



WATER DIPLOMACY AND MULTI-LEVEL GOVERNANCE

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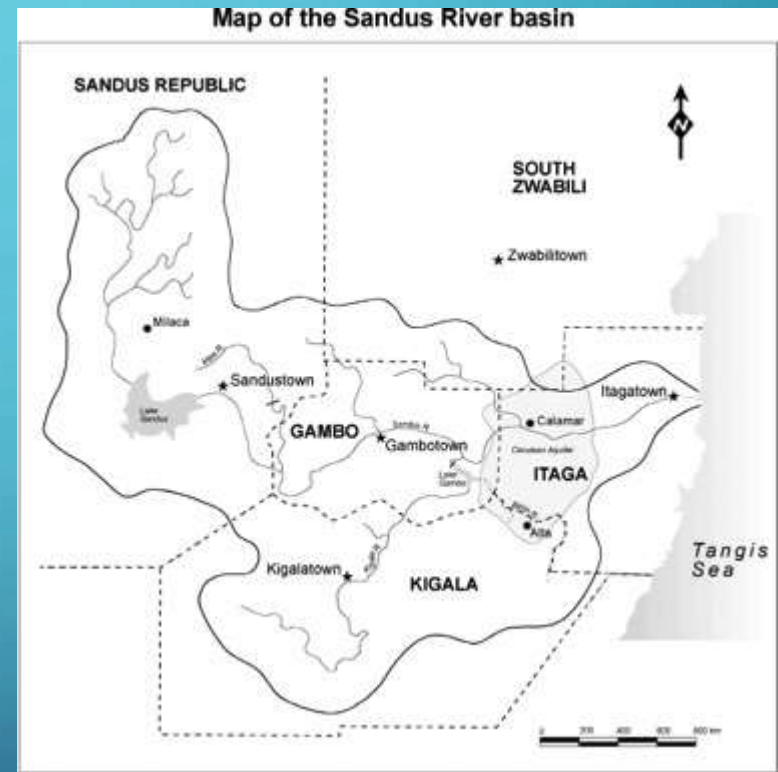
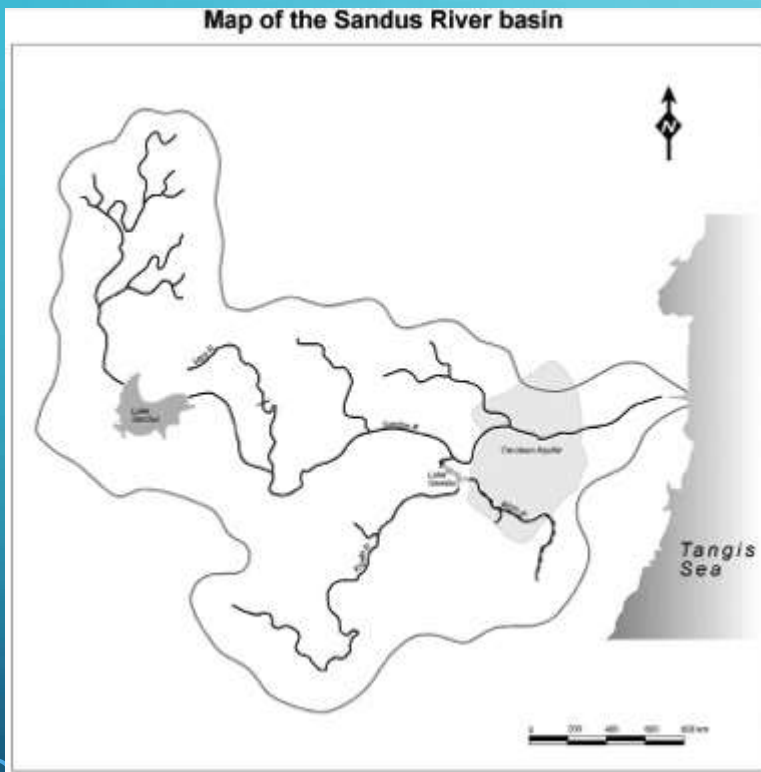
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7TH WORLD WATER FORUM

