

Lecture №5

International water law: linkages between water law and nexus

approach

*International Water Law.*

11 November 2021

*Interconnection between water law  
and the promotion of the NEXUS  
approach.*

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# INTRODUCTION: SDGS NEXUS CONCEPT



Indicator 6.5.1 Implement IWRM

Indicator 6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation

- Existence of a joint body
- Regular, formal communication between riparian countries (at least once a year)
- Joint or coordinated management plans or objectives
- Regular exchange of data and information (at least once a year)

Goal: "By 2030, implement IWRM at all levels, including transboundary cooperation as appropriate"

## WATER



## WATER BIODIVERSITY



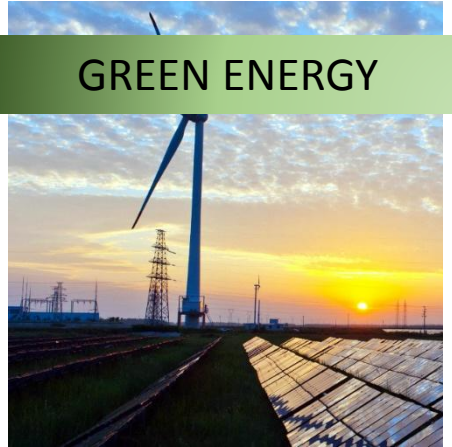
## FLOODS



## CLIMATE CHANGE



## GREEN ENERGY



- Very high dependence on hydropower to meet electricity and heating demand upstream (low resilience in dry years)
- Hydropower allows for extension of power generation through integration of other renewable energy sources

- Highly agricultural basin (wheat, cotton, cattle breeding, aquaculture)
- Large and complex irrigation schemes (great water losses)
- Traditionally grown cotton is highly water intensive but diversification is reducing its share of agricultural output
- Soil salinization due in particular to poor drainage and waterlogging

## WETLANDS



- Wastewater treatment commonly lacking or inadequate

- Soil degradation causes water quality degradation, erosion and sedimentation
- Diffuse pollution from irrigated agriculture
- Water reservoirs can balance water needs between seasons and years

