsustainable development. Start with projects that address these issues to gain public buy in.

- Undertake some pilot or demonstration projects related to biodiversity conservation, carbon sequestration, etc. (for example, reforestation, replanting efforts to restore degraded habitat).
- Clean up already-contaminated sites.
- Assess, monitor and manage risks due to the discharge of hazardous and toxic materials into the Tijuana River Watershed, and evaluate technological alternatives for their disposal (including treatment, recycling, minimization, etc.)
- Assess the environmental impact of existing water works (including canals, dams, drains, and discharges) and evaluate opportunities for their removal and related watershed restoration.
- Seek sustainable development alternatives such as ecotourism

Conserve Land to Create a Park

I realize this and the following four recommendations presume to include protected areas as part of the means for protection of the watershed in contradiction of the white paper.⁴⁹ The sentiment in Part II, Section 4 of that report is correct; parks are not bubbles keeping good things in and bad things out. They are only a tool. While pollution will not respect the park boundary, the existence of one or more parks will provide leverage for the watershed's protection. An example of this leverage relates to the Tijuana National River Estuarine Research Reserve and how it has successfully been used to seek federal government support from both Mexico and the United States.

At present, there is a dearth of protected areas in the Tijuana River Watershed. At the least, there is a need for a green buffer zone between the rapidly sprawling Tijuana and Tecate urban areas. We could also imagine linking protected areas in southern San Diego County, such as the Tijuana National River Estuarine Research Reserve with critical areas in northern Baja California through habitat and wildlife corridors.

The literature relied upon in Section II of the white paper is too limited, with heavy reliance on a decade-old item: Jensen, Torn and Harte (1993). There is inadequate discussion and description of the differences between the U.S. and Mexican protected areas policies and institutional regimes. The system developed by Mexico is different from the U.S. national park system—in part because of the conclusion that a U.S.-style national park system would not work in a comparatively corrupt nation with the poor living and squatting within protected areas' boundaries. For example, the international concept of a biosphere reserve (coined by Mexican Enrique Beltran) focuses on creating parks in which people can live and work, in comparison to the U.S. national park system. However, even the US National Park System is almost always a multiple use area. Only lands designated under the U.S. Wilderness Act come close to being protection for undisturbed habitat.

If we can work with the Mexican Federal government and convince the Fox Administration that this was an important place to act on his commitment to be a good environmental steward, we might hire, train, and equip some park staff. This first element is key as it would provide us with someone to work with at a park. I would also want to encourage President Fox to give such staff more enforcement authority and

appoint an advisory committee to watch over the efficacy of the park; then we just might prevail in the face of otherwise difficult odds.

A key problem with creating a park in this watershed is that much of the land in the watershed is privately owned, especially in Mexico. However, the land is apparently owned in large tracts, so now may be the last best time to buy up land, or conservation easements to provide protections needed. This said, the focus should be on protecting high-quality areas.

Pronatura has done a great job of creating a detailed binder on the legal tools for such land conservation in Mexico (some of which have survived testing in court). Within Baja California, there are a number of land conservancies active (The Nature Conservancy, Niparaja, Pronatura, Terra Peninsular, and Wildcoast).

If there is resistance to sell land, and/or the land tenure issues prevent such investments, we would probably require cooperation of the government and the use of its expropriation powers.

In addition, or in the alternative, we could promote a land use plan that is consistent with protection of the watershed.

First Step: Strategically buy land and/or development rights that will substantially reduce the likelihood of success of the industrialization of the area. Large tracts need not be purchased at the start (unless they are readily available for a good price). Even a small piece taken from the center of a larger tract can ruin a major industrial park concept. Fundación la Puerta could act unilaterally to buy a few small parcels in strategic locations. In the United States, this land is later sold or donated to the government to be converted to parkland. In Mexico, the government may not have the resources for such a re-purchase. Thus, in addition to Fundación la Puerta, a land conservancy should be enlisted to acquire the land, or the development rights to the land, as soon as possible while it is still relatively inexpensive (i.e. before too much more land speculation takes place). This would thus buy time until we could get the governments to act on a binational protected areas concept.

Second Step: Protect the local ecosystem. The objective of this phase is to work with state agencies, legislators and local people to advocate the designation of a natural protected area around and including Mount Kuchumaa (for example), thus limiting impacts from pollution, sprawl, growth, noise, etc. Once designated, a management plan for the area will be developed from the bottom up with local and scientific input.

Third Step: Protect the land. By simultaneously designating the adjacent land area as a special planning area, any proposed development will be thoroughly analyzed to ensure minimal environmental impacts. This interim step is key because it provides the opportunity to work with the federal, state, and local government in both nations; local landowners; and various local and international nonprofit groups to develop the details for permanent protection of the Tijuana River Watershed area.

Fourth Step: Permanent Protection. The long-term goal and solution is permanent protection of a core section of Mount Kuchumaa and its surroundings and the simultaneous protection of the stretch of Ambos Tecate wild lands buffering it. It could also be a Tecate River Park, or a park related to other parts of the Tijuana River Watershed. Or, ideally a combination of all of these. In this way, the area will be kept pristine and healthy, allowing for thriving ecosystems and human enjoyment and recreation. This step will probably take more than a year, as it requires a long-term collaborative effort with the locals, government, private landowners currently owning lands buffering the core, and environmental groups. This plan, however, can only work if the community gets organized and demonstrates the public will, and this project provides the foundation from which these longer-term efforts will occur.

CONCLUSION: A PROPOSAL FOR A “LEGAL” WORKSHOP ON THE BINATIONAL PROTECTION OF THE TIJUANA RIVER WATERSHED IS NOT RECOMMENDED AT THIS TIME

In the September 16, 2002, IRSC white paper “The Tijuana River Watershed,” a recommendation is made to use the peer review process to “conduct a comprehensive evaluation of legal and administrative strategies that can be used as a basis for the establishment of a watershed management plan, greenways, and protected areas.”⁵⁰ This recommendation presumed a need for more detailed data on “land use planning institutions; zoning and planning policy; Baja California’s biodiversity laws, plans and institutions; land acquisition techniques in Mexico; and the politics and institutions of U.S. protected areas from the national to city/county scale.”⁵¹ Because of the possible preemption of the field by the IBWC noted above, I suggest we start with a review of this report, Spalding (1999), Corcuera (2000), and the IRSC white paper by the pre-eminent experts on the IBWC as well as the two current commissioners of the IBWC and the immediate past U.S. commissioner. This will resolve how central a role IBWC will have to play or not. To pinpoint this more, the IBWC role we need to define more precisely relates to binational watershed protection and preservation, sustainable development, and its potential for institutional restructuring to undertake the functions deemed desirable as laid out in section 3 above. Is the IBWC ready to address “the increasingly obvious environmental degradation and potential for related political/social instability in the border region’s watersheds . . .”?

Immediately after such a consultation, or instead, a small group of people might undertake a practical, policy-oriented review (rather than an academic review) exercise. Such a small group could be charged with coming up with a practical concept for the binational management of the Tijuana River Watershed.

¹ Lowi, Miriam “Rivers of conflict, rivers of peace” *Journal of International Affairs* v49, n1 pp. 123-44 (Summer 1995).

² IRSC, White Paper: The Tijuana River Watershed (September 16, 2002) Part I.

³ Spalding, Mark “Improving Institutional Response to Environmental Problems” chapter for *Both Sides of the Border: Transboundary Environmental Management Issues Facing Mexico and the United States* published by Kluwer Academic Publishers (2002) pp. 17-8. And, IRSC, White Paper: The Tijuana River Watershed (September 16, 2002) pp. 29-31.

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- ⁴ Wright, Reis, and Winckell Geographic Information System (GIS) for the Tijuana River Watershed (1995)
- ⁵ Spalding, Mark “Improving Institutional Response to Environmental Problems” p. 15.
- ⁶ Milich, Leonard and Robert Varady “Managing transboundary resources: lessons from river-basin accords” *Environment* (October 1998) v40, n8, pp. 10-23.
- ⁷ List quoted from Milich and Varady pp. 10-23.
- ⁸ Mumme, Stephen P. “Reinventing the International Boundary and Water Commission” *Borderlines* v9, n6 (July 2001)
- ⁹ SCERP Border Institute report “Binational Water Management Planning” (May 2002) p.1.
- ¹⁰ Milich and Varady pp. 10-23.
- ¹¹ Please note that one of these agreements, the Ramsar Convention on Wetlands, is not a specific watershed agreement per se, but was included for its similarity and relevance to multilateral management of watersheds.
- ¹² Kliot, Nurit, Deborah Shmueli and Uri Shamir “Development of institutional frameworks for the management of transboundary water resources” *International Journal of Global Environmental Issues* Vol. 1, No. 3/4 (2001) at pages 308 and 324.
- ¹³ Steinberg, Paul F. *Environmental Leadership in Developing Countries* MIT Press, 2001.
- ¹⁴ Lee, Donna and Ariel Dinar “Review of Integrated Approaches to River Basin Planning, Development and Management” WPS Policy Research Working Paper (April 1995).
- ¹⁵ German Foundation for International Development “Transboundary Water Management: Experience of International River and Lake Commissions” Round Table Proceedings September 1998.
- ¹⁶ Milich and Varady pp. 10-23.
- ¹⁷ Radosevich, George and Douglas Olson “Existing and Emerging Basin Arrangements in Asia: The Tarim Basin Water Resources Commission and the Mekong River Commission” a paper from the proceedings of the World Bank’s Third Workshop on River Basin Institutional Development (Washington DC, June 1999)
- ¹⁸ van Hofwegen, Paul “Framework for Assessment of Institutional Frameworks for Integrated Water Resources Management” *Intersectoral Management of River Basins* an American Center for Sanitary Engineering and Environmental Sciences report, 2000.
- ¹⁹ Kliot, Shmueli and Shamir.
- ²⁰ Roll, Gulnara and Evelin Lopman “Implementation of Water Management Regimes on Transboundary Water Bodies in the Baltic Sea Basin” a paper from the proceedings of the Conference on Environmental Conventions (Estonia, October 2001). Also see Roll, Gulnara “Experiences from Transboundary Water Cooperation” a paper from the proceedings of the conference on Enlargement from a Local and Regional Perspective (Brussels, July 2002)
- ²¹ Development Alternatives, Inc. “International Experiences in Water Management” report prepared for the US Agency for International Development (January 2002).
- ²² World Wildlife Fund “Managing Water Wisely: Promoting sustainable development through integrated river basin management” WWF Living Waters project (July 2002)
- ²³ McNally, Richard and Sylvia Tognetti “Tackling poverty and promoting sustainable development: key lessons for integrated river basin management” WWF Discussion Paper (July 2002)

²⁴ Suarez, Pablo and Dann Sklarew (Eds.) “Transboundary Waters Management: Perspectives from Latin America and Caribbean Managers” International Waters Learning Exchange and Resource Network (September 2002)

²⁵ US Mexico Binational Council “US-Mexico Transboundary Water Management: The case of the Rio Grande/Rio Bravo” Center for Strategic and International Studies, Instituto Tecnológico Antónomo de México and the University of Texas at Austin (January 2003).

²⁶ Boisson de Chazournes, Laurence "Changing Perspectives in the Management of International Watercourses: An International Law Perspective" (undated) available at http://www.up.ac.za/academic/libarts/polsci/awiru/opp/papers/prof_1_boisson_chazournes.pdf

²⁷ Topkaya, Bülent “Water Resources in The Middle East: Forthcoming Problems and Solutions for Sustainable Development of the Region” (July, 1998), available at <http://www.akdeniz.edu.tr/muhfak/publications/gap.html>

²⁸ Topkaya.

²⁹ Topkaya.

³⁰ Topkaya.

³¹ Some factors to define reasonable and equitable beneficial use include ecological, social and economic needs for the present and for the future, as well as down stream impacts.

³² Topkaya.

³³ Boisson de Chazournes.

³⁴ List adapted from Boisson de Chazournes.

³⁵ See for example, Spalding, Mark “Improving Institutional Response to Environmental Problems”

³⁶ Mumme.

³⁷ Mumme.

³⁸ Mumme.

³⁹ Mumme.

⁴⁰ Mumme.

⁴¹ Mumme.

⁴² Personal communication with Stephen Mumme. Email dated 27 May 2003. Copy on file with author.

⁴³ Personal communication with Stephen Mumme.

⁴⁴ van Hofwegen, at page 150.

⁴⁵ Mexico has recently begun a slow, painful process of decentralization.

⁴⁶ Tribal natural resources attorney and consultant Marta Burg provided this information.

⁴⁷ Handout from November 21, 2002 meeting, “Binational Vision for the Tijuana River Watershed”

⁴⁸ The BLM was developed in response to a growing need for institutionalized border cooperation. It includes U.S. and Mexican Consuls, civic leaders, inspection agency representatives and law enforcement contacts who meet to share information and discuss problems.

⁴⁹ IRSC, White Paper: The Tijuana River Watershed (September 16, 2002) Part II.

⁵⁰ IRSC, page 70-1.

⁵¹ IRSC, page 70-1.

Amazonian Cooperation Council

Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, Venezuela

Formal International (binational or multilateral) Agreement	Y	Amazonian Cooperation Treaty, July 3, 1978
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	However, only briefly mentions
Intergovernmental Organization	Y	
Third Party Organization involvement	Y	OAS
Autonomy of the Management Organization	N	Amazonian Cooperation Council carries out decisions made at meetings of Foreign Affairs Ministers
Is it a Political or Technical Organization	Political	(with agreements to cooperate scientifically and technically)
Stakeholder participation	*	No mention in treaty
Project or on-going organization	On-going	
Number of participating countries	8	
Long term planning (more than 50 years)	*	No mention in treaty
Autonomy of Funding	*	No mention in treaty
Transparency	*	No mention in treaty
Instability in region as a result of watershed conflict Y, N, or could be a factor	May be a factor	

Organizational features

Article XXI

The Amazonian Cooperation Council comprising of top level diplomatic representatives shall meet once a year.

Article XXII

The contracting parties shall create Permanent National Commissions charged with enforcing in their respective territories the provisions set out in this Treaty, as well as carrying out the decisions taken at meetings of Foreign Affairs Ministers and by the Amazonian Cooperation Council.

Aral Sea Basin Program

Kazakhstan, Kyrgystan, Tajikistan, Turkmen, and Uzbekistan

Formal International (binational or multilateral) Agreement	Y	Agreement of the Republic of Kazakhstan, Republic of Kyrgystan, Republic of Tajikistan, Turkmenistan, and Republic of Uzbekistan on joint activities addressing the Aral Sea, March 26, 1993.
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	Strategic Action Plan.
Intergovernmental Organization	Y	
Third Party Organization involvement	Y	World Bank
Autonomy of the Management Organization	*	Not mentioned in Treaty
Is it a Political or Technical Organization	Political	
Stakeholder participation (whether there is a process for the public (particularly the impacted/affected public) to voice their views)	*	Unknown
Project or on-going organization	P	
Number of participating countries	5	* Russian Federation participation, Article III
Long term planning (more than 50 years)	N	Long term planning is limited to 35-40 yrs
Autonomy of Funding (referring to either a self-financing mechanism, an endowment, or some other funding source independent of political winds)	Neither	GEF, w/ cofinancing from five Central Asian States, Gov. of Netherlands, EU & Swedish Int'l Dev. Agency
Transparency	*	Unknown
Instability in region as a result of watershed conflict Y, N, or could be a factor	Y	

Organizational features of Treaty

Article II

State-participants consider it necessary:

to establish, on a parity basis, the Interstate Council for the Aral Sea basin crisis, and under it:

Standing Tashkent-based Executive Committee

Commission of Social and Economic Development and Cooperation in Scientific, Technical, and Ecological Spheres

Coordinating Commission on Water Resources, acting in conformity with the Agreement signed on Feb. 18, 1992

World Bank Project -- Water and Environmental Project of the Aral Sea Basin Program.

It is implemented by the Interstate Fund for the Aral Sea (IFAS), restructured in 1997, in collaboration with its five member states. IFAS signed grant agreements with the World Bank for GEF as well as the Dutch and Swedish Contributions and with the European Union in the second half of 1998. Implementation started in October 1998. At this moment (March 1999) procurement action is underway and major contracts are expected to be awarded by mid 1999.

Other initiatives by international agencies in addition to the Aral Sea Basin Programme --

Interstate Commission for Water Coordination (ICWC)

International Aral Sea Rehabilitation Fund (IFAS)

Autonomous Authority of Lake Titicaca (ALT)

Bolivia, Peru

Formal International (binational or multilateral) Agreement	N	Diplomatic papers interchanged between Bolivia and Peru dated June 15, 1992 provide the legal basis for the Binational Autonomous Authority
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	Y	
Third Party Organization involvement	Y	EU
Autonomy of the Management Organization	Y	The ALT's political functioning is an entity of international public right with autonomy in its decisions and administrations in technical and economic fields
Is it a Political or Technical Organization	Technical	Projects of the two countries technically depend on ALT
Stakeholder participation	*	Unknown
Project or on-going organization	On-going	
Number of participating countries	2	
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding	N	Financing of ALT are assumed in equal parts by the Governments of Bolivia & Peru
Transparency	Y	
Instability in region as a result of watershed conflict	*	Not clear

System of data and information:

The Special lake Titicaca Projects (PELT) were created in La Paz-Bolivia and Puno-Peru under the surveillance of a Binational Commission (SUBCOMILAGO). A society of consulting European firms, hired by the European Community by charge of the Governments of both countries, has realized its studies from 1991 to 1993. Based on the available data, they did the basic studies in a binational fashion, to be able to achieve an integral knowledge of the natural medium

Binational Autonomous Entity:

This organization was created by Diplomatic Notes (June 15, 1992) under the name of "Autoridad Autonoma Binacional de la Cuenca del Sistema TDPS" (ALT). It was designed to be a promotion entity, with a small staff which will execute its projects through operative units and agreements with existing regional organizations. The Binational Authority (ALT) will constitute a principal element to permit a dynamic evolution of the Master Plan, and its transparency for the use of development organizations and authorities in both countries. The Authority (ALT) will be available, to guarantee that important programs and projects be financed, and will be the base to adopt unanimous decisions respect to the use and management of the TPDS System resources.