DAEGU, SOUTH KOREA

APRIL 2015

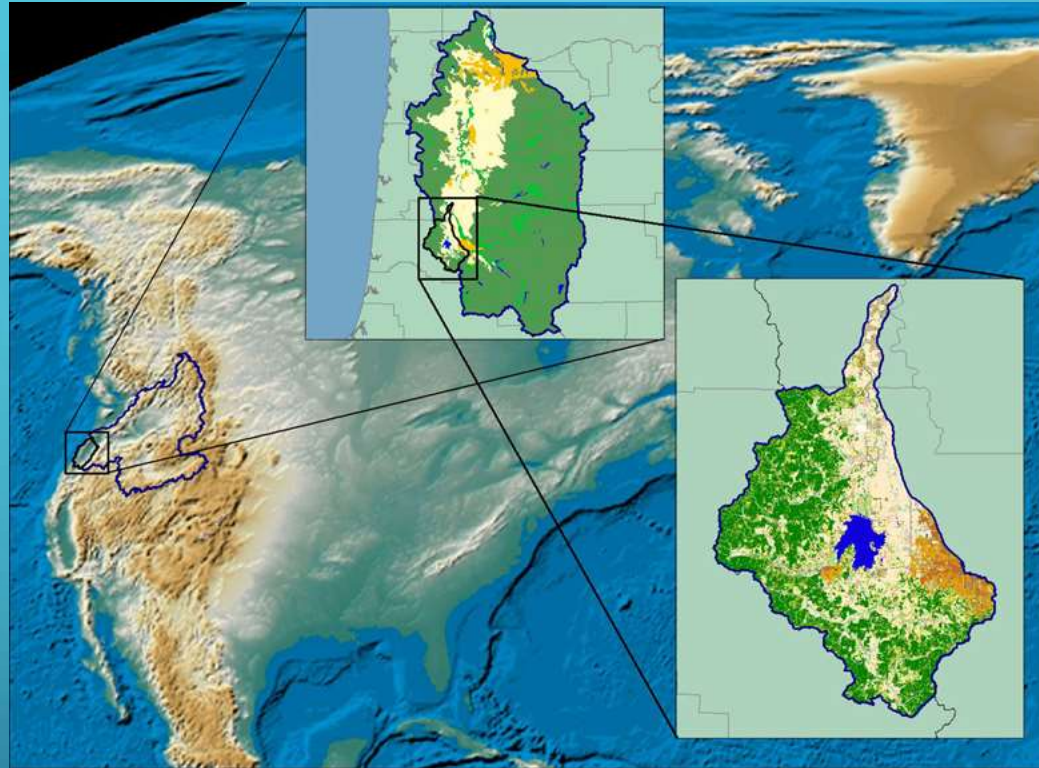
What is Water Diplomacy and Multi-level Governance



What changes when a border is present?

What capacity do we need to address the change?

DIPLOMACY & GOVERNANCE WITHIN AND BETWEEN MULTIPLE SCALES



Diplomacy: How we interact.

Governance: The rules and institutions for interaction.

The background is a solid blue gradient. In the corners, there are white, stylized circuit-like lines. These lines consist of straight segments connected by small circles, resembling a network or a map of connections. They are located in the top-left, top-right, bottom-left, and bottom-right corners.

LESSON 1: COUNTRIES DON'T EXIST, BOUNDARIES DO...OR DON'T

WHAT TO DO ABOUT WATER?

NEGOTIATE IT

NERO BOX

The map displays nearly 2,000 incidents, involving conflict and collaboration alike, over shared river basins from 1990 to 2008. The studies in the sidebar (facing page) compare about 2,200 events—including another 200 disputes over resources other than shared rivers—from the same period.

