



Agreements & Adaptation

Special Session on Governance of Shared Waters: Adaptation to Climate Change

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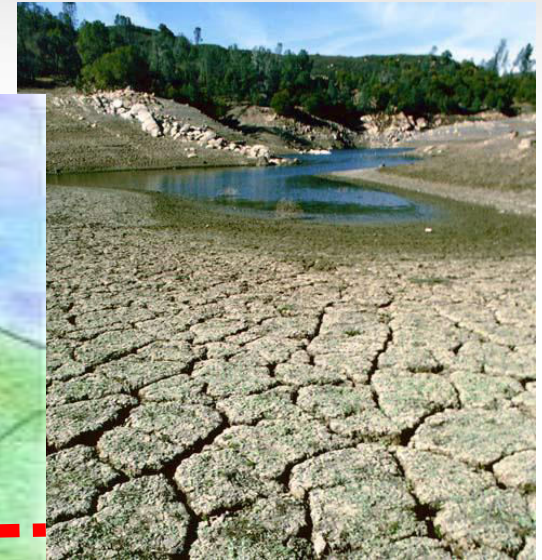
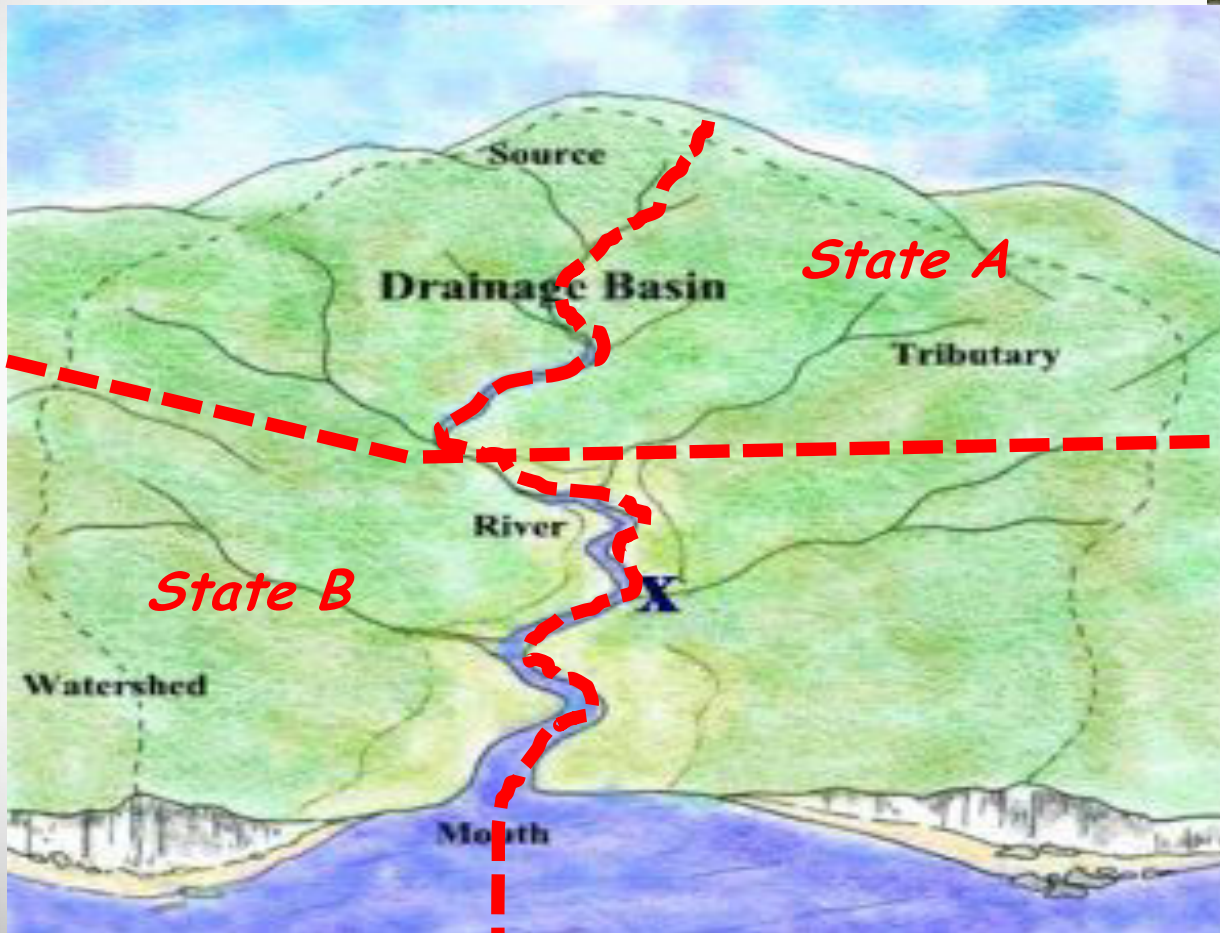


Adaptive Mechanisms

1. Geographic Scope for Managing Shared Waters: The Basin Approach
2. Procedural Mechanisms
 - a) Data sharing
 - b) Monitoring
 - c) Technical and financial cooperation
 - d) Prior notice and consultation
 - e) Mechanisms for responding to changing circumstances
 - f) Managing variability
 - g) Dispute resolution
 - h) Amendment mechanisms
3. Substantive Mechanisms
 - a) Fixed vs. flexible allocations
 - b) Prioritization of uses
4. Governance Structure
 - a) Scope and extent of institutional authority
 - b) Governance mechanisms with flexibility and agility
 - c) Stakeholder participation in governance mechanism
 - d) Financial and resource support for mechanisms
 - e) Political level of implementation (local, regional, national, etc.)