## DESERTIFICATION

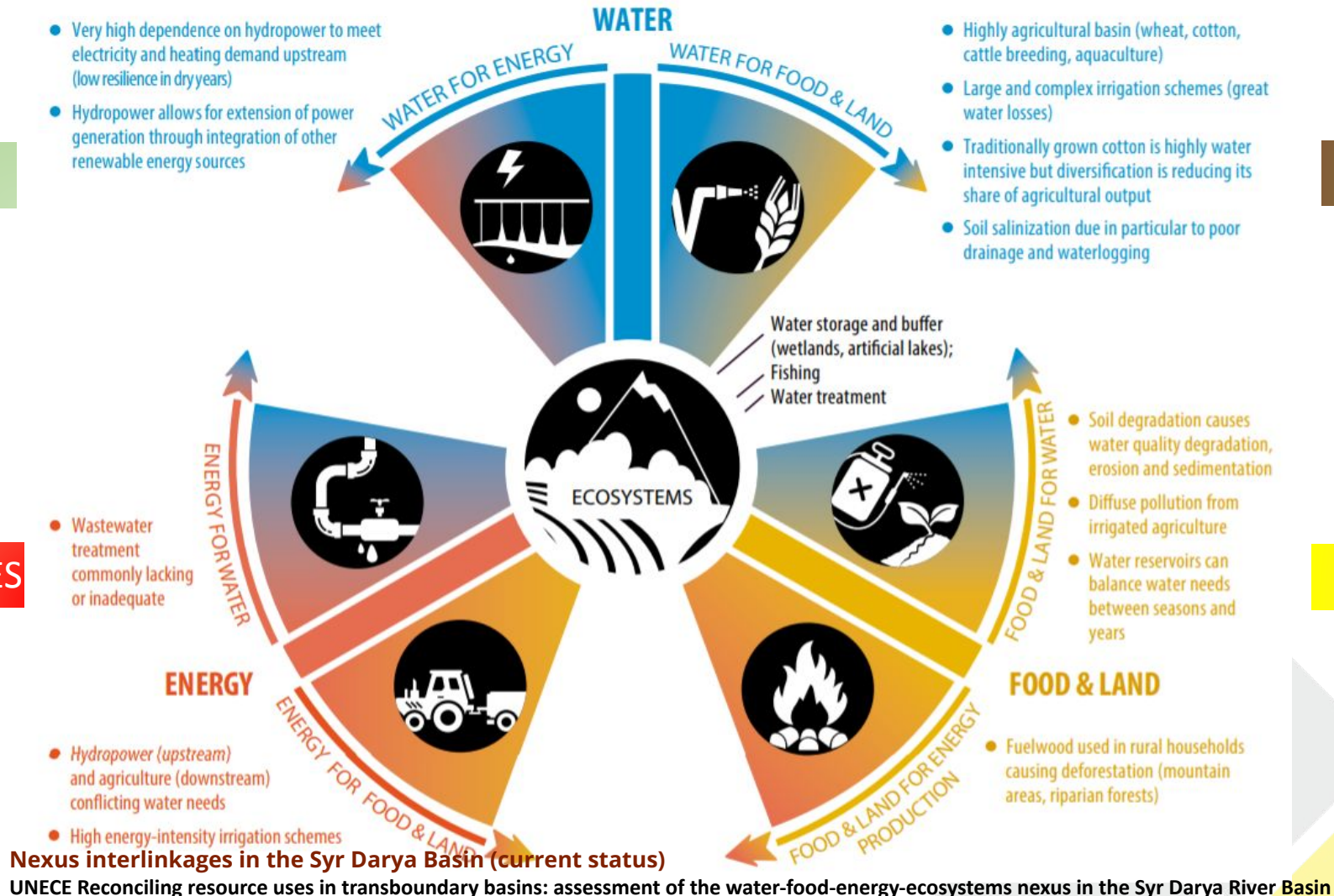


## HAZARDOUS SUBSTANCES



- Hydropower (upstream) and agriculture (downstream) conflicting water needs
- High energy-intensity irrigation schemes

- Fuelwood used in rural households causing deforestation (mountain areas, riparian forests)



# WATER LAW WITHIN A CONTEXT



ENVIRONMENT	<b>Convention</b>	<b>Parties globally</b>
	Convention on biological diversity, 1992	196
	Convention on Climate Change (Paris Agreement), 1992	196
	Convention on desertification, 1994	197
	Convention on Wetlands, 1971 (Ramsar Convention)	171
WATER	<b>Convention</b>	<b>Parties globally</b>
	Convention on the Protection and Use of Transboundary Watercourses and International Lakes, 1992	47
	Convention on the Law of the Non-Navigational Uses of International Watercourses, 1997	37
ENERGY	<b>Convention</b>	<b>Parties globally</b>
	The International Energy Charter, 2015	89
LAND/SOIL	<b>Convention</b>	<b>Parties globally</b>
	The implicit object of multilateral environmental agreements	

# TIME FRAME OF DEVELOPMENT OF THE LAW OF INTERNATIONAL WATERCOURSES AND AQUIFERS

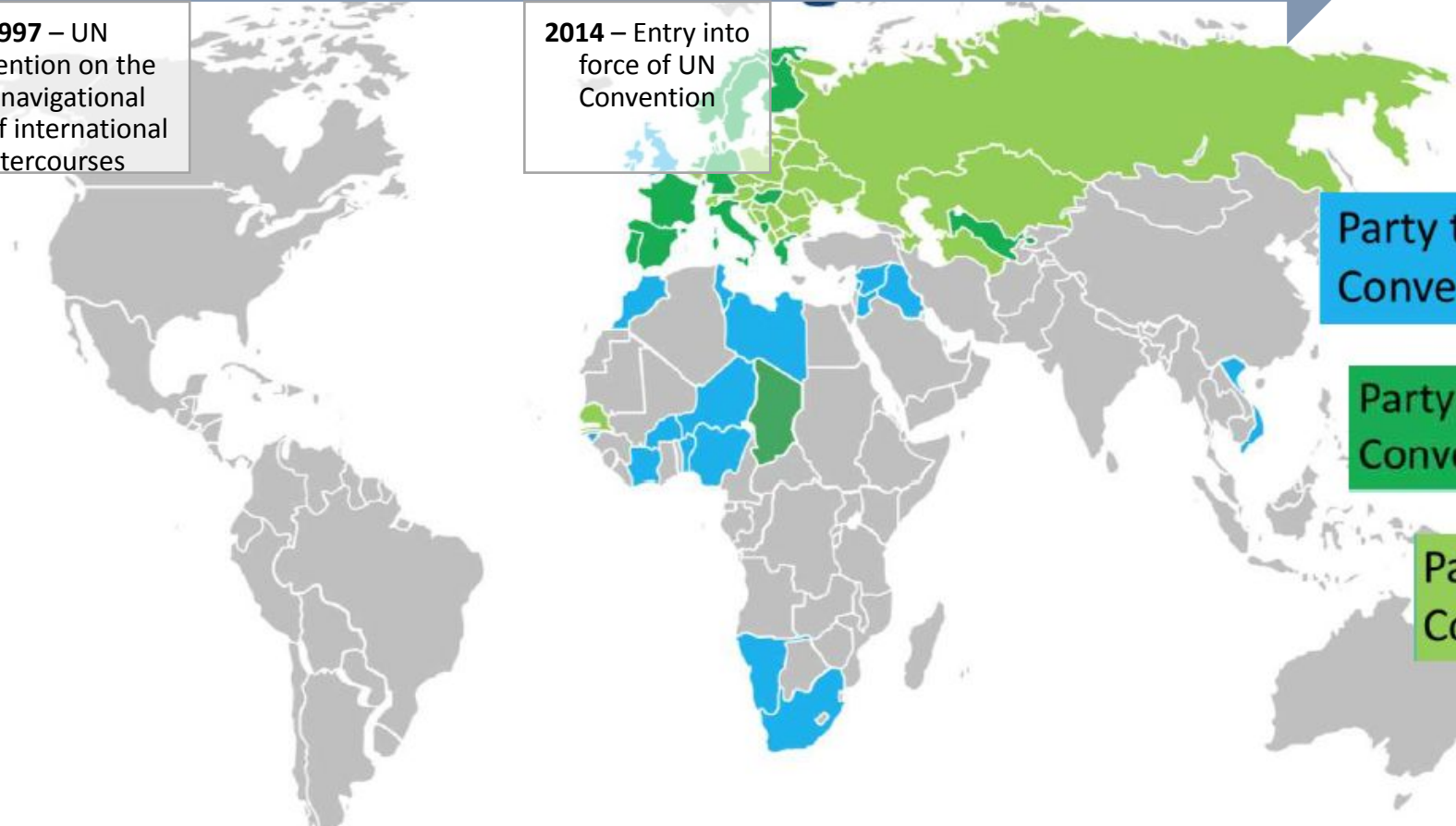
**1992 – 1996** / UNECE Helsinki Convention on Transboundary Watercourses & Lakes