HOTSPOT

Later this year, Turkey will complete the Kisu Dam on the Tigris River, part of a national push to boost electrical power capacity. Besides submerging the 12,000-year-old settlement of Hasankeyf, the dam may damage the already fragile Mesopotamian marshes downstream in Iraq, Germany, Austria, and Switzerland withdrew funding for the dam in 2008.

HOTSPOT

Tajikistan is planning the Rogun hydroelectric dam on a tributary of the Amu Darya river. The dam would be the tallest in the world and help alleviate the country's energy shortages. Uzbekistan, fearing irrigation shortfalls, has imposed tariffs and travel restrictions on its neighbor to the east.

HOTSPOT

In a channel of the Mekong, two miles north of the Cambodian border, Laos intends to construct the Don Sahong Dam. The power project could affect fishing in Cambodia, Vietnam, and Thailand, so those countries are demanding a say in the plan.

HOTSPOT

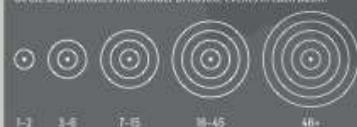
In 2011, Ethiopia began building the Grand Renaissance Dam on the Blue Nile, a tributary that provides about 60 percent of the Nile's water. Egypt and Sudan are concerned about the dam's effect on water flow downstream. Ethiopia says it will finish the project in 2017.

KEY

The color of each international river basin indicates the total number of interactions there from 1990 to 2008.

None 1-3 4-15 16-40 41-125 127+

Circle size indicates the number of hostile events in each basin.



EVENTS BY INTENSITY

The researchers graded each exchange on a 15-point scale. Collaborative interactions outnumber hostile ones.



HEAT MAP

WHERE WILL THE WORLD'S WATER CONFLICTS ERUPT?

DATA VISUALIZATION BY
PITCH INTERACTIVE

As the climate shifts, rivers will both flood and dry up more often, according to the latest report from the Intergovernmental Panel on Climate Change. Shortages are especially likely in parts of the world already strapped for water, so political scientists expect feuds will become even more intense. To track disputes worldwide, researchers at Oregon State University spent a decade building a comprehensive database of international exchanges—both conflicts and alliances—over shared water resources. They found that countries often begin disputes belligerently but ultimately reach peaceful agreements. Says Aaron Wolf, the geographer who leads the project, “For me the really interesting part is how even Arabs and Israelis, Indians and Pakistanis, are able to resolve their differences and find a solution.” **KATIE PEEK**

RIVER LOCATIONS COURTESY THE GLOBAL RUNOFF DATA CENTRE, SOBER KHULENZ, GERMANY.

Columbia River Basin

Legend

Indian Reservation

The Lower Columbia River is the reach from Bonneville Dam downstream to the Ocean.

The Middle Columbia River is the reach from Grand Coulee Dam to Bonneville Dam.

The Upper Columbia River is the reach upstream of Grand Coulee Dam.