The Binational Autonomous Authority is an entity of international public right with autonomy in its decisions and administrations in technical and economic fields; ALT's political functioning is associated with the Peruvian and Bolivian State Secretaries. ALT is directed by a President who is nominated by the two Ministries of Foreign Affairs and its personnel is composed of nationals from the two countries. ALT has units for administration, planning and legal matters. The national projects of the two countries were established, which technically depend on ALT. Administratively the Bolivian project is associated with the Ministry of Environment (Ministerio de Desarrollo Sostenible y Planificación), and the Peruvian project is associated with the Institute of National Development (INADE). The Bolivian project is the 'Unidad Operativa Boliviana' (UOB) and the Peruvian project is the 'Proyecto Especial Lago Titicaca' (PELT). The financing of ALT are assumed in equal parts by the Governments of Bolivia and Peru.

Binational Association Lake Itaipu

Brazil, Paraguay

Formal International Agreement	Y	Treaty between Brazil and Paraguay, April 26, 1973
Does the Agreement address conservation, protection and/or restoration of the watershed?	N	
Intergovernmental Organization	Y	ITaipu is the binational entity created by the present Treaty. The Commission is the Brazilian-Paraguayan mixed technical committee.
Third Party Organization involvement	N	
Autonomy of the Management Organization	Y	
Is it a Political or Technical Organization	Technical	
Stakeholder participation	*	None Mentioned
Project or on-going organization	On-going	
Number of participating countries	2	
Long term planning (more than 50 years)	*	
Autonomy of Funding	*	
Transparency	Yes	
Instability in region as a result of watershed conflict Y, N, or could be a factor	No	

ITaipu is constituted by Eletrobras and by ANDE

Binational Commission for the Development of the Upper Bermejo River and Grande de Tarija River Basins
Argentina, Bolivia

Formal International (binational or multilateral) Agreement	Y	Oran Agreement, May 13, 1996
Does the Agreement address conservation, protection and/or restoration of the watershed?	N	See Article 1
Intergovernmental Organization	Y	
Third Party Organization involvement	Y	GEF, OAS
Autonomy of the Management Organization	Y	Article 4 – The Commission will have international juridical status, technical, administrative and financing self-determination ability and the juridical capacity to acquire rights and contract obligations. It will be able to celebrate the necessary acts and contracts with any other party to perform its activities.
Is it a Political or Technical Organization	Technical	See Article 6 -- Activities are technical
Stakeholder participation	*	None Mentioned
Project or on-going organization	On-going	
Number of participating countries	2	
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding	*	Not Mentioned
Transparency	*	Unknown
Instability in region as a result of watershed conflict Y, N, or could be a factor	N	

Note Annex A - (Relationship with the Plata Treaty) Agreement for the Development of the upper Basin of the Bermejo River and Grande de Tarija River Argentine and Bolivia Governments to implement Article 6 of the Cuenca del Plata Treaty, which considers the signature of specific agreements and according to the approved regulations

The Commission will be integrated by two Delegates of each Country: the first Delegate will be an Ambassador representing each country's Foreign Office who will preside the respective Delegation; and the second Delegate will be the National Director of the Pilcomayo and Bermejo Rivers of the Bolivian Republic and the CEO of the Regional Commission of the Argentine Republic, respectively.

The Regional Commission of the Bermejo River -COREBE- from Argentina and the National Technical Office of the Pilcomayo and Bermejo Rivers of Bolivia will perform the Commission Secretary functions.

*GEF Project: Strategic Action Programme for the Binational Basin of the Bermejo River
All the proposed activities will be driven by the Binational Commission, in consultation with the UNEP/OAS. The Binational Commission will appoint two Executive Directors of the Project, one for Argentina and one for Bolivia. Two Technical Coordinators, one for Argentina and one for Bolivia, will be contracted by the Executing Agency, in consultation with the Binational Commission, with funds provided by GEF through the Implementing Agency. UNEP/OAS will support Project Execution.*

Comision Trinacional para el Desarrollo de la Cuenca del Rio Pilcomayo

Argentina, Bolivia, Paraguay

* No Treaty Available

Formal International Agreement	Y	El Acuerdo Constitutivo de la Comision Trinacional para el Desarrollo de la Cuenca del Rio Pilcomayo Feb. 9, 1995
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	Y	
Third Party Organization involvement	Y	DRD, IDB, UNDP, EU (see case study, pg. 6)
Autonomy of the Management Organization	Y	La Comision Trinacional tiene personeria juridica internacional
Is it a Political or Technical Organization	Both	
Stakeholder participation	*	Unknown
Project or on-going organization	On-going	
Number of participating countries	3	
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding (referring to either a self-financing mechanism, an endowment, or some other funding source independent of political winds)	*	No Mention
Transparency	*	Unknown
Instability in region as a result of watershed conflict Y, N, or could be a factor	Y	A partir desde el 1991 la situacion del Rio Pilcomayo se habia convertido en un problema muy grave ocasionado tension entre los paises

En fuerza del Acuerdo Constitutivo firmado en la ciudad de La Paz - Bolivia el 9 de febrero de 1995 por los representantes de los gobiernos de Argentina, Bolivia y Paraguay, la Comisión Trinacional tiene personería jurídica internacional y es responsable del estudio y ejecución de proyectos conjuntos en el Río Pilcomayo que propendan al desarrollo de la Cuenca. La Comisión está constituida por un Consejo de Delegados conformado por dos delegados por cada país, el primer delegado es el representante de las respectivas Cancillerías, con rango de Embajador, el segundo delegado es, de preferencia, el Director Nacional de cada una de las Comisiones Nacionales del Río Pilcomayo. El consejo de Delegados se reúne tres veces por año en sesiones ordinarias. Las decisiones de la Comisión son adoptadas por consenso de las Delegaciones de los tres países. Bajo la dependencia del Consejo de Delegados está la Dirección ejecutiva a cargo de un funcionario técnico nacional de un país que no participe en el Acuerdo Trinacional. Desde el 20/5/1998 el cargo de Director Ejecutivo es cubierto por el ing. Andrea Parboni Arquati (nacionalidad italiana). Conforme a lo establecido en la XIV Reunión del Consejo de Delegados y confirmado en la XVI Reunión, la sede de la Dirección Ejecutiva permanecerá en Asunción (Paraguay) hasta el año 2006. Por los cinco años subsiguientes, la Dirección Ejecutiva pasará a la República Argentina.

Estonian-Russian Joint Commission on Transboundary Waters (Lake Peipsi / Chudskoe)
Estonia, Russia

Formal International (binational or multilateral) Agreement	Y	Agreement between the government of the Estonian Republic and the Government of the Russian Federation on cooperation in protection and sustainable use of transboundary waters, 1997
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	The goal of the agreement is organization of cooperation between the Parties in the field of protection and sustainable use of transboundary waters and their ecosystems. (See agreement on collaboration in the field of environmental protection)
<u>Intergovernmental Organization</u>	Y	
Third Party Organization involvement (ie. World Bank, UN in addition to, or as an alternative to negotiating a formal international agreement or setting up a intergovernmental organization?)	Y	EU, Swedish Environmental Protection Agency, Norway & Denmark
<u>Autonomy of the Management Organization</u>	*	Unknown
Is it a Political or Technical Organization	Both	
Stakeholder participation	Y	Article 12, The Parties guarantee publicity of discussion of issues covered by this agreement and involving discussion between representatives of local self-governments and the public.
Project or on-going organization	On-going	Article 16 -- The agreement is in force for 5 yrs and is automatically extended for each subsequent five-year period
Number of participating countries	2	
Long term planning (more than 50 years)	*	No Mention
Autonomy of Funding	*	Only mention of financing is under Article 6 -- Expenses of preparation and arrangements of the sessions (of the commission) are paid by the host Party; travel expenses are paid by the traveling party. In Agreement on collaboration in the field of environmental protection -- Article 7 says financing of the collaboration is to be provided on the basis of mutual agreements between the parties.
Transparency	Y	
Instability in region as a result of watershed conflict Y, N, or could be a factor	*	Unknown

Organizational structure

The Estonian-Russian Joint Commission on Transboundary Water consists of a Joint Commission, Secretaries, Working Groups (Working Group on Water Protection, Working Group on Water Management, Working Group on Monitoring and Research, and Working Group on Cooperation with NGO's, Local Authorities, and IO), and National Experts. See pg. 5

Lake Peipsi belongs both to the Republic of Estonia and the Russian Federation, who are responsible for the management and monitoring of the lake. The Estonian-Russian Transboundary Water Commission was established in 1997 after the signing of an intergovernmental agreement on the protection and sustainable use of transboundary water bodies between the Republic of Estonia and the Russian Federation.

The Commission is the main actor in managing Lake Peipsi. It is in charge of:

- organizing the exchange of monitoring data between the parties in accordance with the agreed monitoring program;*
- defining priority directions and programs of scientific studies on protection and sustainable use of transboundary waters;*
- agreeing on common indicators of quality for transboundary waters, and methods of testing and analysing water;*
- facilitating cooperation between executing agencies, local governments, scientific and public interest organizations, as well as other institutions in the field of sustainable development and protection of transboundary waters;*
- ensuring communication of results of discussions related to the use and protection of the transboundary waters.*

During the last few years the Commission has received considerable support from the Swedish Environmental Protection Agency as part of a project to raise the institutional capacity of the Commission.

Stakeholder participation

The Commission has established formal mechanisms for development of cooperation with local authorities, NGOs and stakeholders, which allows NGOs and local stakeholders in the region to communicate their issues and interests directly to the intergovernmental commission. However, only a few regional NGOs are involved in the work of the Commission; capacity of most of local NGOs and stakeholder groups is low and external financial support is necessary to promote development of capacity of local NGOs and stakeholders, to enable them to get involved in management of transboundary waters shared by countries in transition.

Regional NGOs, such as the Peipsi Center for Transboundary Cooperation (Peipsi CTC) and the Council for Cooperation of Border Regions, cooperate with the local authorities and stakeholders on regional development projects as well as on educational, research and social projects in the region. Peipsi CTC is also actively involved in the work of the Estonian - Russian Transboundary Water Commission.

Finnish-Swedish Frontier Rivers Commission

Finland, Sweden

Formal International (binational or multilateral) Agreement	Y	Boundary Waters Agreement of 1971
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	Gives particular emphasis on the preservation of fish stocks and the prevention of water pollution.
Intergovernmental Organization	Y	The commission has six members, three from each country. By law, one member must be an expert on law, another on technical issues, and another on borderland conditions.
Third Party Organization involvement (i.e.. World Bank, UN in addition to, or as an alternative to negotiating a formal international agreement or setting up a intergovernmental organization?)	*	Unknown
Autonomy of the Management Organization	Y	The joint body supersedes the judicial and regulatory authorities of both countries.
Is it a Political or Technical Organization	Technical	
Stakeholder participation (whether there is a process for the public (particularly the impacted/affected public) to voice their views)	N	very little public participation in the decision making process
Project or on-going organization	On-going	
Number of participating countries	2	
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding	*	Unknown
Transparency	Y	
Instability in region as a result of watershed conflict Y, N, or could be a factor	N	

Gambia River Basin Development Organization

Gambia, Guinea, Senegal

Formal International (binational or multilateral) Agreement	Y	Convention Relating to the Creation of the Gambia River Basin Development Organization, June 30, 1978
Does the Agreement address conservation, protection and/or restoration of the watershed?	N	
Intergovernmental Organization	Y	
Third Party Organization involvement	*	No Mention
Autonomy of the Management Organization	Y	Article 6: The decision adopted by the Conference shall be binding on all member States, who are obliged to see their implementation.
Is it a Political or Technical Organization	Political	
Stakeholder participation	*	No Mention
Project or on-going organization	On-going	
Number of participating countries	3	
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding	N	The operating budgets the implementation budgets of the Organization shall be paid by for the member States and from all other resources, either internal or obtained from external sources by the Council Members
Transparency	*	Unknown
Instability in region as a result of watershed conflict Y, N, or could be a factor	*	Unknown

Organizational structure

The permanent bodies of the Organization for the Development of the Gambia River Basin Shall be:

- 1. The Conference of Heads of State and Government*
- 2. The Council of Ministers*
- 3. The High Commission*
- 4. The Permanent Water Commission*
- 5. Such other organs which may be deemed necessary for the realization of the program of the Organization*

Great Lakes Commission
US, Canada

Formal International (binational or multilateral) Agreement	Y	The Great Lakes Basin Compact
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	Y*	Partially -- Canadian provinces have associate status
Third Party Organization involvement	N	
Autonomy of the Management Organization	Y	
Is it a Political or Technical Organization	Both	
Stakeholder participation	Y	
Project or on-going organization	On-going	
Number of participating countries	2	US & Canada -- Members include 8 great lakes states and associate members status to two Canadian provides
Long term planning (more than 50 years)	N	
Autonomy of Funding	Combin.	Base funding is from state contributions, the majority of research, policy, and information staff expenses are covered directly by funds solicited through grants and contracts from federal, state, foundation and other related sources.
Transparency	Y	
Instability in region as a result of watershed conflict Y, N, or could be a factor	N	

The Great Lakes Commission is a binational agency that promotes the orderly, integrated and comprehensive development, use and conservation of the water and related natural resources of the Great Lakes basin and St. Lawrence River. Its members include the eight Great Lakes states with associate member status for the Canadian provinces of Ontario and Québec. Each jurisdiction appoints a delegation of three to five members comprised of senior agency officials, legislators and/or appointees of the governor or premier.

The Commission was established by joint legislative action of the Great Lakes states in 1955 (the Great Lakes Basin Compact) and granted congressional consent in 1968. A Declaration of Partnership established associate membership for the provinces in 1999.

*The Commission's project work falls into the following seven program areas:
Administration, Communications and Internet Technology, Data and Information Management, Environmental Quality, Regional Coordination, Resource Management, Transportation and Sustainable Development.*

Article V (of the Great Basin Compact – Funding)

A. The members of the Commission shall serve without compensation, but the expenses of each commission shall be met by the state which he represents in accordance with the law of that state. All other expenses incurred by the Commission in the course of exercising the powers conferred upon it by this compact, unless met in some other manner specifically provided by this compact, shall be paid by the Commission out of its own funds.

Helsinki Commission

Denmark, Estonia, EU, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden

Formal International Agreement	Y	Convention on the Protection and use of Transboundary Watercourses and International Lakes, March 7, 1992
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	Article 2
Intergovernmental Organization	Y	
Third Party Organization involvement	Y	EU
Autonomy of the Management Organization	Y	
Is it a Political or Technical Organization		
Stakeholder participation	*	None Mentioned
Project or on-going organization	On-going	
Number of participating countries	9	
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding	N	
Transparency	Y	Article 16 --The Riparian Parties shall ensure that information is made available to the public.
Instability in region as a result of watershed conflict Y, N, or could be a factor	N	

Organizational Structure

3. The chairmanship of the Commission shall be given to each Contracting Party in turn in alphabetical order of the names of the Contracting Parties in the English language. The Chairman shall serve for a period of two years, and cannot during the period of chairmanship serve as a representative of the Contracting Party holding the chairmanship.

Should the chairman fail to complete his term, the Contracting Party holding the chairmanship shall nominate a successor to remain in office until the term of that Contracting Party expires.

4. Meetings of the Commission shall be held at least once a year upon convocation by the Chairman. Extraordinary meetings shall, upon the request of any Contracting Party endorsed by another Contracting Party, be convened by the Chairman to be held as soon as possible, however, not later than ninety days after the date of submission of the request.

5. Unless otherwise provided under this Convention, the Commission shall take its decisions unanimously.

Article 22, Financial provisions for the Commission

1. The Commission shall adopt its Financial Rules.

2. The Commission shall adopt an annual or biennial budget of proposed expenditures and consider budget estimates for the fiscal period following thereafter.

3. The total amount of the budget, including any supplementary budget adopted by the Commission shall be contributed by the Contracting Parties other than the European Economic Community, in equal parts, unless unanimously decided otherwise by the Commission.

4. The European Economic Community shall contribute no more than 2.5% of the administrative costs to the budget.

5. Each Contracting Party shall pay the expenses related to the participation in the Commission of its representatives, experts and advisers.

Indo-Bangladesh Joint River Commission

India, Bangladesh

Formal International (binational or multilateral) Agreement	Y	Most Recent is the Ganges Treaty of 1996 (The first Ganges Treaty of 1977 Agreement Collapsed, Subsequently there was the MOU or Memorandum of Understanding of 1982)
Does the Agreement address conservation, protection and/or restoration of the watershed?	N	Addresses flow of water in the dry season
Intergovernmental Organization	Y	
Third Party Organization involvement	*	Verify
Autonomy of the Management Organization	Y	The Joint Committee shall decide its own procedure and method of functioning
Is it a Political or Technical Organization	Technical	Primary function is collecting data, determining flow of river, implementing water sharing arrangements
Stakeholder participation	N	Non identified
Project or on-going organization	on-going*	* Article X The sharing arrangement under this Treaty shall be reviewed by the two Governments at five year intervals or earlier as required by either party (see article for more info)
Number of participating countries	2	
Long term planning (more than 50 years)	N	
Autonomy of Funding	*	
Transparency	*	Unknown
Instability in region as a result of watershed conflict Y, N, or could be a factor	Y	Long running dispute following the construction and operation by India of the Farraka Barrage

Organizational Structure:

The Commission shall be constituted by each participating Government appointing a chairman and three members; of these two shall be engineers. The chairman and the three members shall ordinarily hold office for three years.

Notice Preamble, as it reveals governing principles - "Being desirous of finding a fair and just solution without affecting the rights and entitlement of either country other than those covered by this Treaty, or establishing any general principles of law or precedent.