**2012** – UNECE Model Provisions on Transboundary Groundwaters

**2016** – UNECE Helsinki Convention open to accession by non-UNECE member countries (UNECE Convention goes global)

**1997** – UN Convention on the non-navigational uses of international watercourses

**2014** – Entry into force of UN Convention



Party to the Watercourses Convention (1997)

Party to both global water Conventions

Party to the Water Convention (1992)



DEUTSCH  
KASACHISCHE  
UNIVERSITÄT

# DUTY TO COOPERATE UNDER GENERAL INTERNATIONAL LAW



Limits to national sovereignty over natural resources



The principle of “good neighborly relations”



Duty to cooperate in good faith

# PRINCIPLES OF IWL ALLOWING FOR NEXUS APPROACH

Reasonable equitable use of water

No-harm principle

Principle of cooperation

Protection of environment



# MECHANISMS OF COOPERATION UNDER IWL



Information exchange

Notification

Consultation

Dispute settlement

Institutional cooperation



# Institutional arrangements (basin organizations)

Basin organization is any formal or informal entity that manages water resources at the basin scale and are mandated to facilitate interstate cooperation

- (River Basin Organizations, RBO)

RBOs role in implementation of SDG

- (see 6.5.2 on operational arrangements)

RBOs role in implementation of IWL

- (implementation of legal rules, principles and mechanisms, such as determining what is equitable and reasonable, data exchange, decision support, joint EIA, stakeholder engagement, and dispute settlement)

RBOs regulated in IWL

- (no customary law obligation for states to participate in RBOs, but reflected indirectly the state's duty to cooperate)

Forms: statutory decision making and/or advisory bodies, management bodies, development entities and regulatory bodies.

Types: basin commissions or authorities, basin director rights or agencies, basin associations.

Functions: 1) monitoring, investigation, coordination of the regulation and conflict resolution; 2) planning and financing; 3) developing and management

# DISPUTE RESOLUTION IN IWL

If conflict of uses/ interpretation/ implementation of treaty

Ex: Danube (Slov-Hu); Uruguay River (Ur-Arg over pulp mil); Chenab River Hydropowerstation by India-Pak Kasilili/Sedudu Island on Chobe River

Namibia&Botswana Costa Rica and Nicaragua over San Juan River

disagreement  
on point of  
law or fact, a  
conflict of  
legal views or  
of interest  
between the  
parties (PCIJ 1951  
Mavromatis Palestine  
Concessions)

- Peaceful

- Diplomatic means:



- 1) negotiations (parties only);
- 2) good offices mediation  
conciliation (third party but  
joint solutions).