1. Basin Approach to Management



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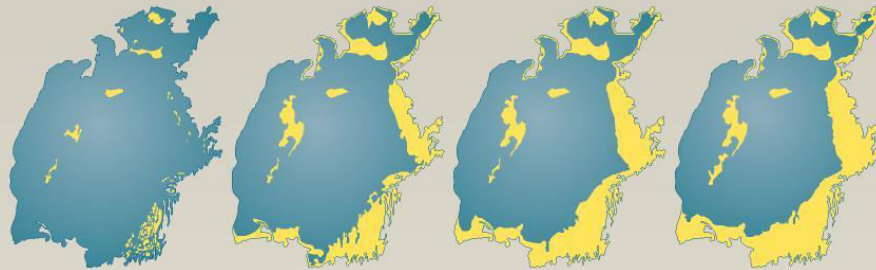
Benefits – allow basin states to:

- Develop a concerted and decisive response to the challenges of climate change
- Formulate and coordinate both short-term and long-term strategies
- Develop plans for alternative scenarios that best prepares all riparians for the possible consequences of climate change
- Develop local, national, and basin-level priorities for managing the shared waters
- Pool resources
- Maximize the benefits of the resource
- Collectively shoulder the burdens that climate change is expected to impose



1. Basin Approach to Management

What has happened...



1957
from a map

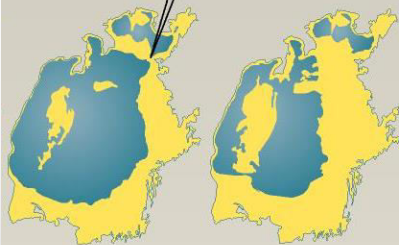
1977
from satellite images

1982
from satellite images

1984
from satellite images



In 1989-1990, the Aral Sea separated into two parts: the 'Large Aral' and the 'Small Aral'



1993
from a map

November 2000
from satellite images

Between November 2000 and June 2001, Vozrojeniya Island joined the mainland to the south



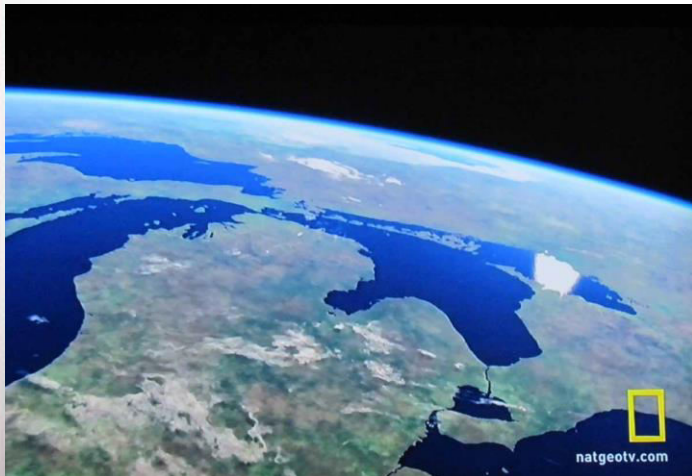
November 2007
from satellite images



1. Basin Approach to Management



Image © GLIN



2. Procedural Mechanisms

- a) Data sharing
- b) Monitoring
- c) Dispute resolution
- d) Amendment mechanisms
- e) Technical and financial cooperation
- f) Prior notice and consultation
- g) Managing flow variability
- h) Mechanisms for responding to changing circumstances



3. Substantive Mechanisms

- a) Fixed vs. flexible allocations
- b) Prioritization of uses



WHOSE
WATER
IS IT?



Which approach and mechanisms are nations more likely to agree to undertake?



Substantive Rules

vs.

Procedural Rules

rules describing material rights and obligations of the parties

rules that provide the means by which substantive rules can be implemented

4. Governance Structure

- a) Scope and extent of institutional authority
- b) Governance mechanisms with flexibility and agility
- c) Stakeholder participation in governance mechanism
- d) Financial and resource support for mechanisms
- e) Political level of implementation (local, regional, national, etc.)

Concluding Thoughts

“**tools for managing transboundary water resources** that can help alleviate both the general challenges of cooperating over transboundary water resources and the specific difficulties resulting from climate change ...

- 1) “**A stepwise approach to cooperation** that encourages trust and collaboration, the sharing and harmonization of data and information, and the development of realistic expectations about cooperation;
- 2) A focus on establishing **sound, albeit flexible procedural bases for cooperation** that can respond to supply and demand variability, before developing substantive rules and water allocation criteria;
- 3) Development of **mechanisms that are both flexible and resilient**; and
- 4) Development of a **subsidiarity-based approach alongside polycentric forms of governance** that allow local and informal initiatives alongside official interstate cooperative efforts.”



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