Inter-Islamic Network on Water Resources Development and Management (INWRDAM)

Bangladesh, Egypt, Iraq, Jordan, Lebanon, Malaysia, Mali, Niger, Oman, Pakistan, Sudan, Syria, Tunisia, Turkey, Yemen

Formal International (binational or multilateral) Agreement	Y	
Does the Agreement address conservation, protection and/or restoration of the watershed?	*	Unknown
Intergovernmental Organization	Y	
Third Party Organization involvement	*	Unknown
Autonomy of the Management Organization	Y	
Is it a Political or Technical Organization	Technical	Operates under the umbrella of the Standing Committee on Scientific and Technological Cooperation (COMSTECH)
Stakeholder participation	*	Unknown
Project or on-going organization	On-going	
Number of participating countries	15	
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding	*	Unknown
Transparency	N	Very little information made public
Instability in region as a result of watershed conflict Y, N, or could be a factor	Y	

INWRDAM is an inter-governmental, autonomous organization operating under the umbrella of the Standing Committee on Scientific and Technological Cooperation (COMSTECH) of the Organization of the Islamic Conference (OIC) . INWRDAM was established in 1987 and since then it is hosted in Amman by the Government of Jordan. INWRDAM has expanded to include 15 OIC member states

Membership in INWRDAM is for OIC states. Each member country in the Network designates a top official to represent a ministry or organization dealing with research and development of water sector in that country.

International Boundary and Water Commission

US, Mexico

Formal International (binational or multilateral) Agreement	Y	
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	Y	
Third Party Organization involvement	N	
Autonomy of the Management Organization	Y	The 1944 Treaty further provides that it shall in all respects have the status of an international body, that the head of each Section must be an Engineer Commissioner and that wherever Treaty provisions call for joint action or joint agreement by the two Governments such matters shall be handled by or through the Department of State of the United States and the Secretariat of Foreign Relations of Mexico.
Is it a Political or Technical Organization	Both	
Stakeholder participation	*	Unclear if there is a formal mechanism for participation
Project or on-going organization	On-going	
Number of participating countries	2	
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding	N	Each government funds their sections
Transparency	Y	
Instability in region as a result of watershed conflict	N	

The United States and Mexican Sections maintain their respective headquarters in the adjoining cities of El Paso, Texas and Ciudad Juárez, Chihuahua. The Commissioners meet at least weekly, alternating the place of meetings and are in almost daily contact with one another. Each Section maintains its own engineering staff, a secretary and such legal advisers and other assistants as it deems necessary. Each Section also has field offices on its side of the boundary at the location of joint projects or related operation where the engineers of the adjoining offices work closely with each other to effect the essential cooperation. Each Government funds the cost of the operation of its Section of the IBWC.

Project costs

The two Governments generally share the total costs of the projects in proportion to their respective benefits in cases of projects for mutual control and utilization of the waters of a boundary river, unless the Governments have predetermined by treaty the division of costs according to the nature of a project. In cases of man-made works in one country or operations in one country causing or threatening to cause damage in the other country, the cost is borne by the Government in whose territory the problem originated.

International Commission between Portugal and Spain

Treaty not available

Formal International (binational or multilateral) Agreement	Y	Convention on Cooperation for Portuguese-Spain River Basins Protection and Sustainable Use, 1998
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	Pg. 3 of "Sharing the Waters of the Iberian Peninsula" The New Convention's scope is to define the framework for bilateral cooperation on freshwater and groundwater protection as well as of the related aquatic ecosystems and also for the sustainable use of international rivers watershed resources.
Intergovernmental Organization	Y	
Third Party Organization involvement	* See note	EU? Framed and inspired by UN Conventions and EU derivatives
Autonomy of the Management Organization	*	Unknown
Is it a Political or Technical Organization	Technical	(Verify)
Stakeholder participation (whether there is a process for the public (particularly the impacted/affected public) to voice their views)	*	Unknown
Project or on-going organization	On-going	
Number of participating countries	2	Spain, Portugal
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding	*	Unknown
Transparency	*	Unknown
Instability in region as a result of watershed conflict Y, N, or could be a factor	N	

International Commission for the Danube River Basin

Austria, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Moldova, Romania, Slovak Republic, Slovenia, Ukraine

Formal International (binational or multilateral) Agreement	Y	Danube River Protection Convention, 1994
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	Article 2
Intergovernmental Organization	Y	
Third Party Organization involvement (i.e.. World Bank, UN in addition to, or as an alternative to negotiating a formal international agreement or setting up a intergovernmental organization?)	Y	UN & EU, Began with the Environmental Programme for the Danube River Basin
Autonomy of the Management Organization	Y	
Is it a Political or Technical Organization	Political	
Stakeholder participation	Y	Danube Environmental Forum, See article
Project or on-going organization	On-going	
Number of participating countries	10	
Long term planning (more than 50 years)	N	SAP provides for short term (3 yrs), medium term (10 yrs) & long term planning
Autonomy of Funding	N	total budget is contributed by member countries in equal parts (excluding the EU)
Transparency	Y	Article 14
Instability in region as a result of watershed conflict Y, N, or could be a factor	Y	

Organizational structure

The main bodies established under the Danube River Protection Convention are: Conference of the Parties; International Commission for the Protection of the Danube River (ICPDR); IC Permanent Secretariat; Expert Groups; Ad-Hoc Groups, and the supporting body - Programme Management Task Force (PMTF). The Conference of the Parties is the highest level body under the Convention (DRPC). Its main task is to provide the overall policy for the work under the Convention and will convene every few years.

The International Commission for the Danube River Basin (ICPDR) is the main decision making body under the Convention. It meets either in Plenary or as Steering Group. A key task for the Plenary is to approve the annual work programme and budget, while the Steering Group provides the management and co-ordination of activities under the Convention. A permanent Secretariat supports the ICPDR and its subsidiary bodies. The Secretariat is also the focal point for information about the implementation

of the Convention. The permanent Expert Groups established under the Convention are:

Emission Issues (EMIS/EG), Monitoring, Laboratory and Information Management (MLIM/EG),

Accident Emergency Warning System (AEWS/EG), Strategic and Legal Issues (SLI/EG).

Temporary ad-hoc Groups may be established by the ICPDR to undertake specific time-limited tasks.

The Programme Management Task Force (PMTF) is a special supporting body. The PMTF supports the practical implementation of action programmes, promotes priority environmental investments and helps to secure technical assistance for the Danube countries. Members of the PMTF are representatives of the contracting parties, international financing institutions and donors, and NGOs.

Strategic Action Plan

The SAP provides directions and a framework for achieving the goals of regional integrated water management and river environmental management expressed in the Danube River Protection Convention. It lays out strategic actions for overcoming the water environment related problems in the Danube river basin. It set short (a period of three years, by 1997), medium (a period of ten years, by 2005) and long term targets and defines a series of tasks to meet them. A series of tasks to achieve the targets is described for each sectors. These sectors include: public authorities at central, district and local level; municipal water companies and utilities; industrial enterprises; the general public and NGOs; agricultural enterprises and the farming community.

Public participation

Most activities have assisted the development of NGOs which are addressing Danube related issues, and have promoted networking between them. In October 1994 the Danube Environmental Forum (DEF) was established, the Danube Grants Programme (DGP) for NGOs was launched in Spring 1995, the NGOs Focal Points (FPs) had several meetings during the 1995, and financial support has been provided to establish NGOs Information Centres (ICs) in the upper and lower parts of the basin. To support public participation with adequate information and to enhance networking between all interested parties, a brochure (The Action for a Blue Danube, January 1995) and a bulletin (Danube Watch, first issue in December 1994) have been released. After the adoption of the SAP the activities of EPDRB focused on supporting the formulation and implementation of the Strategic Action Plan Implementation Programme (SIP), which was adopted in July 1996 in Vienna by the Task Force

International Commission for the Protection of the Elbe

Czech Republic, Germany, EU, Slovak Republic

Formal International (binational or multilateral) Agreement	Y	Convention between the Federal Republic of Germany and the Czech and Slovak Federal Republic and the European Community on the International Commission for the Protection of the Elbe, October 8, 1990
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	Y	
Third Party Organization involvement	Y	EU
Autonomy of the Management Organization	Y	
Is it a Political or Technical Organization	Both	
Stakeholder participation	*	Not mentioned in treaty
Project or on-going organization	On-going	
Number of participating countries	3	
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding	N	Article 14 Each contracting party shall bear the cost of its representation in the Commission and the working parties and the cost of the current investigations carried out in its territory
Transparency	Y	
Instability in region as a result of watershed conflict Y, N, or could be a factor	N	

Organizational structure:

The Commission shall consist of delegations of the contracting parties. Each contracting party shall appoint a maximum of five delegates and their deputies, including the head of the delegation and his deputy.

Each delegation may call in experts which it appoints for the consideration of certain matters.

International Commission for the Protection of the Rhine River

Germany, France, Luxembourg, Netherlands, Switzerland, EU

Formal International (binational or multilateral) Agreement	Y	Convention on the Protection of the Rhine, April 12, 1999
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	Y	
Third Party Organization involvement	N	
Autonomy of the Management Organization	Y	Article 6 -- The Commission shall have legal personality. In the territory of the Contracting Parties it shall, in particular, enjoy the legal capacity conferred on legal persons by domestic law.
Is it a Political or Technical Organization	Political	Article 7
Stakeholder participation	*	Not mentioned
Project or on-going organization	On-going	
Number of participating countries	5 (plus EU)	
Long term planning (more than 50 years)	N	Long term planning is limited to 20 yrs (information obtained from IKSR Secretariat)
Autonomy of Funding	N	Article 13 Each Contracting Party shall bear the costs of its representation in the Commission and its working structure, and each Contracting State shall bear the costs of the studies and actions it carries out within its territory.
Transparency	Y	
Instability in region as a result of watershed conflict Y, N, or could be a factor	N	

Organizational structure

The Commission shall consist of the delegation of the Contracting Parties. Each Contracting Party shall appoint its delegates, one of whom shall be head of delegation.

The Commission shall have a permanent secretariat, which shall carry out the tasks entrusted to it by the Commission and be headed by an executive secretary.

International Joint Commission

US & Canada

Formal International (binational or multilateral) Agreement	Y	Strategic Plan for the International Joint Commission, 1998
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	Objective 4 is sustaining and enhancing the Commission's effectiveness and relevance in the protection of the transboundary environment from coast to coast
Intergovernmental Organization	Y	
Third Party Organization involvement	N	
Autonomy of the Management Organization	Y	Commissioners represent only the Commission and not the government that has appointed them
Is it a Political or Technical Organization	Both	
Stakeholder participation	Y	The Commission takes account of the need to foster public awareness of the issue in question and ensure that the public is able to contribute to the consideration and implementation of its assessments by government
Project or on-going organization	On-going	
Number of participating countries	2	
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding	*	Not mentioned in treaty
Transparency	Y	
Instability in region as a result of watershed conflict Y, N, or could be a factor	N	

The 1909 Boundary Waters Treaty established the Commission, which has six members. Three are appointed by the President of the United States, with the advice and approval of the Senate, and three are appointed by the Governor in Council of Canada, on the advice of the Prime Minister. The Commissioners must follow the Treaty as they try to prevent or resolve disputes. They must act impartially, in reviewing problems and deciding on issues, rather than representing the views of their respective governments.

The Commission has set up more than 20 boards, made up of experts from the United States and Canada, to help it carry out its responsibilities.

Joint Technical Committee (Euphrates, Tigris Rivers)

Iraq, Syria, Turkey

Formal International (binational or multilateral) Agreement	Y	1980 between Turkey and Iraq (Syria joined soon after)
Does the Agreement address conservation, protection and/or restoration of the watershed?	N	
Intergovernmental Organization	Y	
Third Party Organization involvement	Y	Yes, other countries such as the Soviet Union and Saudi Arabia have tried to mitigate conflict
Autonomy of the Management Organization	N	
Is it a Political or Technical Organization	Political	Technically based but is very political
Stakeholder participation	N	
Project or on-going organization	On-going	
Number of participating countries	3	
Long term planning (more than 50 years)	N	
Autonomy of Funding	N	
Transparency	N	
Instability in region as a result of watershed conflict Y, N, or could be a factor	Y	The Southeast Anatolia Development Project (Turkey) has caused considerable conflict
<i>Organizational Structure</i>		
<i>Unable to find information on structure of JTC</i>		

Success of JTC

Pg. 7 "A Case study of the Euphrates and Tigris Basin"

After 16 technical and two ministerial meetings, the talks reached a deadlock and the JTC even failed to produce an outline that might serve as a basis for the report

Lake Chad Basin Commission (LCBC)
Cameroon, Central African Republic, Chad, Niger, Nigeria

Formal International (binational or multilateral) Agreement	Y	Convention on May 22, 1964
Does the Agreement address conservation, protection and/or restoration of the watershed?	N	
Intergovernmental Organization	Y	
Third Party Organization involvement (i.e.. World Bank, UN in addition to, or as an alternative to negotiating a formal international agreement or setting up a intergovernmental organization?)	Y	AFDB, CARE/CHAD, FAC, FAO, EU, UNDP, EED, USAID, GEF
Autonomy of the Management Organization	*	Unknown
Is it a Political or Technical Organization	Both	
Stakeholder participation (whether there is a process for the public (particularly the impacted/affected public) to voice their views)	*	Some projects incorporate public participation such as the inlands fisheries project. Whether the convention addresses public participation is unknown.
Project or on-going organization	Project Based	
Number of participating countries	5	
Long term planning (more than 50 years)	N	There is a long term vision plan that spans 20 years with a 8 year action program
Autonomy of Funding	*	Unknown
Transparency	Y	
Instability in region as a result of watershed conflict Y, N, or could be a factor	Could be a factor	

Organizational structure

The highest authority is the Summit of Heads of State which is held once a year. The Commissioner's meeting, which comprises of two Commissioners per Member State, meets once a year. The Executive Secretariat is the executive organ of the Commission; it is composed of an Executive Secretary, an Assistant to the Secretary, a Financial Controller, and four Departments, namely: Administration and Finance; Planning and Project Execution; Documentation, Information, Remote Sensing and Advanced Technologies; and Water Resources.

Lake Victoria Environmental Management Program

Kenya, Tanzania, Uganda

Formal International Agreement	Y	
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	Y	
Third Party Organization involvement	Y	
Autonomy of the Management Organization	No	
Is it a Political or Technical Organization	Both	
Stakeholder participation	Y	Can I assume this? See document
Project or on-going organization	Project	5 - years
Number of participating countries	3	
Long term planning (more than 50 years)	N	
Autonomy of Funding	3rd party funding	(International Development Association, Global Environmental Facility & World Bank)
Transparency		
Instability in region as a result of watershed conflict	N	

The LVEMP is a five-year project beginning from July 1997 to June 2002. The project is funded by a credit from the International Development Association (IDA) and a grant from the Global Environmental Facility (GEF) through the World Bank to a total of US\$70.0 million for the three East African countries. Out of this, the United Republic of Tanzania is receiving US\$ 20.4 million over a period of five years. Kenya and Uganda are receiving US\$ 24.3 million and US\$ 25.3 million respectively.

Implementation arrangements

The Tripartite agreement provided for the establishment of institutional arrangements both at national and regional levels. The implementation of the project is done through relevant national institutions and government departments and is coordinated by the National Secretariats for LVEMP. A regional Secretariat is also established to ensure uniformity in approach, standards and follow up of harmonization of policies.

Committees

Regional Policy and Steering Committee (RPSC)

The RPSC is the top policy organ of the project and is responsible for policy guidance, issues on regional policies, regulations and standards for compliance by riparian countries. The RPSC is also responsible for ensuring that regional coordination of the program is maintained. Each country is represented by three Permanent Secretaries responsible for natural resources, environment, and water. The chairmanship of the RPSC rotates annually among the three member states.

Project Implementation Committee (PIC)

The PIC is the committee responsible for review of physical and financial progress of all Project activities and is composed of all Component Coordinators of each component and is chaired by the National Executive Secretary with the Operations Officer as its Secretary.

National Steering Committee on Water Hyacinth

The National Water Hyacinth Steering Committees have been established in each country and are responsible for the control and management of water hyacinth.

International Panel of Scientists

This is a high level panel of Internationally renowned Scientists who have been appointed by the RPSC to serve as an advisory group for the scientific studies in the lake. They are to meet annually to review scientific issues arising from project implementation, maintain an up-to-date inventory of international scientific research pertinent to LVEMP programs, assist with identifying international training opportunities for researchers from riparian countries and be available, at the request for the Regional Policy and Steering Committee, to provide advice on specific issues on the project. The panel comprises seven members, six of whom are drawn from Kenya, Tanzania and Uganda and one member nominated by the World Bank.

Project sustainability

The two most important elements of sustainability are stakeholder ownership and provision of fiscal continuance. These are being addressed by a highly participatory mode of project preparation and implementation through special efforts to involve local communities and support for the Fisheries Levy Trust study to seek sources of funds for ongoing support for Lake ecosystem activities.