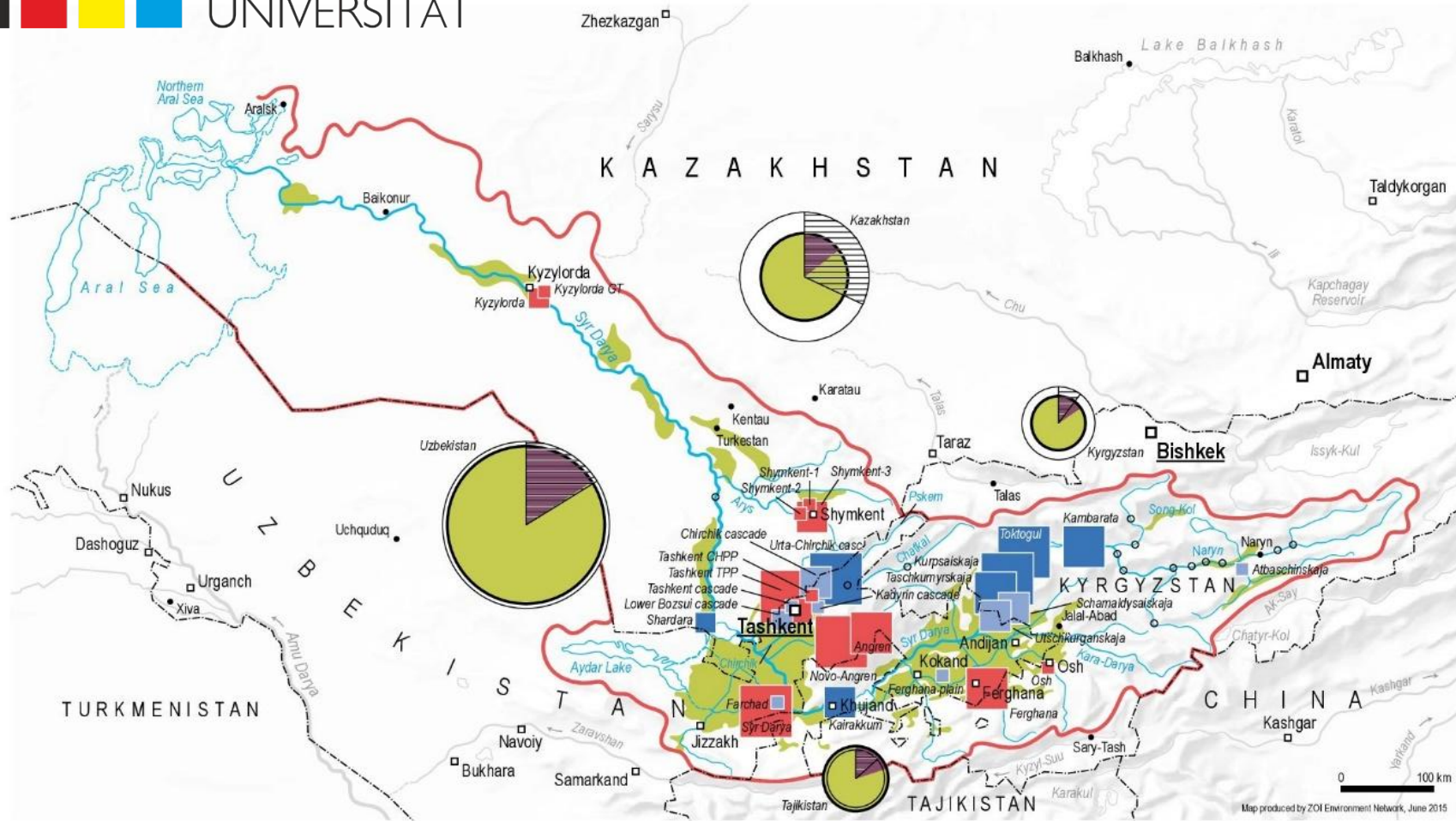
- Judicial means

(binding resolution by a third party):



- 1) arbitration;
- 2) court.

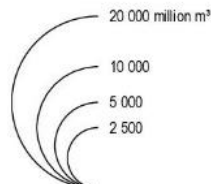
- Joint watercourse institutions



- Power plant facilities**
- Thermal power plant (coal/oil/gas)
  - Hydro power plant with reservoir
  - Run-of-river hydro power plant
  - Projected hydro power plant

- Installed capacity (MW)**
- > 500 MW
  - 250 - 500 MW
  - 100 - 250 MW
  - 50 - 100 MW
  - < 50 MW

- Water withdrawal**
- 2013 Agriculture Public supply
- 1984 Agriculture Public supply
- Irrigated areas



Sources: Central Asia Regional Economic Cooperation: Power Sector Regional Master Plan. Asian Development Bank (ADB), 2012 (<http://www.adb.org/sites/default/files/project-document/74195/43549-012-reg-tac-01.pdf>); Global Map of Irrigation Areas, University Bonn, FAO (<http://www.fao.org/tr/tr/2/a/irrigationmap/index10.stm>); The Scheme of Complex Water Resources Use and Protection of the Syrdarya River Basin, approved by the Protocol of the Scientific and Technical Council of the Ministry of Water Resources Management of the USSR No 413 (29 February 1984), Database CAWATER.info. SIC ICWC 2013. Data collected from National Water resources authorities and aggregated by provinces within the Syrdarya river basin.

**NEXUS ELEMENTS IN THE SYR DARYA BASIN**  
Distribution of selected elements relevant to the nexus: water bodies, irrigated areas, power plants; water withdrawals for agriculture; and water supply.

ENVIRONMENT	Convention	Parties globally	Afghanistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
	Convention on biological diversity, 1992	196	+	+	+	+	+	+
	Convention on Climate Change (Paris Agreement), 1992	196	+	+	+	+	+	+
	Convention on desertification, 1994	197	+	+	+	+	+	+
	Convention on Wetlands, 1971 (Ramsar Convention)	171	-	+	+	+	+	+
WATER	Convention	Parties globally	Afghanistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
	Convention on the Protection and Use of Transboundary Watercourses and International Lakes, 1992	47	-	+	-	-	+	+
	Convention on the Law of the Non-Navigational Uses of International Watercourses, 1997	37	-	-	-	-	-	+
ENERGY	Convention	Parties globally	Afghanistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
	The International Energy Charter, 2015	89	+	+	+	-	+	+
LAND/OIL	Convention	Parties globally	Afghanistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
	The implicit object of multilateral environmental agreements							