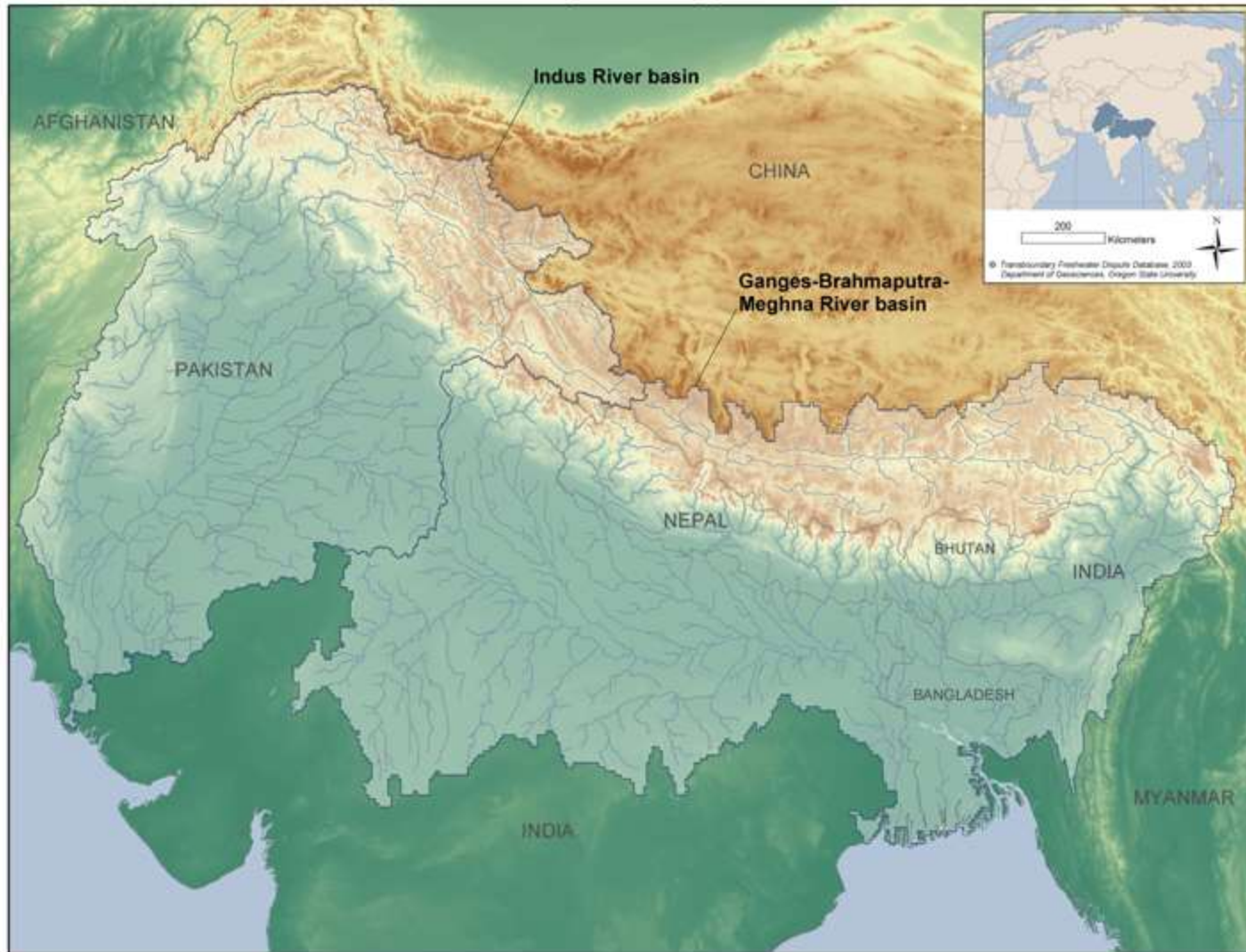


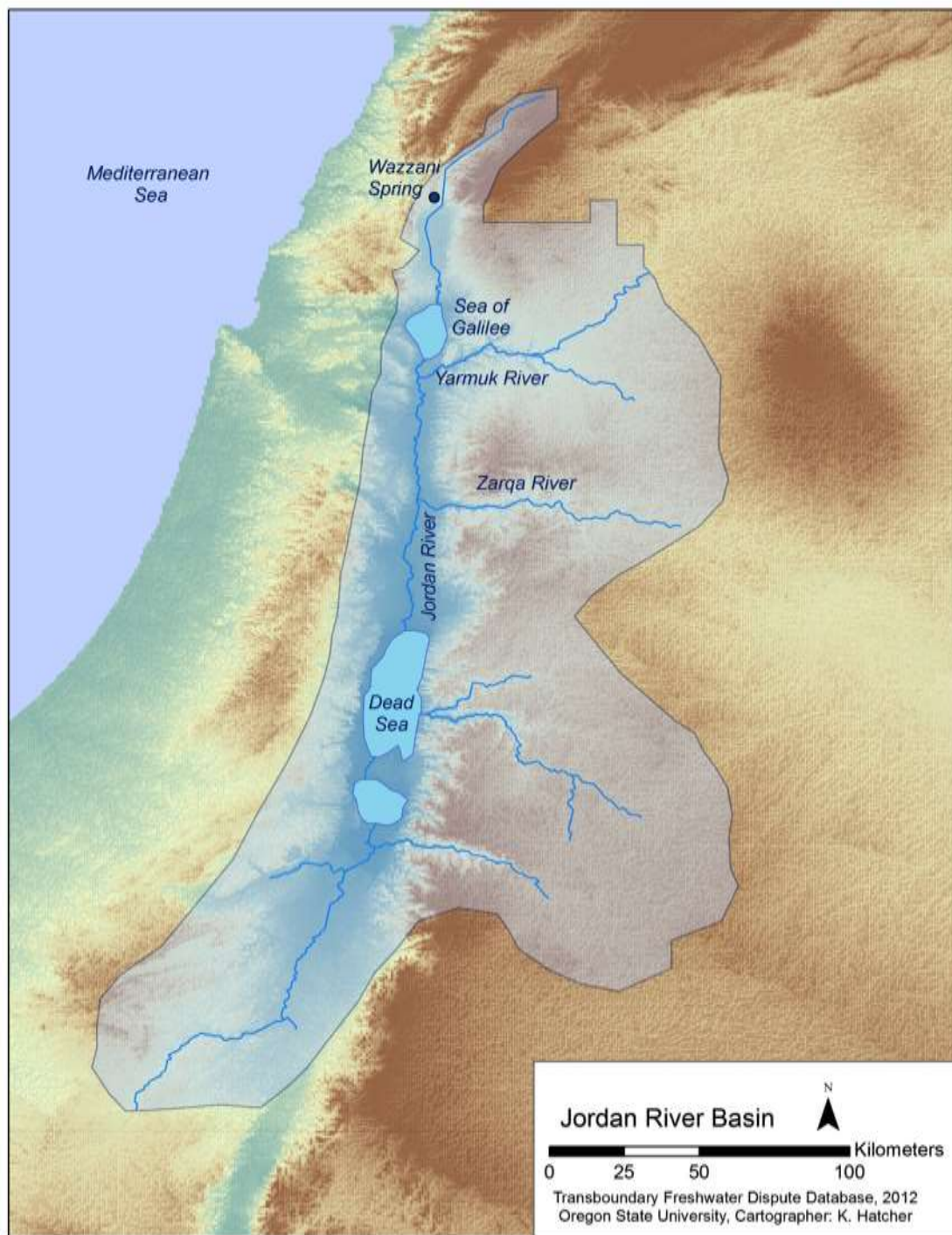
1940's-1960's
David Lilienthal &
Pres. Dwight Eisenhower





The Indus River and Ganges-Brahmaputra-Meghna River basins







Michael W. Straus
1953-1959



Wilbur A. Dexheimer
1959 – 1969



Floyd E. Dominy 1945 1953



RECLAMATION

Managing Water in the West



Operation Candor

Eisenhower 1953

- peaceful use of nuclear energy
- development to combat communism
- reactors in Pakistan & Iran



“...I want to announce the beginning of a Water for Peace Program...Therefore, today I call upon all the nations of the world to join us in the creation of an international fund to bring the fruits of science and technology to all the corners of a parched and thirsty world...”