Mahakali River Commission

India, Nepal

Formal International (binational or multilateral) Agreement	Y	Treaty -- His Majesty's Government of Nepal and the Government of India Concerning the Integrated Development of the Mahakali River Including Sarada Barrage, Tanakpur Barrage and Pancheshwar Project, 1996. (Treaty replaces the 1992 agreement that Nepal rejected as providing inadequate amounts of water and electricity)
Does the Agreement address conservation, protection and/or restoration of the watershed?	N	
Intergovernmental Organization	Y	The commission shall be composed of equal number of representatives from both the parties.
Third Party Organization involvement	*	Unknown
Autonomy of the Management Organization	*	Unknown
Is it a Political or Technical Organization	Technical	
Stakeholder participation	N	
Project or on-going organization	On-going	Article 12, The Treaty shall be reviewed by both the parties at 10 yr intervals
Number of participating countries	2	
Long term planning (more than 50 years)	N	
Autonomy of Funding	N	The expenses of the commission shall be borne equally by both the parties.
Transparency	*	Unknown
Instability in region as a result of watershed conflict Y, N, or could be a factor	Y	Has been a factor

Mekong River Commission
Cambodia, Lao PDR, Thailand and Vietnam

Formal International Agreement	Y	Agreement on The Cooperation for the Sustainable Development of the Mekong River Basin, April 5, 1995
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	Y	
Third Party Organization involvement	Y	Significant contribution by UN and int'l community. This agreement replaces the 1957 Committee for coordination of investigations of the Lower Mekong Basin by governments mentioned and endorsed by the UN
Autonomy of the Management Organization	Y	Article 11, The Mekong River Commission shall enjoy the status of an international body, including entering into agreements and obligations with the donor or international community
Is it a Political or Technical Organization	Political	Secretariat provides technical & administrative assistance
Stakeholder participation	*	None mentioned in agreement
Project or on-going organization	On-going	
Number of participating countries	4	Cambodia, Lao PDR, Thailand and Viet Nam (with regular dialogue with upper countries of China & Myanmar)
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding	N	Article 14, The budget of the Commission shall be drawn up by the Joint Committee and approved by the Council and shall consist of contributions from member countries on an equal basis unless otherwise decided by the Council, from the international community (donor countries), and from other sources.
Transparency	Y*	Appears quite transparent
Instability in region as a result of watershed conflict Y, N, or could be a factor	N	

The MRC consists of three permanent bodies: The Council, the Joint Committee (JC) and the Secretariat.

The National Mekong Committees (NMCs) act as focal points for the Commission in each of the member countries and are served by the respective National Mekong Committee Secretariats.

Organization

The Council, which meets once a year, consists of one member from each country at ministerial or cabinet level. The Council makes policy decisions and provides other necessary guidance concerning the promotion, support, co-operation and co-ordination of joint activities and programmes in order to implement the 1995 Agreement.

The Joint Committee consists of one member from each country at no less than Head of Department level. The Joint Committee is responsible for the implementation of the policies and decisions of the Council and supervises the activities of the Mekong River Commission Secretariat.

The MRC Secretariat is the operational arm of the MRC. It provides technical and administrative services to the Council and the Joint Committee. Under the supervision of the Joint Committee, the Chief Executive Officer is responsible for the day-to-day operations of more than 100 professional and general support staff. The main counterparts for MRC activities in the four member countries are the National Mekong Committees (NMCs).

Niger Basin Authority

Benin, Burkina Faso, Cameroon, Cote D'Ivoire, Guinea, Niger, Mali, Nigeria, Chad

Formal International (binational or multilateral) Agreement	Y	Original agreement signed on Nov. 1964
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	Y	
Third Party Organization involvement (i.e.. World Bank, UN in addition to, or as an alternative to negotiating a formal international agreement or setting up a intergovernmental organization?)	Y	GEF, UNDP, WWF-WARPO
Autonomy of the Management Organization		
Is it a Political or Technical Organization	Both	Is a technical committee of experts
Stakeholder participation (whether there is a process for the public (particularly the impacted/affected public) to voice their views)	Y*	Mentions that the NBA achieves its objectives through a "process that entails national consultants with the riparian governments and other stakeholders in each country"
Project or on-going organization	On-going	
Number of participating countries	9	
Long term planning (more than 50 years)	N	Current plan is 5 years, the Long term Action plan will soon be published under the Niger Basin Shared Vision
Autonomy of Funding	N	100% of the NBA recurrent budget comes from the NBA member countries (shared among themselves based on a special formula), while the projects are funded by development Partners and countries. (I.e. UNDP's TRIP project) There was s the establishment of a Development fund (see UNEP treaty summary) In the past there was failure by member countries to pay regularly their contributions.
Transparency	Y	
Instability in region as a result of watershed conflict Y, N, or could be a factor	Y	Appears that it could be a significant factor
Instability in region as a result of watershed conflict Y, N, or could be a factor	Y	

The Niger Basin Authority was previously the Niger River Commission (created in 1964). Following the transformation of the NRC into the NBA, the institution faced an institutional crisis that led to a loss of credibility vis-à-vis the member countries with several development partners becoming disaffected too. The result was a worsening institutional and financial crisis which almost paralyzed the NBA.

Historical Context

The Niger Basin Authority (NBA) is one of the oldest African Intergovernmental Organization as its creation dates back to 1964 when it was called River Niger Commission.

The River Niger Commission functioned for seventeen (17) years and the results achieved were deemed insufficient. Consequently, the member states decided to replace it with a new organization, the Niger Basin Authority which became heir to all the assets, liabilities and programs initiated by the River Niger Commission.

The present structure of NBA is based on four (4) organs :

The Summit of the Heads of State and Government

It defines the general orientation of the development policy of the Authority and controls its executive functions to ensure the realization of the objectives of the Authority. It meets every two years in an ordinary session in the member state which assumes the chairmanship. The mandate of the Chairmans is two years.

The Council of Ministers

It is responsible for monitoring the activities of the Executive Secretariat and reports to the Summit. The Council of Ministers meets once a year in ordinary session.

The mandate of the Chairman of the Council of Ministers is two years.

The Technical Committee of Experts

It is composed of the representatives of the member states. Its mandate is to prepare the sessions of the Council of Ministers.

The Technical Committee of Experts meets upon invitation of the Executive Secretary according to a work schedule approved by the Council of Ministers.

The Executive Secretariat

It is administered by an Executive Secretary appointed upon recommendations of the Council of Ministers by the Summit

of Heads of State and Government for a period of four (4) years renewable once. Each member country

can present a candidate for the position of Executive Secretary.

Financial Assistance

Contributions of member states

Each year a balanced income and expenditure budget is prepared for the NBA. This budget is prepared on the basis of a sharing formula equitably determined among the member states.

Foreign assistance

The NBA received from external donors important financial supports which made it possible to execute most its programs .

Nigeria-Niger Joint Commission

Nigeria, Niger

Formal International (binational or multilateral) Agreement	Y	Agreement between the Federal Republic of Nigeria and the Republic of Niger concerning the equitable sharing in the development, conservation and use of their common water resources done at Maiduguri, 18 July 1990.
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	Y	
Third Party Involvement	*	Not Mentioned
Autonomy of the Management Organization	Y	Article 12, Subject to the provisions of this Article and of Article 14, the Committee shall have the power to determine its own rules of procedure
Is it a Political or Technical Organization	Both	A Permanent Technical Committee of Water Experts (hereinafter referred to as the Committee) composed of an equal number of representatives from the Contracting Parties, shall be established to assist the Commission in the discharge of its responsibilities under Article 11. The Contracting Parties will endeavor to ensure that the respective members of the Committee hold office for a minimum duration of four consecutive regular sessions.
Stakeholder participation	*	Not mentioned
Project or on-going organization	On-going	
Number of participating countries	2	
Long term planning (more than 50 years)	*	Not mentioned
Autonomy of Funding	*	Funding not mentioned
Transparency	*	Unclear
Instability in region as a result of watershed conflict Y, N, or could be a factor	Could be a factor	

Nile Basin Initiative

Burundi, Democratic Republic of Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, Uganda

Formal International (binational or multilateral) Agreement	N	Cooperative Framework' was drafted but has not yet been ratified.
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	Referring to the Shared Vision, guidelines for the NBI (see below)
Intergovernmental Organization	Y	The NBI is a transitional mechanism for cooperation until a permanent cooperative framework is established
Third Party Organization involvement	Y	Initial partners were the World Bank, UNDP, CIDA Also, an International Consortium for Cooperation on the Nile (ICCON) is being established (envisioned as a long-term partnership of the riparian states and the international community)
Autonomy of the Management Organization		Nile-COM is the highest decision making body of the NBI. It is supported by Nile-TEC, a technical advisory committee. The Nile-SEC is the Secretariat.
Is it a Political or Technical Organization	Both	
Stakeholder participation	Y	A project under the <i>Shared Vision Program</i> is 'Confidence Building and Stakeholder Involvement'
Project or on-going organization	On-going	
Number of participating countries	10	
Long term planning (more than 50 years)	N	
Autonomy of Funding	Y	See below
Transparency	Y	
Instability in region as a result of watershed conflict Y, N, or could be a factor	Y	

The Nile riparian established a forum for a process of legal and institutional dialogue in 1997, with UNDP support. With three-person teams from each country (typically senior government lawyers and water resource specialists) a 'Panel of Experts' (POE) produced the draft text of a 'Cooperative Framework' in early 2000. This encompasses general principles, rights and obligations, and institutional structure. The draft framework has moved the riparian a long way and important compromises have been reached. However, some key issues remain to be resolved, and the Council of Ministers agreed in August 2000 to extend the dialogue process to seek further agreement on the outstanding issues. UNDP has pledged its continued support to the process, which by its nature requires time and effort.

The Shared Vision Program is part of the Strategic Action Program for NBI.

The overall purpose of the Mission is to ensure in-country SVP briefings to facilitate broad national understanding and ownership of the SVP, and to discuss detailed implementation planning for the "Confidence Building and Stakeholder Involvement Project (communication)". In addition, implementation planning for the "Efficient Water Use for Agricultural Production Project" will be initiated. These two projects are part of the seven projects under the SVP approved by the Nile-COM.

Funding Mechanisms: The financial mechanisms proposed in support of the NBI are designed with several objectives in mind: to maximize riparian ownership and control of the process; to meet donor requirements for fiduciary accountability; and to provide timely and efficient administration of funds. Given the fledging and transitional nature of the cooperative Nile institutions, the large sums of money involved, the imperative for early implementation of projects, and following extensive consultation with potential donors, a World Bank managed Trust Fund is proposed by the Nile-COM as the preferred initial funding mechanism (although alternative funding mechanisms may also be used). This will allow funds to be transferred according to established disbursement and procurement procedures. An objective will be the eventual transfer of the Trust Fund to a Nile Basin institution with appropriate legal status and capacity.

The donors represented at the meeting [Canada, Denmark, European Commission, Finland, France, Germany, Italy, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom and the United States] reconfirmed the commitments which they made at the first meeting of the International Consortium for Cooperation on the Nile (ICCON), held in June 2001, in Geneva, Switzerland. The donors, together with officials from the World Bank, UNDP and the African Development Bank, worked with a high-level delegation of officials from the countries of the Nile River Basin

ICCON Consultative Group (ICCON-CG), a group of interested donors within the framework of the ICCON, organized by the World Bank at the request of the Nile Council of Ministers. The ICCON-CG was chaired by the World Bank's Vice-President for Africa, Callisto Madavo and Vice-President for the Middle East and North Africa, Jean-Louis Sarbib.

Historical Context

Appreciating the benefits of cooperation, various sub-groups within the Nile Basin have engaged in cooperative activities over the past thirty years. One of the early regional projects in the Nile Basin was Hydromet, which was launched in 1967, with the support of the United Nations Development Program (UNDP), to foster the joint collection of hydrometeorologic data. Hydromet operated until 1992. In 1993, the Technical Cooperation Committee for the Promotion of the Development and Environmental Protection of the Nile Basin (TECCONILE) was formed in an effort to focus on a development agenda. Also in 1993, the first in a series of ten Nile 2002 Conferences, supported by the Canadian International Development Agency (CIDA), was launched to provide an informal mechanism for riparian dialogue and the exchange of views between countries, as well as with the international community. Within the framework of TECCONILE, a Nile River Basin action plan was prepared in 1995 with support from CIDA. In 1997, the World Bank agreed to a request by the Council of Ministers of Water Affairs of the Nile Basin States (Nile-COM) to lead and coordinate donor support for their activities. Thus, the World Bank, the UNDP, and CIDA began operating in concert as 'cooperating partners' to facilitate dialogue and cooperation among the riparians, creating a climate of confidence within which an inclusive mechanism for working together could be established

Okavango River Basin Commission (OKACOM)

Angola, Botswana, Namibia

Formal International Agreement	Y	Signed in 1994
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	Y	
Third Party Organization involvement	Y	Ramsar Bureau
Autonomy of the Management Organization		
Is it a Political or Technical Organization	Both	
Stakeholder participation (whether there is a process for the public (particularly the impacted/affected public) to voice their views)	Y	"In January, 1991, following major meeting/public hearings to solicit the views of the local communities, the Government of Botswana, showing its responsiveness to the local concerns, suspended the project and agreed to seek further review"
Project or on-going organization	On-going	
Number of participating countries	3	
Long term planning (more than 50 years)	N	
Autonomy of Funding (referring to either a self-financing mechanism, an endowment, or some other funding source independent of political winds)	*	The riparian states are in the process of resubmitting a request for GEF support
Transparency	*	Unknown
Instability in region as a result of watershed conflict Y, N, or could be a factor	Could be a factor	

Organizational Structure

Each of the riparian countries have appointed commissioners from the relevant institutions. The Commission also has a Basin Steering Committee that works with a study manager who is mandated to coordinate the different activities pertaining to the technical work of OKACOM.

Organization for the Development of the Senegal River basin (OMVS)

Mali, Mauritania, Senegal

Formal International Agreement	Y	Bamako Convention for the Development of the Senegal River Basin of 1972 and more recently, the Senegal River Water Charter signed in May 2002
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	*	
Third Party Organization involvement	Y	Significant involvement
Autonomy of the Management Organization	*	
Is it a Political or Technical Organization	*	
Stakeholder participation (whether there is a process for the public (particularly the impacted/affected public) to voice their views)	Y	The start up of environmental monitoring by the Observatory represents golden opportunities for increasing the involvement of representatives of the various stakeholders in the resource management decision making process. This participatory approach will be reinforced by the Master Plan.
Project or on-going organization	*	
Number of participating countries	3	Guinea not included, only 3 out of four established the organization
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding (referring to either a self-financing mechanism, an endowment, or some other funding source independent of political winds)	*	Receives significant funding from African Development Bank Group & USAID
Transparency	*	Unknown
Instability in region as a result of watershed conflict Y, N, or could be a factor	N	

Current approach:

The OMVS's fundamental conventions of 1972 and the Senegal River Water Charter signed in May 2002, which establish its legal and regulatory framework, clearly state that river water must be allocated to the various use sectors. The resource is not allocated to riparian states in terms of volumes of water to be withdrawn, but rather to uses as a function of possibilities. The various uses can be for agriculture, inland fishing, livestock raising, fish farming, tree farming, fauna and flora, hydroelectric energy production, urban and rural drinking water supply, health, industry, navigation and the environment.

The start-up of environmental monitoring by the Observatory represents golden opportunities for increasing the involvement of representatives of the various stakeholders in the resource management decision-making process. This participatory approach will be reinforced by the launching of the Master Plan next year.

Permanent Water Commission of Namibia and South Africa

Formal International (binational or multilateral) Agreement	Y	Agreement between the Government of the Republic of Namibia and the Government of the Republic of South Africa on the establishment of a permanent water commission, Sept. 14, 1992.
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	Article 3 states that one function of the commission is the prevention of and control over the pollution of common water resources and soil erosion affecting such resources.
Intergovernmental Organization	Y	
Third Party Organization involvement	*	None mentioned
Autonomy of the Management Organization	Y	Article 2. The Commission shall decide its own procedure.
Is it a Political or Technical Organization	Technical	The objective of the Commission shall be to act as technical adviser to the Parties on matters relating to the development and utilization of water resources of common interest to the Parties and shall perform such other functions pertaining to the development and utilization of such resources as the Parties may from time to time agree to assign to the Commission.
Stakeholder participation (whether there is a process for the public (particularly the impacted/affected public) to voice their views)	N	None mentioned
Project or on-going organization	On-going	
Number of participating countries	2	Namibia, South Africa
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding (referring to either a self-financing mechanism, an endowment, or some other funding source independent of political winds)	No	Each Party shall in respect of all meetings of the Commission be responsible for all costs incurred in connection with the attendance and participation of its delegation and of any person co-opted as adviser to its delegation in terms of Article 2(4).
Transparency	*	Unknown
Instability in region as a result of watershed conflict	*	Unknown

Plata Basin Intergovernmental Coordinator Committee

Argentina, Bolivia, Brazil, Paraguay, Uruguay

Formal International (binational or multilateral) Agreement	Y	Tratado de la Cuenca Plata. April. 1969
Does the Agreement address conservation, protection and/or restoration of the watershed?		
Intergovernmental Organization	Y	
Third Party Organization involvement	*	Unknown
Autonomy of the Management Organization	N	Article III, The Intergovernmental Coordinator Committee is recognized as the permanent body of the Basin, in charge with promoting, coordinating, and putting into effect the multilateral steps taken with the goal of the integrated development of the Plata Basin, the technical and financial assistance, and the execution of the decisions made by the Ministers of Foreign Relations.
Is it a Political or Technical Organization	Both	
Stakeholder participation		
Project or on-going organization	On-going	
Number of participating countries	5	
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding		
Transparency		
Instability in region as a result of watershed conflict Y, N, or could be a factor	*	

Ramsar Convention on Wetlands

Belgium, Denmark, Finland, France, Germany, India, Iran, Ireland, Jordan, Netherlands, Pakistan, South Africa, Spain, Sweden, Switzerland, Turkey, Russia, UK

Formal International (binational or multilateral) Agreement	Y	Convention on Wetlands, 1971
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	Y	
Third Party Organization involvement	Y	UN
Autonomy of the Management Organization	Y	
Is it a Political or Technical Organization	Political	
Stakeholder participation	*	Unknown
Project or on-going organization	On-going	(But project based)
Number of participating countries	18	
Long term planning (more than 50 years)	*	Unclear
Autonomy of Funding	Y	The Conference of the Parties adopts a core budget administered by the Ramsar Bureau. The core budget for the year 2000 amounts to three million Swiss francs. Each Party pays a percentage related to its contribution to the UN budget (from a minimum of 0.01% to a maximum of 25%). Many countries and other donors also make contributions to special Ramsar Bureau projects, including the Ramsar Small Grants Fund.
Transparency	Y	
Instability in region as a result of watershed conflict Y, N, or could be a factor	N/A	

The Convention on Wetlands, signed in Ramsar, Iran, in 1971, is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. There are presently 135 Contracting Parties to the Convention, with 1230 wetland sites, totaling 105.9 million hectares, designated for inclusion in the Ramsar List of Wetlands of International Importance.