## REGIONAL AGREEMENTS (UNECE & CIS)

Convention name	Afgh	Kz	Kg	Tj	Tm	Uz
1991 UNECE Espoo	-	+	+	S	-	-
1992 UNECE Watercourses	-	+	-	-	+	+
1992 UNECE industrial accidents	-	+	-	-	-	-
1998 UNECE Aarhus	-	+	+	+	+	-
1992 CIS interaction in the field of ecology	-	+	+	+	+	+
1998 CIS on transboundary watercourses	-	S	-	+	-	-
1998 CIS Information Cooperation	-	+	+	+	-	-

## REGIONAL AGREEMENTS IN CA

Convention name	Kz	Kg	Tj	Tm	Uz
1992 Almaty Agreement	+	+	+	+	+
1993 Kyzylorda Agreement	+	+	+	+	+
1996 Agreement on Water Use	-	-	-	+	+
1996 Agreement on on Use of Water and Energy Resources	+	+	-	-	+
1998 Syr Darya Agreement	+	+	+	-	+
1998 Agreement on Cooperation in the Area of Environment and Rational Nature Use	+	+	-	-	+
1999 Agreement on the Parallel Operation of the Energy Systems of Central Asia	+	+	+	-	+
1999 Agreement on Cooperation in the Sphere of Hydromet	+	+	+	-	+
1999 The Agreement about the status of IFAS and its organizations	+	+	+	+	+
2006 Framework Convention on Environmental Protection for Sustainable Development in CA	-	S	S	S	-

# NON-BINDING DECLARATIONS

1992

1995

1999

2001

2002

2009



## CA legal cooperation on Water & Energy

“Strengthening friendly and good neighborly relations, establishing cooperation and mutual support between the Parties meet the traditional interests of the Central Asian nations” and “important to set favorable conditions for the development of market relations between the economic entities, and create an integrated electricity market in the future.”

**Agreement between the Governments of Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan on the Parallel Operation of the Energy Systems of Central Asia, the June 17, 1999**

“Benefits derived from the joint operation of the reservoirs of the Naryn-Syr Darya Cascade, through a multi-year flow regulation and flood control measures, including the use of water for irrigation and power generation,” and

“a joint and comprehensive use of the water and energy resources of the Syr Darya basin must be implemented with regards to the environmental safety of the region.”

**Agreement Between the Governments of Kazakhstan, Kyrgyzstan, and Uzbekistan on the Use of Water and Energy Resources of the Syr Darya Basin, the March 17, 1998**

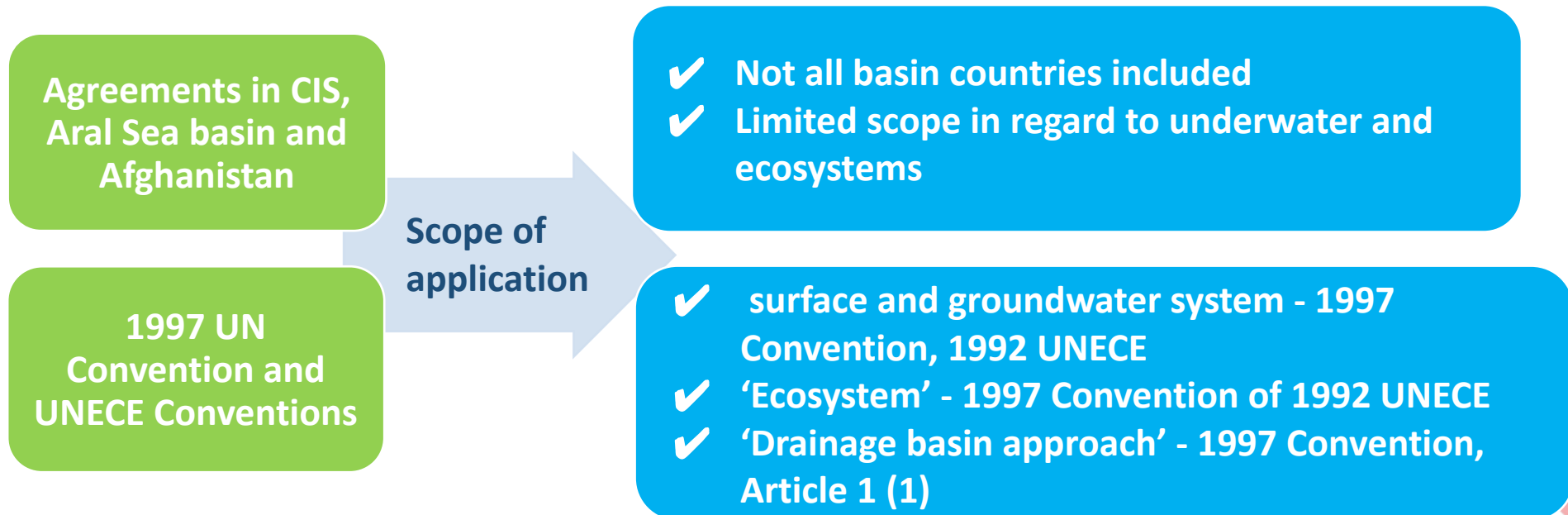
Concept of “benefit sharing” embedded or principle of equitable and reasonable use to reconcile competing interests in Syr Dariya basin

# SCOPE OF AGREEMENTS ON TRANSBOUNDARY RIVERS IN CENTRAL ASIA

- Non-inclusion of Afghanistan, only in Soviet-Afghanistan treaties
- Mainly bilateral (not all countries of the basin involved)
- Limited thematic scope (energy, environment is missing)

- 1998 Syr Darya Agreement

- 2006 Convention on Sustainable Development in Central Asia (not in force)



# EXCHANGE OF INFORMATION

Agreements in CIS,  
Aral Sea basin and  
Afghanistan

Regular exchange of  
information

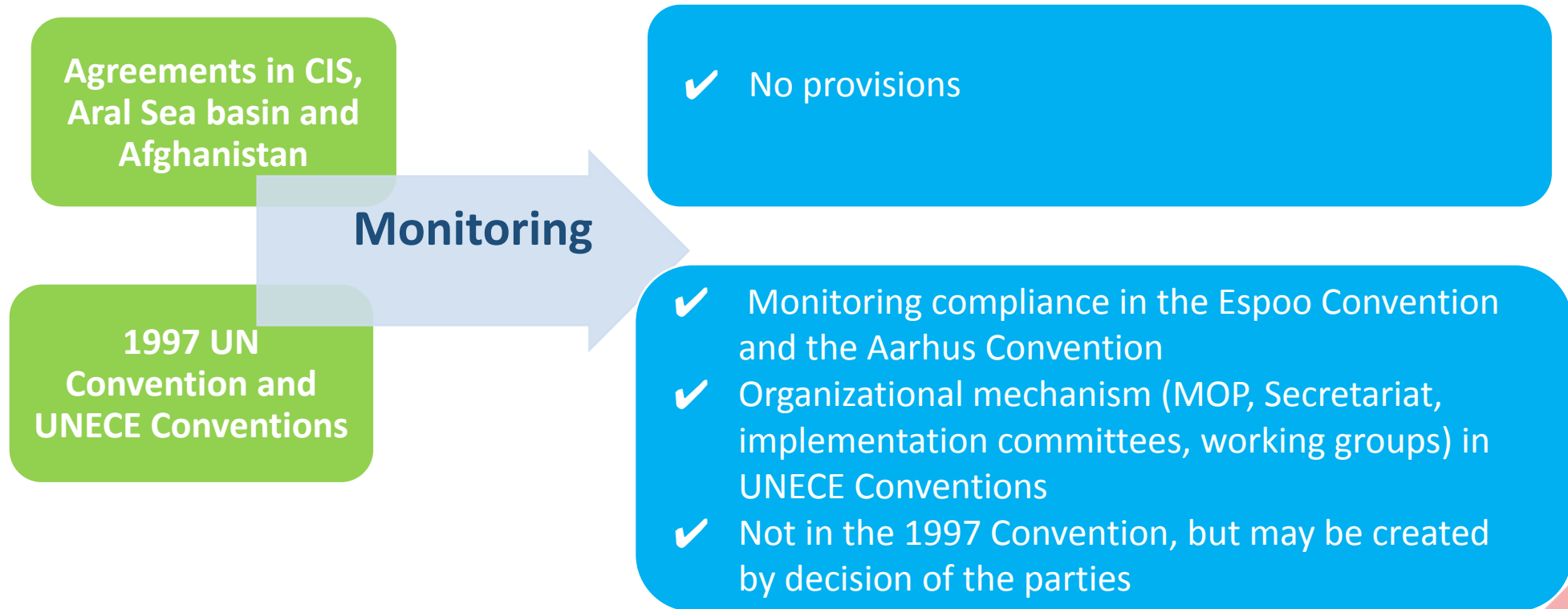
1997 UN  
Convention and  
UNECE Conventions

- ✓ Facilitate the exchange of information, not ensure it
- ✓ The scope of the exchange is extensive, the content of the exchange is not spelled out