Trilateral Wadden Sea Cooperation

Germany, Netherlands, Denmark

Formal International (binational or multilateral) Agreement	Y	Joint Declaration on the Protection of the Wadden Sea, 1982 & Trilateral Wadden Sea Plan of 1997
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	Y	
Third Party Organization involvement	N	
Autonomy of the Management Organization	N	Appears that form is Trilateral Gov. Conferences
Is it a Political or Technical Organization	Political	Started by scientists in 1976 but is a political agreement.
Stakeholder participation	Y	Recognizes importance, held public discussion re: the Wadden Sea Plan
Project or on-going organization	On-going	
Number of participating countries	3	
Long term planning (more than 50 years)	N	
Autonomy of Funding	N	Primarily financed by three countries
Transparency	Y	
Instability in region as a result of watershed conflict Y, N, or could be a factor	N	

Zambezi Intergovernmental Monitoring and Co-ordinating Committee (ZIMCC) of the Zambezi Action Plan

Botswana, Mozambique, Tanzania, Zambia, Zimbabwe

Formal International (binational or multilateral) Agreement	Y	Agreement on the Action Plan for the Environmentally Sound Management of the Common Zambezi River System, 1987. Known as ZACPIAN, Zambezi Action Plan
Does the Agreement address conservation, protection and/or restoration of the watershed?	Y	
Intergovernmental Organization	Y	The Committee shall be composed of representatives of Angola, Botswana, Malawi, Mozambique, United Republic of Tanzania, Zambia, Zimbabwe, The United Nations Council for Namibia and the Secretariat of the Southern African Development Coordination Conference.
Third Party Organization involvement	Y	UNEP (EMINWA - African Inland Water Program)
Autonomy of the Management Organization	*	
Is it a Political or Technical Organization	Neither	Coordinating Center
Stakeholder participation	*	Unknown
Project or on-going organization	On-going	
Number of participating countries	8	* Angola, Malawi, Namibia have not signed the agreement
Long term planning (more than 50 years)	*	Unknown
Autonomy of Funding	Y	Trust Fund, Common costs of ZACPIAN is equally shared among participating countries at 12.5% each. Implementation costs are shared by countries, donors, UNEP and other international organizations
Transparency	*	Unknown
Instability in region as a result of watershed conflict Y, N, or could be a factor	Y	

<http://www.un.org/law/ilc/texts/nonnav.htm>

Appendix B. Convention on the Law of the Non-navigational Uses of International Watercourses, 1997^{*}

The Parties to the present Convention,

Conscious of the importance of international watercourses and the non-navigational uses thereof in many regions of the world,

Having in mind Article 13, paragraph 1 (a), of the Charter of the United Nations, which provides that the General Assembly shall initiate studies and make recommendations for the purpose of encouraging the progressive development of international law and its codification,

Considering that successful codification and progressive development of rules of international law regarding non-navigational uses of international watercourses would assist in promoting and implementing the purposes and principles set forth in Articles 1 and 2 of the Charter of the United Nations,

Taking into account the problems affecting many international watercourses resulting from, among other things, increasing demands and pollution,

Expressing the conviction that a framework convention will ensure the utilization, development, conservation, management and protection of international watercourses and the promotion of the optimal and sustainable utilization thereof for present and future generations,

Affirming the importance of international cooperation and good-neighbourliness in this field,

Aware of the special situation and needs of developing countries, Recalling the principles and recommendations adopted by the United Nations Conference on Environment and Development of 1992 in the Rio Declaration and Agenda 21,

Recalling also the existing bilateral and multilateral agreements regarding the non-navigational uses of international watercourses,

Mindful of the valuable contribution of international organizations, both governmental and non-governmental, to the codification and progressive development of international law in this field,

Appreciative of the work carried out by the International Law Commission on the law of the non-navigational uses of international watercourses,

Bearing in mind United Nations General Assembly resolution 49/52 of 9 December 1994,

Have agreed as follows:

**PART I
INTRODUCTION**

**Article 1
Scope of the present Convention**

1. The present Convention applies to uses of international watercourses and of their waters for purposes other than navigation and to measures of protection, preservation and management related to the uses of those watercourses and their waters.
2. The uses of international watercourses for navigation is not within the scope of the present Convention except insofar as other uses affect navigation or are affected by navigation.

**Article 2
Use of terms**

For the purposes of the present Convention:

- (a) "Watercourse" means a system of surface waters and ground waters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus;
- (b) "International watercourse" means a watercourse, parts of which are situated in different States;
- (c) "Watercourse State" means a State Party to the present Convention in whose territory part of an international watercourse is situated, or a Party that is a regional economic integration organization, in the territory of one or more of whose Member States part of an international watercourse is situated;
- (d) "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 this Convention and which has been duly authorized in accordance with its internal procedures, to sign, ratify, accept, approve or accede to it.

**Article 3
Watercourse agreements**

1. In the absence of an agreement to the contrary, nothing in the present Convention shall affect the rights or obligations of a watercourse State arising from agreements in force for it on the date on which it became a party to the present Convention.

2. Notwithstanding the provisions of paragraph 1, parties to agreements referred to in paragraph 1 may, where necessary, consider harmonizing such agreements with the basic principles of the present Convention.
3. Watercourse States may enter into one or more agreements, hereinafter referred to as "watercourse agreements", which apply and adjust the provisions of the present Convention to the characteristics and uses of a particular international watercourse or part thereof.
4. Where a watercourse agreement is concluded between two or more watercourse States, it shall define the waters to which it applies. Such an agreement may be entered into with respect to an entire international watercourse or any part thereof or a particular project, programme or use except insofar as the agreement adversely affects, to a significant extent, the use by one or more other watercourse States of the waters of the watercourse, without their express consent.
5. Where a watercourse State considers that adjustment and application of the provisions of the present Convention is required because of the characteristics and uses of a particular international watercourse, watercourse States shall consult with a view to negotiating in good faith for the purpose of concluding a watercourse agreement or agreements.
6. Where some but not all watercourse States to a particular international watercourse are parties to an agreement, nothing in such agreement shall affect the rights or obligations under the present Convention of watercourse States that are not parties to such an agreement.

Article 4 **Parties to watercourse agreements**

1. Every watercourse State is entitled to participate in the negotiation of and to become a party to any watercourse agreement that applies to the entire international watercourse, as well as to participate in any relevant consultations.
2. A watercourse State whose use of an international watercourse may be affected to a significant extent by the implementation of a proposed watercourse agreement that applies only to a part of the watercourse or to a particular project, programme or use is entitled to participate in consultations on such an agreement and, where appropriate, in the negotiation thereof in good faith with a view to becoming a party thereto, to the extent that its use is thereby affected.

PART II **GENERAL PRINCIPLES**

Article 5 **Equitable and reasonable utilization and participation**

1. Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and sustainable utilization thereof and benefits therefrom, taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse.
2. Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both

the right to utilize the watercourse and the duty to cooperate in the protection and development thereof, as provided in the present Convention.

Article 6
Factors relevant to equitable and reasonable utilization

1. Utilization of an international watercourse in an equitable and reasonable manner within the meaning of article 5 requires taking into account all relevant factors and circumstances, including:
 - (a) Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character;
 - (b) The social and economic needs of the watercourse States concerned;
 - (c) The population dependent on the watercourse in each watercourse State;
 - (d) The effects of the use or uses of the watercourses in one watercourse State on other watercourse States;
 - (e) Existing and potential uses of the watercourse;
 - (f) Conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect;
 - (g) The availability of alternatives, of comparable value, to a particular planned or existing use.
2. In the application of article 5 or paragraph 1 of this article, watercourse States concerned shall, when the need arises, enter into consultations in a spirit of cooperation.
3. The weight to be given to each factor 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.

Article 7
Obligation not to cause significant harm

1. Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States.
2. Where significant harm nevertheless is caused to another watercourse State, the States whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures, having due regard for the provisions of articles 5 and 6, in consultation with the affected State, to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation.

Article 8
General obligation to cooperate

1. Watercourse States shall cooperate on the basis of sovereign equality, territorial integrity, mutual benefit and good faith in order to attain optimal utilization and adequate protection of an international watercourse.
2. In determining the manner of such cooperation, watercourse States may consider the establishment of joint mechanisms or commissions, as deemed necessary by them, to facilitate cooperation on relevant measures and procedures in the light of experience gained through cooperation in existing joint mechanisms and commissions in various regions.

Article 9

Regular exchange of data and information

1. Pursuant to article 8, watercourse States shall on a regular basis exchange readily available data and information on the condition of the watercourse, in particular that of a hydrological, meteorological, hydrogeological and ecological nature and related to the water quality as well as related forecasts.
2. If a watercourse State is requested by another watercourse 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. Watercourse States shall employ their best efforts to collect and, where appropriate, to process data and information in a manner which facilitates its utilization by the other watercourse States to which it is communicated.

Article 10

Relationship between different kinds of uses

1. In the absence of agreement or custom to the contrary, no use of an international watercourse enjoys inherent priority over other uses.
2. In the event of a conflict between uses of an international watercourse, it shall be resolved with reference to articles 5 to 7, with special regard being given to the requirements of vital human needs.

PART III

PLANNED MEASURES

Article 11

Information concerning planned measures

Watercourse States shall exchange information and consult each other and, if necessary, negotiate on the possible effects of planned measures on the condition of an international watercourse.

Article 12

Notification concerning planned measures with possible adverse effects

Before a watercourse State implements or permits the implementation of planned measures which may have a significant adverse effect upon other watercourse States, it shall provide those States with timely notification thereof. Such notification shall be accompanied by available technical data and information, including the results of any environmental impact assessment, in order to enable the notified States to evaluate the possible effects of the planned measures.

Article 13

Period for reply to notification

Unless otherwise agreed:

(a) A watercourse State providing a notification under article 12 shall allow the notified States a period of six months within which to study and evaluate the possible effects of the planned measures and to communicate the findings to it;

(b) This period shall, at the request of a notified State for which the evaluation of the planned measures poses special difficulty, be extended for a period of six months.

Article 14

Obligations of the notifying State during the period for reply

During the period referred to in article 13, the notifying State:

(a) Shall cooperate with the notified States by providing them, on request, with any additional data and information that is available and necessary for an accurate evaluation; and

(b) Shall not implement or permit the implementation of the planned measures without the consent of the notified States.

Article 15

Reply to notification

The notified States shall communicate their findings to the notifying State as early as possible within the period applicable pursuant to article 13. If a notified State finds that implementation of the planned measures would be inconsistent with the provisions of articles 5 or 7, it shall attach to its finding a documented explanation setting forth the reasons for the finding.

Article 16

Absence of reply to notification

1. If, within the period applicable pursuant to article 13, the notifying State receives no communication under article 15, it may, subject to its obligations under articles 5 and 7, proceed with the implementation of the planned measures, in accordance with the notification and any other data and information provided to the notified States.

2. Any claim to compensation by a notified State which has failed to reply within the period applicable pursuant to article 13 may be offset by the costs incurred by the notifying State for action undertaken after the expiration of the time for a reply which would not have been

undertaken if the notified State had objected within that period.

Article 17
Consultations and negotiations concerning planned measures

1. If a communication is made under article 15 that implementation of the planned measures would be inconsistent with the provisions of articles 5 or 7, the notifying State and the State making the communication shall enter into consultations and, if necessary, negotiations with a view to arriving at an equitable resolution of the situation.
2. The consultations and negotiations shall be conducted on the basis that each State must in good faith pay reasonable regard to the rights and legitimate interests of the other State.
3. During the course of the consultations and negotiations, the notifying State shall, if so requested by the notified State at the time it makes the communication, refrain from implementing or permitting the implementation of the planned measures for a period of six months unless otherwise agreed.

Article 18
Procedures in the absence of notification

1. If a watercourse State has reasonable grounds to believe that another watercourse State is planning measures that may have a significant adverse effect upon it, the former State may request the latter to apply the provisions of article 12. The request shall be accompanied by a documented explanation setting forth its grounds.
2. In the event that the State planning the measures nevertheless finds that it is not under an obligation to provide a notification under article 12, it shall so inform the other State, providing a documented explanation setting forth the reasons for such finding. If this finding does not satisfy the other State, the two States shall, at the request of that other State, promptly enter into consultations and negotiations in the manner indicated in paragraphs 1 and 2 of article 17.
3. During the course of the consultations and negotiations, the State planning the measures shall, if so requested by the other State at the time it requests the initiation of consultations and negotiations, refrain from implementing or permitting the implementation of those measures for a period of six months unless otherwise agreed.

Article 19
Urgent implementation of planned measures

1. In the event that the implementation of planned measures is of the utmost urgency in order to protect public health, public safety or other equally important interests, the State planning the measures may, subject to articles 5 and 7, immediately proceed to implementation, notwithstanding the provisions of article 14 and paragraph 3 of article 17.
2. In such case, a formal declaration of the urgency of the measures shall be communicated without delay to the other watercourse States referred to in article 12 together with the relevant data and information.

3. The State planning the measures shall, at the request of any of the States referred to in paragraph 2, promptly enter into consultations and negotiations with it in the manner indicated in paragraphs 1 and 2 of article 17.

**PART IV
PROTECTION, PRESERVATION AND MANAGEMENT**

**Article 20
Protection and preservation of ecosystems**

Watercourse States shall, individually and, where appropriate, jointly, protect and preserve the ecosystems of international watercourses.

**Article 21
Prevention, reduction and control of pollution**

1. For the purpose of this article, "pollution of an international watercourse" means any detrimental alteration in the composition or quality of the waters of an international watercourse which results directly or indirectly from human conduct.
2. Watercourse States shall, individually and, where appropriate, jointly, prevent, reduce and control the pollution of an international watercourse that may cause significant harm to other watercourse States or to their environment, including harm to human health or safety, to the use of the waters for any beneficial purpose or to the living resources of the watercourse. Watercourse States shall take steps to harmonize their policies in this connection.
3. Watercourse States shall, at the request of any of them, consult with a view to arriving at mutually agreeable measures and methods to prevent, reduce and control pollution of an international watercourse, such as:
 - (a) Setting joint water quality objectives and criteria;
 - (b) Establishing techniques and practices to address pollution from point and non-point sources;
 - (c) Establishing lists of substances the introduction of which into the waters of an international watercourse is to be prohibited, limited, investigated or monitored.

**Article 22
Introduction of alien or new species**

Watercourse States shall take all measures necessary to prevent the introduction of species, alien or new, into an international watercourse which may have effects detrimental to the ecosystem of the watercourse resulting in significant harm to other watercourse States.

**Article 23
Protection and preservation of the marine environment**

Watercourse States shall, individually and, where appropriate, in cooperation with other States,

take all measures with respect to an international watercourse that are necessary to protect and preserve the marine environment, including estuaries, taking into account generally accepted international rules and standards.

Article 24 Management

1. Watercourse States shall, at the request of any of them, enter into consultations concerning the management of an international watercourse, which may include the establishment of a joint management mechanism.
2. For the purposes of this article, "management" refers, in particular, to:
 - (a) Planning the sustainable development of an international watercourse and providing for the implementation of any plans adopted; and
 - (b) Otherwise promoting the rational and optimal utilization, protection and control of the watercourse.

Article 25 Regulation

1. Watercourse States shall cooperate, where appropriate, to respond to needs or opportunities for regulation of the flow of the waters of an international watercourse.
2. Unless otherwise agreed, watercourse States shall participate on an equitable basis in the construction and maintenance or defrayal of the costs of such regulation works as they may have agreed to undertake.
3. For the purposes of this article, "regulation" means the use of hydraulic works or any other continuing measure to alter, vary or otherwise control the flow of the waters of an international watercourse.

Article 26 Installations

1. Watercourse States shall, within their respective territories, employ their best efforts to maintain and protect installations, facilities and other works related to an international watercourse.
2. Watercourse States shall, at the request of any of them which has reasonable grounds to believe that it may suffer significant adverse effects, enter into consultations with regard to:
 - (a) The safe operation and maintenance of installations, facilities or other works related to an international watercourse; and
 - (b) The protection of installations, facilities or other works from wilful or negligent acts or the forces of nature.

PART V HARMFUL CONDITIONS AND EMERGENCY SITUATIONS

Article 27
Prevention and mitigation of harmful conditions

Watercourse States shall, individually and, where appropriate, jointly, take all appropriate measures to prevent or mitigate conditions related to an international watercourse that may be harmful to other watercourse States, whether resulting from natural causes or human conduct, such as flood or ice conditions, water-borne diseases, siltation, erosion, salt-water intrusion, drought or desertification.

Article 28
Emergency situations

1. For the purposes of this article, "emergency" means a situation that causes, or poses an imminent threat of causing, serious harm to watercourse States or other States and that results suddenly from natural causes, such as floods, the breaking up of ice, landslides or earthquakes, or from human conduct, such as industrial accidents.
2. A watercourse State shall, without delay and by the most expeditious means available, notify other potentially affected States and competent international organizations of any emergency originating within its territory.
3. A watercourse 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 of the emergency.
4. When necessary, watercourse States shall jointly develop contingency plans for responding to emergencies, in cooperation, where appropriate, with other potentially affected States and competent international organizations.

PART VI
MISCELLANEOUS PROVISIONS

Article 29
International watercourses and installations in time of armed conflict

International watercourses and related installations, facilities and other works shall enjoy the protection accorded by the principles and rules of international law applicable in international and non-international armed conflict and shall not be used in violation of those principles and rules.

Article 30
Indirect procedures

In cases where there are serious obstacles to direct contacts between watercourse States, the States concerned shall fulfil their obligations of cooperation provided for in the present Convention, including exchange of data and information, notification, communication, consultations and negotiations, through any indirect procedure accepted by them.

Article 31
Data and information vital to national defence or security

Nothing in the present Convention obliges a watercourse State to provide data or information vital to its national defence or security. Nevertheless, that State shall cooperate in good faith with the other watercourse States with a view to providing as much information as possible under the circumstances.

Article 32

Non-discrimination

Unless the watercourse States concerned have agreed otherwise for the protection of the interests of persons, natural or juridical, who have suffered or are under a serious threat of suffering significant transboundary harm as a result of activities related to an international watercourse, a watercourse State shall not discriminate on the basis of nationality or residence or place where the injury occurred, in granting to such persons, in accordance with its legal system, access to judicial or other procedures, or a right to claim compensation or other relief in respect of significant harm caused by such activities carried on in its territory.

Article 33

Settlement of disputes

1. In the event of a dispute between two or more Parties concerning the interpretation or application of the present Convention, the Parties 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.
2. If the Parties concerned cannot reach agreement by negotiation requested by one of them, they may jointly seek the good offices of, or request mediation or conciliation by, a third party, or make use, as appropriate, of any joint watercourse institutions that may have been established by them or agree to submit the dispute to arbitration or to the International Court of Justice.
3. Subject to the operation of paragraph 10, if after six months from the time of the request for negotiations referred to in paragraph 2, the Parties concerned have not been able to settle their dispute through negotiation or any other means referred to in paragraph 2, the dispute shall be submitted, at the request of any of the parties to the dispute, to impartial fact-finding in accordance with paragraphs 4 to 9, unless the Parties otherwise agree.
4. A Fact-finding Commission shall be established, composed of one member nominated by each Party concerned and in addition a member not having the nationality of any of the Parties concerned chosen by the nominated members who shall serve as Chairman.
5. If the members nominated by the Parties are unable to agree on a Chairman within three months of the request for the establishment of the Commission, any Party concerned may request the Secretary-General of the United Nations to appoint the Chairman who shall not have the nationality of any of the parties to the dispute or of any riparian State of the watercourse concerned. If one of the Parties fails to nominate a member within three months of the initial request pursuant to paragraph 3, any other Party concerned may request the Secretary-General of the United Nations to appoint a person who shall not have the nationality of any of the parties to the dispute or of any riparian State of the watercourse concerned. The person so appointed shall constitute a single-member Commission.
6. The Commission shall determine its own procedure.

7. The Parties concerned have the obligation to provide the Commission with such information as it may require and, on request, to permit the Commission 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.

8. The Commission shall adopt its report by a majority vote, unless it is a single-member Commission, and shall submit that report to the Parties concerned setting forth its findings and the reasons therefor and such recommendations as it deems appropriate for an equitable solution of the dispute, which the Parties concerned shall consider in good faith.

9. The expenses of the Commission shall be borne equally by the Parties concerned.

10. When ratifying, accepting, approving or acceding to the present Convention, or at any time thereafter, a Party which is not a regional economic integration organization may declare in a written instrument submitted to the Depositary that, in respect of any dispute not resolved in accordance with paragraph 2, it recognizes as compulsory ipso facto and without special agreement in relation to any Party accepting the same obligation:

(a) Submission of the dispute to the International Court of Justice; and/or

(b) Arbitration by an arbitral tribunal established and operating, unless the parties to the dispute otherwise agreed, in accordance with the procedure laid down in the annex to the present Convention.

A Party which is a regional economic integration organization may make a declaration with like effect in relation to arbitration in accordance with subparagraph (b).

PART VII FINAL CLAUSES

Article 34 Signature

The present Convention shall be open for signature by all States and by regional economic integration organizations from 21 May 1997 until 20 May 2000 at United Nations Headquarters in New York.

Article 35 Ratification, acceptance, approval or accession

1. The present Convention is subject to ratification, acceptance, approval or accession by States and by regional economic integration organizations. The instruments of ratification, acceptance, approval or accession shall be deposited with the Secretary-General of the United Nations.

2. Any regional economic integration organization which becomes a Party to this Convention without any of its member States being a Party shall be bound by all the obligations under the Convention. In the case of such organizations, one or more of whose member States is a Party to this Convention, the organization and its member States shall decide on their respective responsibilities for the performance of their obligations under the Convention. In such cases, the organization and the member States shall not be entitled to exercise rights under the Convention

concurrently.

3. In their instruments of ratification, acceptance, approval or accession, the regional economic integration organizations shall declare the extent of their competence with respect to the matters governed by the Convention. These organizations shall also inform the Secretary-General of the United Nations of any substantial modification in the extent of their competence.

Article 36

Entry into force

1. The present Convention shall enter into force on the ninetieth day following the date of deposit of the thirty-fifth instrument of ratification, acceptance, approval or accession with the Secretary-General of the United Nations.
2. For each State or regional economic integration organization that ratifies, accepts or approves the Convention or accedes thereto after the deposit of the thirty-fifth instrument of ratification, acceptance, approval or accession, the Convention shall enter into force on the ninetieth day after the deposit by such State or regional economic integration organization of its instrument of ratification, acceptance, approval or accession.
3. For the purposes of paragraphs 1 and 2, any instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by States.

Article 37

Authentic texts

The original of the present Convention, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

ANNEX

ARBITRATION

Article 1

Unless the parties to the dispute otherwise agree, the arbitration pursuant to article 33 of the Convention shall take place in accordance with articles 2 to 14 of the present annex.

Article 2

The claimant party shall notify the respondent party that it is referring a dispute to arbitration pursuant to article 33 of the Convention. The notification shall state the subject matter of arbitration and include, in particular, the articles of the Convention, the interpretation or application of which are at issue. If the parties do not agree on the subject matter of the dispute, the arbitral tribunal shall determine the subject matter.

Article 3

1. In disputes between two parties, the arbitral tribunal shall consist of three members. Each of the parties to the dispute shall appoint an arbitrator and the two arbitrators so appointed shall designate by common agreement the third arbitrator, who shall be the Chairman of the tribunal. The latter shall not be a national of one of the parties to the dispute or of any riparian State of the watercourse concerned, nor have his or her usual place of residence in the territory of one of these parties or such riparian State, nor have dealt with the case in any other capacity.
2. In disputes between more than two parties, parties in the same interest shall appoint one arbitrator jointly by agreement.
3. Any vacancy shall be filled in the manner prescribed for the initial appointment.

Article 4

1. If the Chairman of the arbitral tribunal has not been designated within two months of the appointment of the second arbitrator, the President of the International Court of Justice shall, at the request of a party, designate the Chairman within a further two-month period.
2. If one of the parties to the dispute does not appoint an arbitrator within two months of receipt of the request, the other party may inform the President of the International Court of Justice, who shall make the designation within a further two-month period.

Article 5

The arbitral tribunal shall render its decisions in accordance with the provisions of this Convention and international law.

Article 6

Unless the parties to the dispute otherwise agree, the arbitral tribunal shall determine its own rules of procedure.

Article 7

The arbitral tribunal may, at the request of one of the Parties, recommend essential interim measures of protection.

Article 8

1. The parties to the dispute shall facilitate the work of the arbitral tribunal and, in particular, using all means at their disposal, shall:
 - (a) Provide it with all relevant documents, information and facilities; and
 - (b) Enable it, when necessary, to call witnesses or experts and receive their evidence.

2. The parties and the arbitrators are under an obligation to protect the confidentiality of any information they receive in confidence during the proceedings of the arbitral tribunal.

Article 9

Unless the arbitral tribunal determines otherwise because of the particular circumstances of the case, the costs of the tribunal shall be borne by the parties to the dispute in equal shares. The tribunal shall keep a record of all its costs, and shall furnish a final statement thereof to the parties.

Article 10

Any Party that has an interest of a legal nature in the subject matter of the dispute which may be affected by the decision in the case, may intervene in the proceedings with the consent of the tribunal.

Article 11

The tribunal may hear and determine counterclaims arising directly out of the subject matter of the dispute.

Article 12

Decisions both on procedure and substance of the arbitral tribunal shall be taken by a majority vote of its members.

Article 13

If one of the parties to the dispute does not appear before the arbitral tribunal or fails to defend its case, the other party may request the tribunal to continue the proceedings and to make its award. Absence of a party or a failure of a party to defend its case shall not constitute a bar to the proceedings. Before rendering its final decision, the arbitral tribunal must satisfy itself that the claim is well founded in fact and law.

Article 14

1. The tribunal shall render its final decision within five months of the date on which it is fully constituted unless it finds it necessary to extend the time limit for a period which should not exceed five more months.
2. The final decision of the arbitral tribunal shall be confined to the subject matter of the dispute and shall state the reasons on which it is based. It shall contain the names of the members who have participated and the date of the final decision. Any member of the tribunal may attach a separate or dissenting opinion to the final decision.
3. The award shall be binding on the parties to the dispute. It shall be without appeal unless the parties to the dispute have agreed in advance to an appellate procedure.
4. Any controversy which may arise between the parties to the dispute as regards the interpretation or manner of implementation of the final decision may be submitted by either party for decision to the arbitral tribunal which rendered it.

Abstract: ([back](#))

Adopted by the UN General Assembly in resolution 51/229 of 21 May 1997 .

In accordance with article 34, the Convention was opened for signature at United Nations Headquarters in New York, on 21 May 1997 and will remain open to all States and regional economic integration organizations for signature until 21 May 2000.

Text: U.N. Doc. A/51/869

[Status](#)

<http://www.un.org/law/ilc/texts/nnavfra.htm>

8.3 The Law of Non-Navigational Uses of International Watercourses ([abbreviations](#))

Activities:

Sources:

A. Mandate

G.A. Res. 2669 (XXV) of 8 December 1970

B. Studies undertaken by the Secretariat and Reports of the Secretary-General

1. 23rd session of the International Law Commission (1971)

- Note by the Secretariat

- U.N. Doc. A/CN.4/244/Rev.1 (in Ybk, 1971, vII(2))

2. 25th session of the International Law Commission (1973)

- Supplementary report on the legal problems relating to the non-navigational uses of international watercourses requested by the General Assembly in resolution 2669 (XXV) - Advance report submitted by the Secretary-General pursuant to General Assembly resolution 2926 (XXVII)

- U.N. Doc. A/CN.4/270 (in Ybk, 1973, vII)
- ILC Report, A/9090/Rev.1 (A/28/10), 1973, chp. VI(A)(2), paras.146-150

3. 26th session of the International Law Commission (1974)

- Legal Problems relating to the utilization and use of international rivers - Report by the Secretary-General

- U.N. Doc. A/5409 (in Ybk, 1974, vII(2))

- Legislative texts and treaty provisions concerning the utilization of international rivers for other purposes than navigation (U.N. Legislative series, vol.12)

- ST/LEG/SER.B/12 (United Nations Publication, Sales No. 63.V.4)

- Legal problems relating to the non-navigational uses of international watercourses: supplementary report by the Secretary-General

- U.N. Doc. A/CN.4/274 (in Ybk, 1974, vII(2))

C. Reports of the Working Group or Sub-Committee

1. 26th session of the International Law Commission (1974)

- Report of the Sub-Committee on the Law of the Non-Navigational Uses of International Watercourses

- U.N. Doc. A/CN.4/283 (in ILC Report, A/9610/Rev.1, 1974, chp. V, annex)

D. Reports of the *Special Rapporteur*

1. Consideration of the replies that had been submitted by Governments to the questionnaire.

- First report of the *Special Rapporteur*, Mr. Richard D. Kearney (28th session of the ILC (1976))

- U.N. Doc. A/CN.4/295 (in Ybk, 1976, vII(1))

- ILC Report, A/31/10, 1976, chp. V, paras.139-166

2. Introductory chapter dealing with the nature of the topic, Chapter II - treatment of the topic by the Commission and the scope of its work, Chapter III - utility of "user agreements" and Chapter IV on regulation of data collection and exchange.

- First Report of the *Special Rapporteur*, Mr. Stephen Schwebel (31st session of the ILC (1979))

- U.N. Doc. A/CN.4/320 and Corr.1 (in Ybk, 1979, vII(1))

- ILC Report, A/34/10, 1979, chp. V(A), par. 109

3. Six draft articles were proposed dealing with: "scope" (article 1), "system States" (article 2), "system agreements" (article 4), "parties to the negotiation and conclusion of system agreements" (article 5), "collection and exchange of information" (article 6) and "a shared natural resource" (article 7). It also contained a draft article 3 on "meaning of terms".

- Second report of the *Special Rapporteur*, Mr. Stephen Schwebel (32nd session of the ILC (1980))

- U.N. Doc. A/CN.4/332 and Corr.1 and Add.1 (in Ybk, 1980, vII(1))

- ILC Report, A/35/10, 1980, chp. V(A)(1), par. 85

4. Discussion on the status of the work of the topic, together with a set of proposed draft general principles, including: "equitable participation", the ascertainment of equitable use, and responsibility for appreciable harm etc. Several further questions, such as river regulation, hydraulic installations and water security, interaction with navigational uses, administrative arrangements, and the avoidance and settlement of disputes, were considered by the *Special Rapporteur*.
- Third report of the Special Rapporteur, Mr. Stephen Schwebel (34th session of the ILC (1982))
5. A brief outline of the work together with a tentative draft Convention on the law of the non-navigational uses of international watercourses.
- First report of the *Special Rapporteur*, Mr. Jens Evensen (35th session of the ILC (1983))
6. Revised tentative draft of a convention on the law of the non-navigational uses of international watercourses. The draft consisted of 41 draft articles contained in six chapters as follows: introductory articles (chp.I); general principles, rights and duties of watercourse States (chp.II); co-operation and management in regard to international watercourses (chp.III); environmental protection, pollution, health hazards, natural hazards, safety and national and regional sites (chp.IV); peaceful settlement of disputes (chp.V); final provisions (chp.VI).
- Second Report of the *Special Rapporteur*, Mr. Jens Evensen (36th session of the ILC (1984))
7. Preliminary report which reviewed Commission's work thus far and indicated his preliminary views as to general lines along which Commission's work could proceed: draft articles 1 to 9 should be taken up by Drafting Committee at the 38th session, and the general organizational structure for further draft articles proposed by the previous *Special Rapporteur* should be followed.
- Preliminary Report of the *Special Rapporteur*, Mr. Stephen C. McCaffrey (37th session of the ILC (1985))
8. Status of the Commission's work on the topic; views on draft articles 1 to 9 as submitted by the
- U.N. Doc. A/CN.4/348 and Corr.1 (in Ybk, 1982, vII(1))
 - ILC Report, A/37/10, 1982, chp. VII(A), par. 251
- U.N. Doc. A/CN.4/367 and Corr.1 (in Ybk, 1983, vII(1))
 - ILC Report, A/38/10, 1983, chp. VI(B), paras.215-260
- U.N. Doc. A/CN.4/381 and Corr.1 and 2 (French only) (in Ybk, 1984, vII (1))
 - ILC Report, A/39/10, 1984, chp. VI(B), paras. 279-343
- U.N. Doc. A/CN.4/393 (in Ybk, 1985, VII(1))
 - ILC Report, A/40/10, 1985, chp. VII(B), paras.279-90
- U.N. Doc. A/CN.4/399 and Add.1-2 (in Ybk, 1986, vII(1))

previous *Special Rapporteur*; and set of five draft articles concerning procedural rules applicable in cases involving proposed new uses of watercourses.

- Second Report of the *Special Rapporteur*, Mr. Stephen C. McCaffrey (38th session of the ILC (1986))

- ILC Report, A/41/10, 1986, chp. VII(B), paras.231-243

9. Reviewed status of the work (chp. I); set forth general considerations on procedural rules relating to the utilization of international watercourses (chp. II); submitted six draft articles (arts. 10-15) concerning general principles of cooperation and notification (chp. III); and addressed the question of exchange of data and information (chp. IV).

- Third Report of the *Special Rapporteur*, Mr. Stephen C. McCaffrey (39th session of the ILC (1987))

- U.N. Doc. A/CN.4/406 and Corr.1, Add.1 and Add.1/Corr.1, Add.2 and Add.2/Corr.1 (in Ybk, 1987, vII(1))
- ILC Report, A/42/10, 1987, chp. III(B), paras. 84-116

10. Report divided into three chapters: "Status of work on the topic and plan for future work" (chp. I); "Exchange of data and information" (chp. II) submitting draft article 15; and "Environmental protection, pollution and related matters" (chp.III) submitting draft articles 16, 17, and 18.

- Fourth Report of the *Special Rapporteur*, Mr. Stephen C. McCaffrey (40th session of the ILC (1988))

- U.N. Doc. A/CN.4/412 and Add.1 and Add./Corr.1, and Add.2 and Add.2/Corr.1 to 3 (in Ybk, 1988, vII(1))
- ILC Report, A/43/10, 1988, chp. III(B), paras. 118-188

11. Chapter I of the report dealt with parts VI of the draft and contained draft article 22 (Water-related hazards, harmful conditions and other adverse effects) and article 23 (Water-related dangers and emergency situations); chapter II and III dealt with the relationship between non-navigational and navigational uses and with the regulation of international watercourses and contained two draft articles (arts. 24 and 25) on those sub-topics for part VII and VIII of the draft, respectively.

- Fifth Report of the *Special Rapporteur*, Mr. Stephen C. McCaffrey (41st session of the ILC (1989))

- U.N. Doc. A/CN.4/421 and Corr.1-4, and Add.1-2 (in Ybk, 1989, vII(1))
- ILC Report, A/44/10, 1989, chp. VII(B), paras.632-683

12. Draft article 26 (Joint institutional management), article 27 (Protection of water resources and installations), article 28 (Status of international watercourses and water installations in time of armed conflict) and annex I "Implementation of the articles".

- Sixth Report of the *Special Rapporteur*,

- ILC Report, A/CN.4/427 and Corr. 1, and Add.1 (in Ybk, 1990, vII(1))
- ILC Report, A/45/10, 1990, chp. IV(B), paras.251-311

Mr. Stephen C. McCaffrey (42nd session of the ILC (1990))

13. Chapters on the structure of part I of the draft articles and on the use of terms; proposal for article [1][2] on the use of terms.