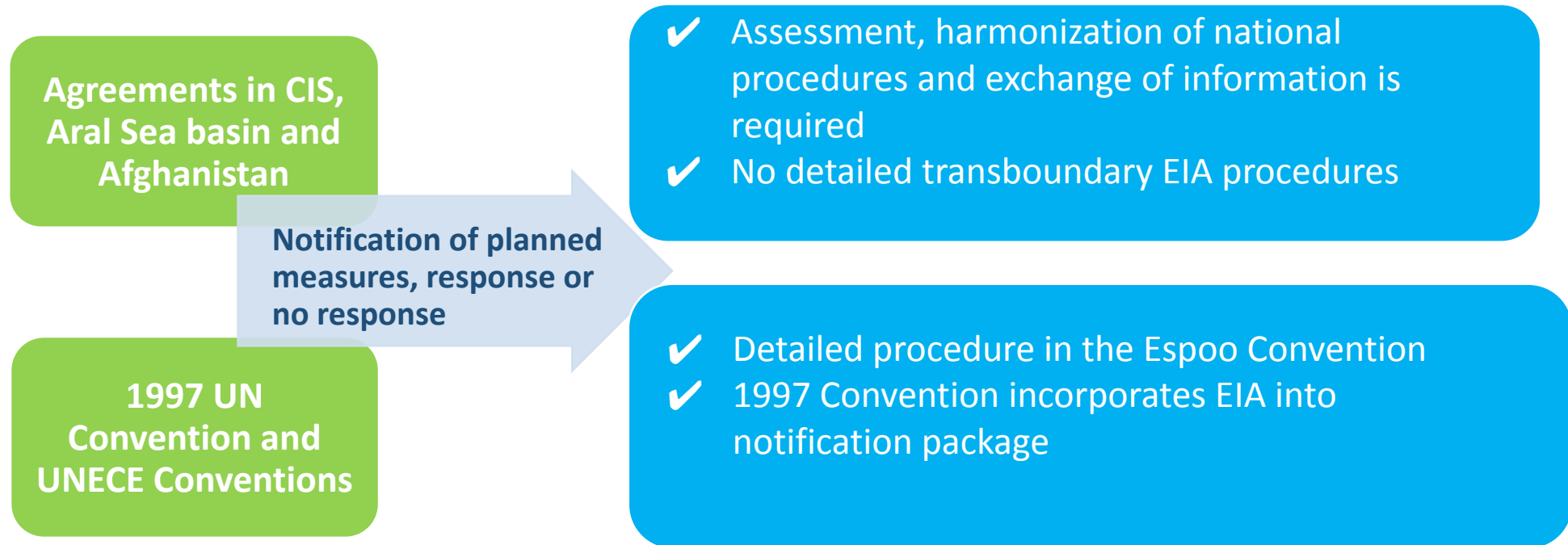
- ✓ Exchange obligations in the 1997 UNECE Convention
- ✓ The basis for developing a more specific set of data and information for sharing

- ✓ Article 2 and 3, the 1998 CIS Agreement on Transboundary Waters;
- ✓ Article 5, the 1992 Almaty Agreement;
- ✓ Article 17, the 1958 Soviet-Afghan Frontier Agreement;
- ✓ Articles 1 and 3, the 1998 CIS Informational Cooperation Agreement;
- ✓ Article 3, the 2011 Sino-Kazakhstani Agreement)