- Seventh Report of the *Special Rapporteur*, Mr. Stephen C. McCaffrey (43rd session of the ILC (1991))

- U.N. Doc. A/CN.4/436 and Corr.1-3 (in Ybk, 1991, vII(1))
- ILC Report, A/46/10, 1991, chp. III(B), paras.35-56

14. Analysed the written comments and observations received from Governments and made some changes in the articles adopted on first reading; raised two issues of a general character: whether the eventual form of the articles should be a convention or model rules; and the question of dispute settlement procedure. Examined arts. 1 to 10 of Parts I and II of the topic: scope of the present articles (art.1), use of terms (art.2), watercourse agreements (art.3), parties to watercourse agreements (art.4), equitable and reasonable utilization and participation (art.5), factors relevant to equitable and reasonable utilization (art.6), obligation not to cause appreciable harm (art.7), general obligation to cooperate (art.8), regular exchange of data and information (art.9), relationship between uses (art.10).

- First Report of the *Special Rapporteur*, Mr. Robert Rosenstock (45th session of the ILC (1993))

- U.N. Doc. A/CN.4/451
- ILC Report, A/48/10, 1993, chp. V(B), paras.342-416

15. Contained, in addition to a few amendments to the draft articles adopted on a second reading by the Drafting Committee at the previous session, new texts proposed by the *Special Rapporteur* for the draft articles not yet considered by the Drafting Committee, namely draft articles 7 and 11 to 32, as well as a new draft article on the settlement of disputes.

- Second Report of the *Special Rapporteur*, Mr. Robert Rosenstock (46th session of the ILC (1994))

- U.N. Doc. A/CN.4/462 and Corr.1 (Spanish only)
- ILC Report, A/49/10, 1994, chp. III(A), paras. 216, 217

E. Reports of the Drafting Committee

1. 32nd session of the International Law Commission (1980)

- Texts adopted by the Drafting Committee: Articles 1-5, X and explanatory note

- U.N. Doc. A/CN.4/L.316 (in Ybk, 1980, vI, 1636th mtg (17 July 1980))

2. 39th session of the International Law Commission (1987)

- Titles and texts adopted by the Drafting Committee: titles of parts I and II of the draft; articles 1 to 7

- U.N. Doc. A/CN.4/L.411 (in Ybk, 1987, vI, 2028th to 2030th mtgs (7 to 9 July 1987), and 2033rd mtg (13 July 1987))

3. 40th session of the International Law Commission (1988)

- Titles and texts adopted by the Drafting Committee: titles of the parts II and III of the draft; articles 8 to 21

- U.N. Doc. A/CN.4/L.421 (in Ybk, 1988, vI, 2070th to 2073rd mtgs (29 June 1988 to 5 July 1988))

4. 42nd session of the International Law Commission (1990)

- Titles and texts adopted by the Drafting Committee: articles 22 to 27

- U.N. Doc. A/CN.4/L.445 (in Ybk, 1990, vI, 2187th and 2188th mtgs (5 and 6 July 1990))

5. 43rd session of the International Law Commission (1991)

- Titles and texts adopted by the Drafting Committee: Parts I, II, and VI of the draft articles; articles 2, 10 and 26 to 33

- U.N. Doc. A/CN.4/L.458 and Corr.1 and Add.1 (in Ybk, 1991, vI, 2228th to 2230th mtgs (21 to 26 June 1991))

6. 45th session of the International Law Commission (1993)

- Titles and texts adopted by the Drafting Committee on second reading: arts.1-6 and 8-10

- U.N. Doc. A/CN.4/L.489 (in Ybk, 1993, vI, 2322nd mtg (19 July 1993))

7. 46th session of the International Law Commission (1994)

- Titles and texts adopted by the Drafting Committee on second reading: arts.1-33

- U.N.Doc. A/CN.4/L.492 and Corr.1, Corr.2 (French only) and Corr.3 (English only) and Add.1 (in Ybk, 1994, vI, 2353rd mtg, (21 June 1994))

F. Comments by Governments

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| <p>1. 28th session of the International Law Commission (1976)
 - Replies of Governments to the Commission's questionnaire</p> | <p>- U.N. Doc. A/CN.4/294 and Add.1 (in Ybk, 1976, vII(1))</p> |
| <p>2. 30th session of the International Law Commission (1978)
 - Replies of Governments to the Commission's questionnaire</p> | <p>- U.N. Doc. A/CN.4/314 (In Ybk, 1978, vII(1))</p> |
| <p>3. 31st session of the International Law Commission (1979)
 - Replies of Governments to the Commission's questionnaire</p> | <p>- U.N. Doc. A/CN.4/324 (in Ybk, 1979, vII(1))</p> |
| <p>4. 32nd session of the International Law Commission (1980)
 - Replies of Governments to the Commission's questionnaire</p> | <p>- U.N. Doc. A/CN.4/329 and Add.1 (in Ybk, 1980, vII(1))</p> |
| <p>5. 34th session of the International Law Commission (1982)
 - Replies of Governments to the Commission's questionnaire</p> | <p>- U.N. Doc. A/CN.4/352 and Add.1 (in Ybk , 1982, vII(1))</p> |
| <p>6. 45th session of the International Law Commission (1993)
 - Comments and observations received from Governments on the draft articles</p> | <p>- U.N. Doc. A/CN.4/447 and Add.1-5</p> |

G. Other

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| <p>1. 35th session of the International Law Commission (1983)
 - Note presented by Mr. Constantin Stavropoulos</p> | <p>- U.N. Doc. A/CN.4/L.353 (in Ybk, 1983, vII(1))</p> |
| <p>2. 46th session of the International Law Commission (1994)
 - Draft resolution adopted by the Drafting Committee</p> | <p>- U.N. Doc. A/CN.4/L.492 and Add. 1 (in Ybk, 1994, vI, 2356th mtg (24 June 1994))</p> |

H. Reports of the International Law Commission

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| <p>1. Report of the International Law Commission on the work of its twenty-third session, 26 April to 30 June 1971
 - Decided to include the topic in the Commission's general programme of work without prejudging the priority to be given to its study.</p> | <p>- ILC Report, A/8410/Rev.1 (A/26/10), 1971, chp. V(A), paras.119-122
 - Ybk, 1971, vII(1)</p> |
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- *Discussion in Plenary*: 1128th mtg (2 July 1971)
- Ybk, 1971, vI
2. Report of the International Law Commission on the work of its twenty-fourth session, 2 May to 7 July 1972
- ILC Report, A/8710/Rev.1 (A/27/10), 1972, chp. V(A), par.77
- Ybk, 1972, vII
- Concluded that the topic was of both substantial urgency and complexity, and requested the Secretariat to continue compiling material relating to the topic with specific reference to the problems of international watercourses.
3. Report of the International Law Commission on the work of its twenty-fifth session, 7 May to 13 July 1973
- ILC Report, A/9090/Rev.1 (A/28/10), 1973, chp. VI(A)(2), paras.144-150
- Ybk, 1973, vII
- Formal decision on the commencement of work on the topic should be taken after members have had an opportunity to review the Secretary-General's supplementary report expected before the 26th session.
4. Report of the International Law Commission on the work of its twenty-sixth session, 6 May to 26 July 1974
- ILC Report, A/9610/Rev.1 (A/29/10), 1974, chp. V, paras. 146-159
- Ybk. 1974, vII(1)
- The Commission set up a sub-committee to consider the question pursuant to Res. 3071 (XXVIII) of 30 November 1973. It adopted the report of the Sub-Committee, and appointed Mr. Richard D. Kearney as *Special Rapporteur* for the topic.
- *Discussion in Plenary*: 1297th mtg (22 July 1974)
- Ybk, 1974, vI
5. Report of the International Law Commission on the work of its twenty-seventh session, 5 May to 25 July 1975
- ILC Report, A/10010/Rev.1 (A/30/10), 1975, chp. VI(A), par.138
- Ybk, 1975, vII
- Pending the receipt of answers from Governments of Member States to a questionnaire circulated by the Secretary-General, the Commission did not consider the topic during the session.
6. Report of the International Law Commission on the work of its twenty-eighth session, 3 May to 23 July 1976
- ILC Report, A/31/10, 1976, chp. V, paras.106-166
- Ybk, 1976, vII(2)
- Decided that attention should be devoted to beginning the formulation of general principles applicable to legal aspects of the uses of the international watercourses.

- Decided that the question of determining the range of the term "international watercourses" need not be pursued at the outset of the work. - *Discussion in Plenary*: 1406th to 1409th mtgs (14 to 19 July 1976)
- Ybk, 1976, vI
7. Report of the International Law Commission on the work of its twenty-ninth session, 9 May to 29 July 1977
- ILC Report, A/32/10, 1977, chp. V(B), par.79 - Ybk, 1977, vII(2)
- Appointed Mr. Stephen M. Schwebel as *Special Rapporteur* for the topic.
8. Report of the International Law Commission on the work of its thirtieth session, 8 May to 28 July 1978
- ILC Report, A/33/10, 1978, chp. VIII(A), paras. 157-160
- Ybk, 1978, vII(2)
- The Commission took note of the presentation made by the *Special Rapporteur*.
- *Discussion in Plenary*: 1526th mtg (26 July 1978)
- Ybk, 1978, vI
9. Report of the International Law Commission on the work of its thirty-first session, 14 May to 3 August 1979
- ILC Report, A/34/10, 1979, chp. V, paras. 86-148
- Ybk, 1979, vII(2)
- The Commission considered and engaged in a general debate on the issues raised in the *Special Rapporteur's* report and on questions relating to the topic as a whole.
- *Discussion in Plenary*: 1554th to 1556th mtgs (18 to 20 June 1979), 1577th mtg (26 July 1979) and 1578th mtg (27 July 1979)
- Ybk, 1979, vI
10. Report of the International Law Commission on the work of its thirty-second session, 5 May to 25 July 1980
- ILC Report, A/35/10, 1980, chp. V, paras. 59-98
- Ybk, 1980, vII(2)
- The Commission provisionally adopted draft articles 1-5 and article X, with commentaries. It also decided to use the provisional working hypothesis recommended by the Drafting Committee as to the meaning of the term "international watercourse system".
- *Discussion in Plenary*: 1607th to 1612th mtgs (9 to 16 June 1980) and 1636th mtg (17 July 1980)
- Ybk, 1980, vI
11. Report of the International Law Commission on the work of its thirty-fourth session, 3 May to 23 July 1982
- ILC Report, A/37/10, 1982, chp. VII(A), paras.250-251
- Ybk, 1982, vII(1)
- The Commission appointed Mr. Jens

Evensen as *Special Rapporteur* for the topic.

12. Report of the International Law Commission on the work of its thirty-fifth session, 3 May to 22 July 1983
- Discussed the first report of the *Special Rapporteur*. Agreed that his outline could be taken as the basis for further work on the topic.
 - *Discussion in Plenary*: 1785th to 1794th mtgs (20 June to 1 July 1983)
- ILC Report, A/38/10, 1983, chp. VI, paras.191-260
- Ybk, 1983, vII(2)

-Ybk, 1983, vI
13. Report of the International Law Commission on the work of its thirty-sixth session, 7 May to 27 July 1984
- The Commission, after considering the *Special Rapporteur's* second report (its discussion was focused on draft articles 1 to 9 and questions related thereto), decided to refer draft articles 1 to 9 contained in the second report to the Drafting Committee. Owing to lack of time, the Committee was unable to consider those articles at the session.
 - *Discussion in Plenary*: 1831st and 1832nd mtgs (30 May and 1 June 1984), 1853rd to 1857th mtgs (3 to 9 July 1984), 1859th and 1860th mtgs (11 and 12 July 1984)
- ILC Report, A/39/10, chp. VI, paras.258-343
- Ybk, 1984, vII(2)

- Ybk, 1984, vI
14. Report of the International Law Commission on the work of its thirty-seventh session, 6 May to 26 July 1985
- Appointed Mr. Stephen C. McCaffrey *Special Rapporteur* upon the resignation of Mr. Jens Evenson. Considered the preliminary report of the new *Special Rapporteur*.
 - *Discussion in Plenary*: 1910th mtg (25 June 1985), and 1928th mtg (17 July 1985)
- ILC Report, A/40/10, 1985, chp. VII, paras.268-290
- Ybk, 1989, vII(2)

- Ybk, 1985, vI
15. Report of the International Law Commission on the work of its thirty-eighth session, 5 May to 11 July 1986
- Considered the second report of the *Special Rapporteur*.
 - *Discussion in Plenary*: 1976th to 1980th mtgs (26 June to 2 July 1986)
- ILC Report, A/41/10, 1986, chp. VII, paras.220-243
- Ybk, 1986, vII(2)

- Ybk, 1986, vI
16. Report of the International Law Commission on
- ILC Report, A/42/10, 1987, chp.

- the work of its thirty-ninth session, 4 May to 27 July 1987
- The Commission had before it the third report of the *Special Rapporteur*. It referred draft articles 10 to 15 to the Drafting Committee. The Commission approved the method followed by the Drafting Committee with regard to article 1 and the question of the use of the term "system", and provisionally adopted articles 2 to 7 with commentaries.
 - *Discussion in Plenary*: 2008th to 2014th mtgs (3 to 12 June 1987), 2028th to 2030th mtgs (7 to 9 July 1987), and 2033rd mtg (13 July 1987)
17. Report of the International Law Commission on the work of its fortieth session, 9 May to 29 July 1988
- The Commission had before it the fourth report submitted by the *Special Rapporteur*. It decided to refer draft articles 16 and 17 to the Drafting Committee. But the Committee was unable to consider these articles due to lack of time. However, the Committee did adopt a report on the draft articles previously referred to it, resulting in the Commission provisionally adopting articles 8 to 21, with commentaries.
 - *Discussion in Plenary*: 2050th to 2052nd mtgs (24 to 27 May 1988), 2062nd to 2076th mtgs (15 June to 8 July 1988)
18. Report of the International Law Commission on the work of its forty-first session, 2 May to 21 July 1989
- The Commission had before it the fifth report submitted by the *Special Rapporteur*. It referred draft articles 22 and 23 to the Drafting Committee.
 - *Discussion in Plenary*: 2123rd to 2126th mtgs (22 to 28 June 1989), and 2133rd mtg (7 July 1989))
19. Report of the International Law Commission on the work of its forty-second session, 1 May to 20 July 1990
- Referred draft articles 24 to 28, and 3 to 4 of annex I to the Drafting Committee. Provisionally adopted draft articles 22 to 27,
- III, paras.68-118
- Ybk, 1987, vII(2)
- Ybk, 1987, vI
- ILC Report, A/43/10, 1988, chp.III, paras.103-91
- Ybk, 1988, vII(2)
- Ybk, 1988, vI
- ILC Report, A/44/10, 1989, chp. VII, paras.614-685
- Ybk, 1989, vII(2)
- Ybk, 1989, vI
- ILC Report, A/45/10, 1990, chp. IV, paras.244-313
- Ybk, 1990, vII(2)

- with commentaries.
 - *Discussion in Plenary*: 2162nd to 2167th mtgs (23 May to 1 June 1990), 2187th and 2188th mtgs (5 and 6 July 1990) - Ybk, 1990, vI
20. Report of the International Law Commission on the work of its forty-third session, 29 April to 19 July 1991 - ILC Report, A/46/10, 1991, chp. III, paras.29-59
 - Ybk, 1991, vII(2)
- Referred articles [1][2] to the Drafting Committee. Adopted on first reading draft articles 2, 10, 26 to 33, with commentaries. It decided to transmit the complete set of draft articles through the Secretary-General to Governments of Member States for comments and observations.
 - *Discussion in Plenary*: 2213th to 2218th mtgs (23 May to 4 June 1991), 2228th to 2231st mtgs (21 to 27 June 1991) and 2237th mtg (9 July 1991) - Ybk, 1991, vI
21. Report of the International Law Commission on the work of its forty-fourth session, 4 May to 24 July 1992 - ILC Report, A/47/10, 1992, chp. V(A), paras.350-352
 - Ybk, 1992, vII(2)
- The Commission appointed Mr. Robert Rosenstock as *Special Rapporteur* for the topic.
 - *Discussion in Plenary*: 2292nd mtg (22 July 1992) - Ybk, 1992, vI
22. Report of the International Law Commission on the work of its forty-fifth session, 3 May to 23 July 1993 - ILC Report, A/48/10, 1993, chp. V, paras.336-416
 - Ybk, 1993, vII(2)
- The Commission considered the *Special Rapporteur's* first report and referred the 10 articles contained therein to the Drafting Committee for consideration in the light of discussion. The Commission took note of the report of the Drafting Committee containing the titles and texts of arts. 1 to 6 and 8 to 10, adopted on second reading by the Drafting Committee. The Commission decided to defer action on it until its next session pending the submission of commentaries.
 - *Discussion in Plenary*: 2309th mtg (18 June 1993), 2311th to 2314th mtgs (24 to 30 June 1993), 2316th mtg (6 July 1993) and 2322nd mtg (19 July 1993) - Ybk, 1993, vI
23. Report of the International Law Commission on - ILC Report, A/49/10, 1994, chp.

the work of its forty-sixth session, 2 May to 22 July 1994

III, paras. 210-221
- Ybk, 1994, vII(2)

- The Commission considered the *Special Rapporteur's* second report and referred the articles contained therein to the Drafting Committee. On the basis of the recommendations of the Drafting Committee, the Commission adopted on second reading a complete set of [draft articles on the topic and a draft resolution on transboundary confined groundwater](#). It also decided to recommend the draft articles and the resolution to the General Assembly, and to recommend the elaboration of a convention by the Assembly or by an international conference of plenipotentiaries on the basis of the draft articles.

- Ybk, 1994, vI

- *Discussion in Plenary*: 2334th to 2339th mtgs (9 to 17 May 1994), 2353rd to 2356th mtgs (21 to 24 June 1994), 2362nd mtg (8 July 1994), 2367th and 2368th mtgs (15 and 18 July 1994), and 2370th to 2372nd mtgs (19 to 20 July 1994)

I. General Assembly Action

Res. 2780 (XXVI) of 3 December 1971

- Recommended that the Commission should decide upon the priority to be given to the topic.