# MONITORING



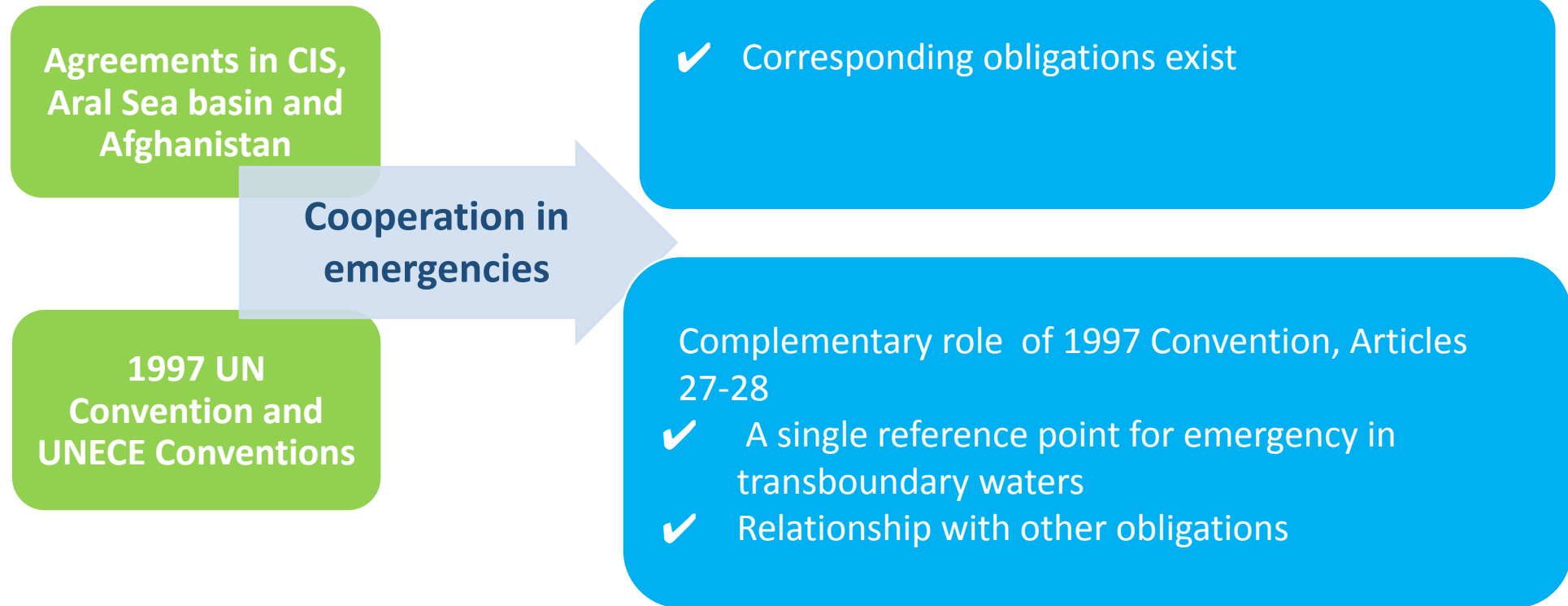
# PRIOR NOTIFICATION



# ENVIRONMENTAL IMPACT ASSESSMENT



# EMERGENCY COOPERATION



# DISPUTE SETTLEMENT

Agreements in CIS,  
Aral Sea basin and  
Afghanistan

Dispute settlement

1997 UN  
Convention and  
UNECE Conventions

✓ No detailed provisions

- ✓ A number of tools, including the innovative fact-finding mechanism of the commission - the 1997 Convention
- ✓ Implementation mechanism under implementation in the ECE Convention 1992



# GOVERNANCE STRUCTURES AND INSTITUTIONS

<b>Regional level</b>	<b>Near Aral Sea communities and environmental rehabilitation efforts</b>	International Fund for Saving the Aral Sea
	<b>Surface water allocation and management</b>	Interstate Commission for Water Coordination (including the Syr Darya Water Basin Organization and SIC ICWC)
	<b>Sustainable Development and Environment</b>	Interstate Commission for Sustainable Development (incl. regional centres)
	<b>Power</b>	Coordinating Electric Power Council of Central Asia, Coordination Dispatch Centre "Energy"
	<b>Renewable energy</b>	Regional Centre for Renewable Energies
	<b>Hydrometeorology (climate and water monitoring and forecasts)</b>	Regional Centre for Hydrology
	<b>Mountains</b>	Regional Mountain Centre

# HISTORY OF INTERNATIONAL FUND FOR SAVING THE ARAL SEA (IFAS)

- **1993** – establishment of IFAS
- **1993** – the Agreement between the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan on the status of IFAS and its organizations,
- **1999** - the Agreement about the status of IFAS and its organizations
- **2008** - the UN Resolution (UN General Assembly observer)

## The main directions:

- Promote further improvement of the ecological and socio-economic situation in the region;
- Ensuring normal living conditions for the population;
- Support dialogue and mutual understanding;



Meeting of the Heads of the Founding States of IFAS (Tashkent, 1993)



Summit of the Heads of the Founding States of IFAS (2009)

# IFAS STRUCTURE

Council of the Heads of CA States

ICWC and its executive bodies implement a set of measures and **procedures ensuring equitable allocation along the interstate sources**, taking account nature needs and future development. (C... 2; 2.1-2.19 p.)

Revision Co

The commission is entrusted with the function of verifying the financial activities of the Fund. The Revision Commission is delegated by one representative from each of the founding countries at the level of deputy ministers of economy and finance, responsible for budget contributions to the Fund.

BWO Amu Darya

BWO Syr Darya

Coordination Center for Metrology

- 2.1. Organization, coordination and **development of the regional sustainable development strategy**, programs and plans for sustainable development.
- 2.2. **Management of regional programs**, action plans, projects in the field of environmental protection and sustainable development.
- 2.3. Organization of examination and preparation of regional projects.
- 2.4. Coordination of actions in **the implementation of obligations of Central Asian countries** to implement environmental conventions that have a transboundary aspect.
- 2.5. Promoting the **unification of the legislative and methodological framework** in the field of environmental protection.
- 2.6. Facilitating the **interstate exchange of information** and the creation of a regional information bank in the field of environmental protection and sustainable development.

( [www.mkurca.org/mkur/polozhenie\\_mkur/](http://www.mkurca.org/mkur/polozhenie_mkur/))

in the Rep

Kyz

Execut  
in the Rep

Bras  
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Dashoug  
in Turkmenistan

ASBP Agency  
in Uzbekistan

Nukus branch

Regional Center of Hydrology  
(RCH)

- **implementation of relevant projects** and programs of the Aral Sea basin; coordination of the branches activities in the territory of the founding states; promotion of ICWC and ICSD activities;
- **cooperation** with international organizations, donor countries, environmental and other funds to enhance activities to address environmental issues;
- **attract the funds** for project and program management;
- **preparation of documents and meetings** of the IFAS Board, as well as conferences and meetings of the Heads of State on the problems of the Aral Sea.

managed by the **Board**, which includes the Ministers of the IFAS founding states. The Board meets at least twice a year. The founding states may propose additional meetings of the

Commission for Sustainable Development  
(ICSD)

of the Heads of State;

# CONCLUSIONS

IWRM – NEXUS – SDG & International Water Law

Need for implementation of multilateral environmental agreements & law on international watercourses and aquifers

Need for introduction of principle of International Water Law into Central Asian water legal framework

Need for strengthening mechanisms of International Water Law

Need for strengthening energy & agriculture related coordination within existing institutional framework for water cooperation in CA

Need to enhance dispute resolution mechanisms in water management in CA



**THANK YOU FOR YOUR ATTENTION!**

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