Res. 3071 (XXVIII) of 30 November 1973

- Recommended the establishment of a subcommittee.

Res. 3315 (XXIX) of 14 December 1974

- Recommended that the International Law Commission should continue the work on the topic, taking into account, *inter alia*, comments received from Member States on the question referred in the annex to Chapter V of the Commission's report (1974)

Res. 31/97 of 15 December 1976

- Recommended that the Commission should continue its work on the topic. It also urged member States that had not done so to submit their written comments on the subject.

Res. 33/139 of 19 December 1978

- Recommended that the Commission continue its work on the law of the non-navigational uses of international watercourses.

Res. 34/141 of 17 December 1979

- Recommended that the Commission continue its work taking into account the replies of Governments to the questionnaire prepared by the Commission and the views expressed on the topic in debates in the General Assembly.

Res. 35/163 of 15 December 1980

- Recommended that the Commission proceed with the preparation of draft articles, taking into account the replies to questionnaires addressed to Governments as well as information furnished by them.

Res. 46/55 of 9 December 1991

- Expressed its appreciation for the Commission's work on the completion of the provisional draft articles, and drew the attention of Governments to the importance of having their views submitted to the Commission.

Res.47/33 of 25 November 1992

- Urged Governments to present in writing their comments and observations by 1 January 1993.

Res.48/31 of 9 December 1993

- Welcomed the Commission's decision to endeavour to complete in 1994 the second reading of the draft articles on the law of the non-navigational uses of international watercourses.

J. Final Outcome

International Law Commission (46th session, 1994)

- The Commission decided to recommend the [draft articles adopted on second reading](#) to the General Assembly, and recommended the elaboration of a convention by the Assembly or by an international conference of

- ILC Report, A/49/10, 1994, chp. III(B), par.219
- Ybk, 1994, vII(2)

plenipotentiaries on the basis of the draft articles.

General Assembly

Res.49/51 of 9 December 1994

- Expressed its appreciation to the Commission for the adoption of final draft articles on the law of the non-navigational uses of international watercourses.

Res.49/52 of 9 December 1994

- Invited States to submit, not later than 1 July 1996, written comments and observations on the draft articles adopted by the Commission; Decided that, at the beginning of the fifty-first session of the Assembly, the Sixth Committee would convene as a working group of the whole, open to all States Members of the United Nations or members of specialized agencies, for three weeks from 7 to 25 October 1996, to elaborate a framework convention on the law of the non-navigational uses of international watercourses on the basis of the draft articles adopted by the Commission in the light of the written comments and observations of States and views expressed in the debate at the forty-ninth session.

Res.51/206 of 17 December 1996

- Took note of the report of the Working Group of the Whole (A/C.6/51/L.3), and decided to convene a second session of the Group, for a period of two weeks from 24 March to 4 April 1997, to elaborate a framework convention on the topic and to report to the Assembly.¹

[\(back\)](#) ¹. The [Convention on the Law of the Non-Navigational Uses of International Watercourses](#) was adopted by the General Assembly in resolution 51/229 of 21 May 1997.

APPENDIX C

1. Which local, state and federal institutions/agencies have legal jurisdiction and political power to make decisions regarding this specific place, the Tijuana River Watershed?

Local and Municipal Agencies

At the local level, a number of San Diego County as well as San Diego and Tijuana city agencies are involved in border environmental issues. In addition, the cities of San Diego and Tijuana signed a 1993 memorandum of understanding to create a binational advisory board, which includes an environmental advisory committee. There is also ongoing city-to city cooperation on air pollution through the San Diego-Tijuana Clean Air Alliance.

Table Two: Local and Regional Government

San Diego County	
Department of Environmental Health	
Hazardous Materials Management Division	
Department of Health Services	
Department of Public Works	
San Diego County Water Authority	
San Diego Association of Governments (not a county agency per se)	
• Committee on Binational Regional Opportunities	
	Tijuana (and/or Tecate)
	Dirección de Planeación del Desarrollo y Ecología
	Dirección Municipal de Ecología
	Instituto Municipal de Planeación (City of Tijuana's Planning Department)
	Department of Public Works (CESPT)
City of San Diego	
Environmental Services Department	
Metropolitan Wastewater Department	
Fire Department's Hazardous Materials Emergency Response Team	

State Agencies

The two leading state agencies are:

California Environmental Protection Agency (Cal-EPA)
Baja California's Dirección General de Ecología (DGE) (Ecology Department)

The two states have coordinated some of their border environmental infrastructure planning, at least at the needs assessment level, through CalBECC (California Border Environmental Cooperation Committee). In addition, California has a number of agencies that in some manner deal with border environmental issues:

- California Air Resources Board
- California Coastal Commission
- Department of Commerce.
- Department of Energy
- Office of Environmental Health Hazard Assessment
- Department of Fish and Game
- Department of Health Services
- Department of Water Resources
- California Integrated Waste Management Board
- Department of Pesticide Regulation
- State Water Resources Control Board
- Department of Toxic Substances Control
- Department of Transportation

Federal Agencies

The federal aspects of binational cooperation in the management of protected natural areas are set forth in more detail in "Adjacent US-Mexico Border Natural Protected Areas: Protection, Management and Cooperation"¹

At present, Mexico and the US have well-developed policies regarding protected natural areas, particularly in their national parks and other officially designated natural sites. The policy-making in this area has not always been coordinated at the binational level, at the national level or at the state level. Often different agencies have developed parts of such policies, however, due to limited mandates or internally conflicted mandates; they cannot always define a comprehensive vision of protection for natural areas.²

The two federal lead agencies on border environmental issues are:

U.S. Environmental Protection Agency (EPA)

Mexico's Secretaría de Medio Ambiente, y Recursos Naturales (SEMARNAT)

However, technically they must work through the US Department of State and the Mexican Ministry of Foreign Relations. In addition to the lead agencies, there are a number of other U.S. and Mexican federal agencies involved in border environmental issues:

¹ Spalding, Mark and Johanna Salazar (1999) this paper was presented as part of a Center for US-Mexican Studies conference on The Environment of Greater Mexico: History, Culture, Economy, And Politics in March 1999.

² Spalding and Salazar p. 1.

Table Three: Federal Government

United States	Mexico
Attorney General	Environmental Attorney General for the Environment (part of SEMARNAT)
Department of Agriculture • U.S. Soil Conservation Service	Secretariat of Agriculture
Department of Commerce • National Oceanographic and Atmospheric Administration (Tijuana River National Estuarine Research Reserve)	
Department of Defense	(Mexico's Navy has been involved in some water quality monitoring in the border region)
Department of Energy	Secretariat of Energy
Department of Health and Human Services	Secretariat of Health
Department of Housing and Urban Development	
Department of the Interior	National Ecology Institute (natural resources generally and Mexico's National Water Commission are part of SEMARNAT)
	Mexican Institute of Water Technology (IMTA)
Department of the Treasury	Secretariat of the Treasury
U.S. Environmental Protection Agency	Secretariat of Environment and Natural Resources (SEMARNAT) • Consejos de Cuencas
U.S. Army Corps of Engineers, Bureau of Reclamation	

Table Four: Federal binational agreements between the United States and Mexico relevant to protected areas' management

Year	Agreement
1944	Treaty Relating to the Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande
1966	La Comisión para el Desarrollo Fronterizo y la Amistad (CODEF) was established (It dissolved less than one year later)
1983	The Agreement on Cooperation for the Protection and Improvement of the Environment in the Border Area (the La Paz Agreement) is signed
1984	USFWS and SEDESOL sign an accord for cooperation in wildlife conservation

1988	Memorandum of Understanding on Cooperation in Management and Protection of National Parks and Other Protected Natural and Cultural Heritage Sites (between USFWS and SEDUE)
1992	Release of the Integrated Border Environment Program (IBEP) 1992-1994
1993	US and Mexico agree to conduct a joint field study of the Big Bend National Park
1994	NAFTA environmental side agreement (the North American Agreement on Environmental Cooperation)
1994	Memorandum of Understanding between the US National Park Service and the Mexican National Institute of Ecology
1995	Letter of Intent signed by the Dept of Interior and <i>counterpart</i> to work together in protected areas management
1995	Memorandum of Understanding Concerning Scientific and Technical Cooperation on Biological Data and Information
1996	USGS and INEGI sign agreement to cooperatively acquire compatible aerial photography for the entire border region
1996	Border XXI program (building on IBEP)
1996	Memorandum of Understanding to Establish the Canada/Mexico/United States Trilateral Committee for Wildlife, Plants and Ecosystem Conservation and Management
1997	Letter of Intent to Cooperate on Border Region Protected Areas signed

This table from page 8 of Spalding and Salazar "Adjacent US-Mexico Border Natural Protected Areas: Protection, Management and Cooperation" (1999)

Indian Tribes

Tribal natural resources are considered under U.S. federal law and policy to be the property of the Tribes. In the contiguous United States, most Indian people live on or near Reservations that are held by the United States in trust for the Tribes. This trust land, although federally owned and ultimately subject to federal law, is not public land and is subject to different law and policy, although it may often be checkerboarded or abutting public land controlled by a federal agency such as the National Park Service, U.S. Forest Service or Bureau of Land Management. Of critical significance are the facts that Tribal governments are the primary managers of Tribal trust land and Tribal natural resources located both on and off current Reservations; and that all federal agencies and departments must consult with Indian Tribes on a government-to-government basis before taking any action which affects Tribal members, lands or other resources.³

In Mexico, Tribes do not have the same recognition as in the U.S. Officially, only those persons who do not speak Spanish are considered to be indigenous. Tribes view this differently and are currently seeking autonomy in some form. However, at present Indians and Indian land in Baja California is governed by federal, state and local environmental laws.

³ Tribal natural resources attorney and consultant Marta Burg provided this information.

The following is a list of the Tribes in the San Diego area. The border splits some of these Tribes' traditional lands and there thus remain communities affiliated with the same Tribe in Baja California.

Table Five: California Tribes⁴

Tribal Affiliation	Reservation
Kumeyaay (Diegueno)	Barona
	Campo
	Capitan Grande
	Cuyapaipe
	Inaja-Cosmit
	Jamul Indian Village
	La Posta
	Manzanita
	Mesa Grande
	San Pasqual
	Santa Ysabel
	Sycuan
	Viejas
Luiseno	
	La Jolla
	Pala
	Pechanga
	Pauma
	Rincon
Cahuilla	
	Los Coyotes
	Torres Martinez

Binational and Trinational institutions

The environmental administration and regulation in the border region is a confusing web of international, federal, tribal, state, and local agencies and jurisdictions. It is often not easy to determine which agency is responsible for which environmental problems. Two very different political systems meet at the border. Mexico is highly centralized and thus there are few direct governmental and administrative counterparts across the border.⁵ To make matters worse, transborder cooperation is not always a high priority of San Diego. As we can see from the sections above, there are many government actors in the border region: US and Mexican Federal Agencies, Tribal Governments, State Agencies, Local and Municipal Agencies in the Border Region. This is not to mention the non-governmental organizations, the Academic sector and the

⁴ This table is drawn from an unpublished manuscript by Marta Burg. A copy is on file with the author.

⁵ Mexico has recently begun a slow, painful process of decentralization.

Private Sector. While all these other actors are important, Table Six focuses on binational and trinational institutions that may bring all these actors together. In a previous multi-year study, I evaluated each of these institutions on the basis of the strengths and weaknesses of each one, especially as related to the actual implementation of sustainable development.⁶ In short, the IBWC, the La Paz Agreement, and the IBEP fall short of the goals of sustainable development, partly because they pre-date its common use. While the GNEB has great unrealized potential to be the multi-stakeholder body for the border region, I identified more overall positive outcomes for the CEC, BECC/NADBank and BXXI. The NAFTA meanwhile included the concept of sustainable development in its preamble, but does little else. The problem now is that, as noted above, BXXI has expired, BECC/NADBank has been restructured for the worse (relative to sustainable development).

Table Six: Binational and Trinational Institutions

Institution and Date	Description
The International Boundary and Water Commission (IBWC) 1944	The principle binational agency with authority over territorial limits, water allocation, wastewater treatment, sanitation, and water quality. “The government agency whose responsibility comes closest to implementing a binational watershed management plan is the International Boundary and Water Commission.” ⁷
The La Paz Agreement 1983	Established a framework for cooperation on specific environmental pollution problems. Formal workgroups, comprised of federally appointed governmental and academic experts, target their policy recommendations toward water, air, contingency planning and emergency response, hazardous waste, enforcement cooperation, and pollution prevention.
Integrated Border Environment Program (IBEP) 1992-1994	Proposed strengthening enforcement of environmental laws, increased cooperative planning, completion of expansion of wastewater treatment facilities, and the development of a computer tracking system on the transboundary movement of hazardous wastes.

⁶ See, Spalding, Mark “The NAFTA Environmental Institutions and Sustainable Development on the U.S.-Mexico Border” chapter for Herzog, Larry (Ed.) *Shared Space: Rethinking the U.S. Mexico Border Environment* published by the Regents of the University of California (2000)

⁷ IRSC, White Paper: The Tijuana River Watershed (September 16, 2002)

<p>Good Neighbor Environment Board (GNEB) 1992</p>	<p>Advises the President and the Congress concerning environmental and infrastructure issues and needs within the states contiguous to Mexico.</p>
<p>North American Free Trade Agreement (NAFTA) 1994</p>	<p>The NAFTA is the first trade agreement which contains provisions to deal with environmental issues which arise in the context of trade relations and disputes: NAFTA protects certain Multilateral Environmental Agreements from trade challenge (art. 104). NAFTA prohibits reducing environmental standards to attract investment (arts. 104, 906(2), and 1114). NAFTA sets general, multilateral rules on Sanitary and Phytosanitary Measures (SPSs) and other Standards Related Measures (SRMs) (arts. 712, 902 and 904). NAFTA promotes the upward harmonization of environmental policies and standards (arts. 713, 714, 905 and 906). NAFTA provides for improved consideration of environmental issues in its trade dispute resolution procedures (arts. 723 and 914).</p>
<p>The Commission for Environmental Cooperation (CEC) 1994</p>	<p>The CEC is a trinational organization whose members are Canada, Mexico and the United States, created under the North American Agreement for Environmental Cooperation (NAAEC) to address regional environmental concerns, help prevent potential trade and environmental conflicts and to promote the effective enforcement of environmental law.</p>
<p>The Border Environmental Cooperation Commission (BECC) 1994</p>	<p>Created to assist border communities and other sponsors in developing and implementing environmental infrastructure projects, and to certify projects for financing consideration by the North American Development Bank or other sources.</p>
<p>The North American Development Bank (NADBank) 1994</p>	<p>Capitalized in equal shares by the United States and Mexico to provide \$3 billion in new financing to supplement existing sources of funds and leverage the expanded participation of private capital. The BECC/NADBank</p>

	institutions are limited to three types of environmental infrastructure development: water supply and treatment, waste water treatment and disposal, and solid municipal waste [and related matters].
The Border XXI Program 1996	A binational effort which brings together the diverse US and Mexican federal entities responsible for the shared border environment to work cooperatively toward sustainable development through protection of human health and the environment, and proper management of natural resources in both countries. It is the follow-on to the IBEP.

2. Other Actors

Academic Institutions

CICESE (Centro de Investigación Científica y de Educación Superior de Ensenada)
San Diego State University
University of California, San Diego
University of San Diego
El Colegio de la Frontera Norte
Universidad Autónoma de Baja California

ENGOS

For the US side, the land conservancy players and legal tools are well developed. In fact, because much of the land contemplated for the binational protected area is already in Federal control much can be easily protected. A local land conservancy can even be developed for the region using traditional tools of conservation easements, sale of development rights or outright land purchases to prevent excess development.

For Mexico, Pronatura has done a great job in creating a detailed binder (I have a copy) on the legal tools for such land conservation in Mexico (some of which have already survived testing in court). Within Baja California, there are a number of land conservancies and/or active conservation organizations that might play a role:

- Conservation International (some limited role in land conservation)
- The Nature Conservancy-Mexico, is a good possibility if it will agree this is an important place to protect
- Pronatura Noroeste-Mar de Cortés itself is a good possibility but is slow to act and will run away if there is controversy (but I guess I could say that about TNC as well).
- Pro Peninsula (I am on the Board of Directors), not really a land conservancy but may be very helpful.

- Terra Peninsular (I am on the Board of Directors) has some money and is leaving popular coastal sites to others, but it is currently looking for a new executive director. I believe you may have already had communications with this organization.
- Wildcoast (Serge Dedina), probably overstretched right now, but could pull something off if it was given the cash. Ambos Tecate is not a coastal issue and it is not within Wildcoast's four priority areas.
- National Wildlife Federation
- Niparaja (Enrique Hambelton) is also overstretched right now. It is concentrating on acquiring all the land to protect the Sierra Agua Historic Trail region south of Loreto.
- San Diego Natural History Museum
- World Wildlife Fund

Funders

In late March 2002 a meeting of Baja California funders was hosted by Packard Foundation. The meeting was an opportunity to hear about the potential for supporting collaboration on funding by Packard, Homeland, Sandler, International Community Foundation, San Diego Foundation, and the Walton Family Foundation. As such it demonstrated the grand interest the Peninsula of Baja California holds. This said, the border region was not high on the list of priority areas. I think that Suzanne's White Paper (or an executive summary of it) might convince these funders (and others) to look at the opportunities to prevent threats from excess development in our region. Since that meeting, I have been trying to create a comprehensive list of funders with grantmaking in Baja California:

- Fundación La Puerta
- Fondo Mexicano para la conservación de la naturaleza (Mexican Nature Conservation Fund)
- The William and Flora Hewlett Foundation
- Homeland Foundation
- International Community Foundation (ICF)
- Moore Family Foundation
- The David and Lucille Packard Foundation
- Sandler Family Supporting Foundation

The second meeting of this group was held during the first week of March 2003.