President Lyndon Johnson, 1967



LESSON 2: SCALE MATTERS, AND ABSOLUTE SCALE MATTERS ABSOLUTELY



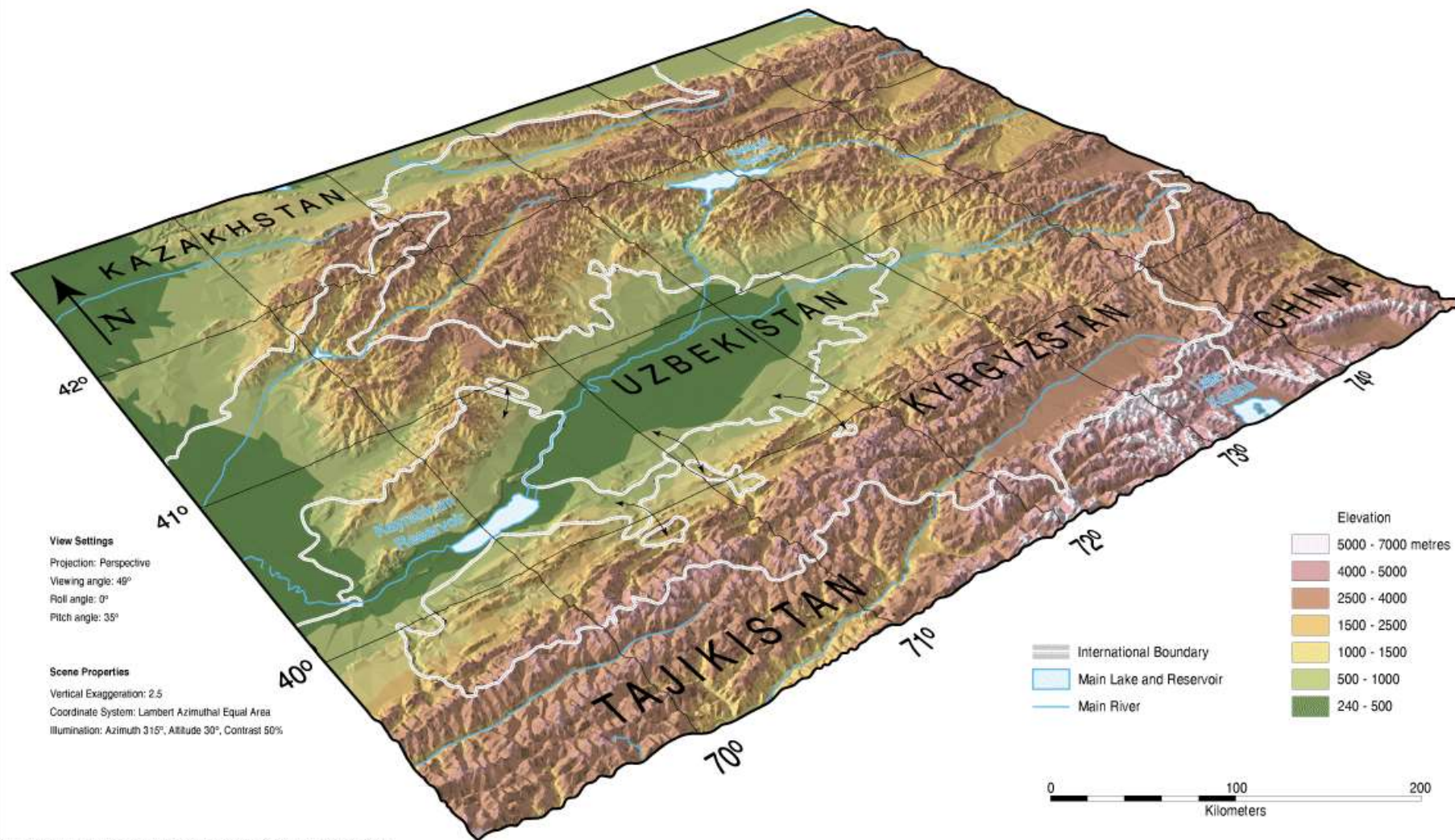


The Amu-Darya River Basin



Three Dimensional View of the Fergana Valley Region

(Preliminary Version)



Source: VMap Level 0 (DCW fifth edition), NIMA; ArcWorld, ESRI; Dem (SRTM-30), USGS.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Created at UNEP/DEWA/GRID-Geneva; June 2004



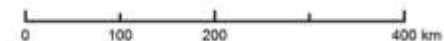
Afghanistan Transboundary River Basins



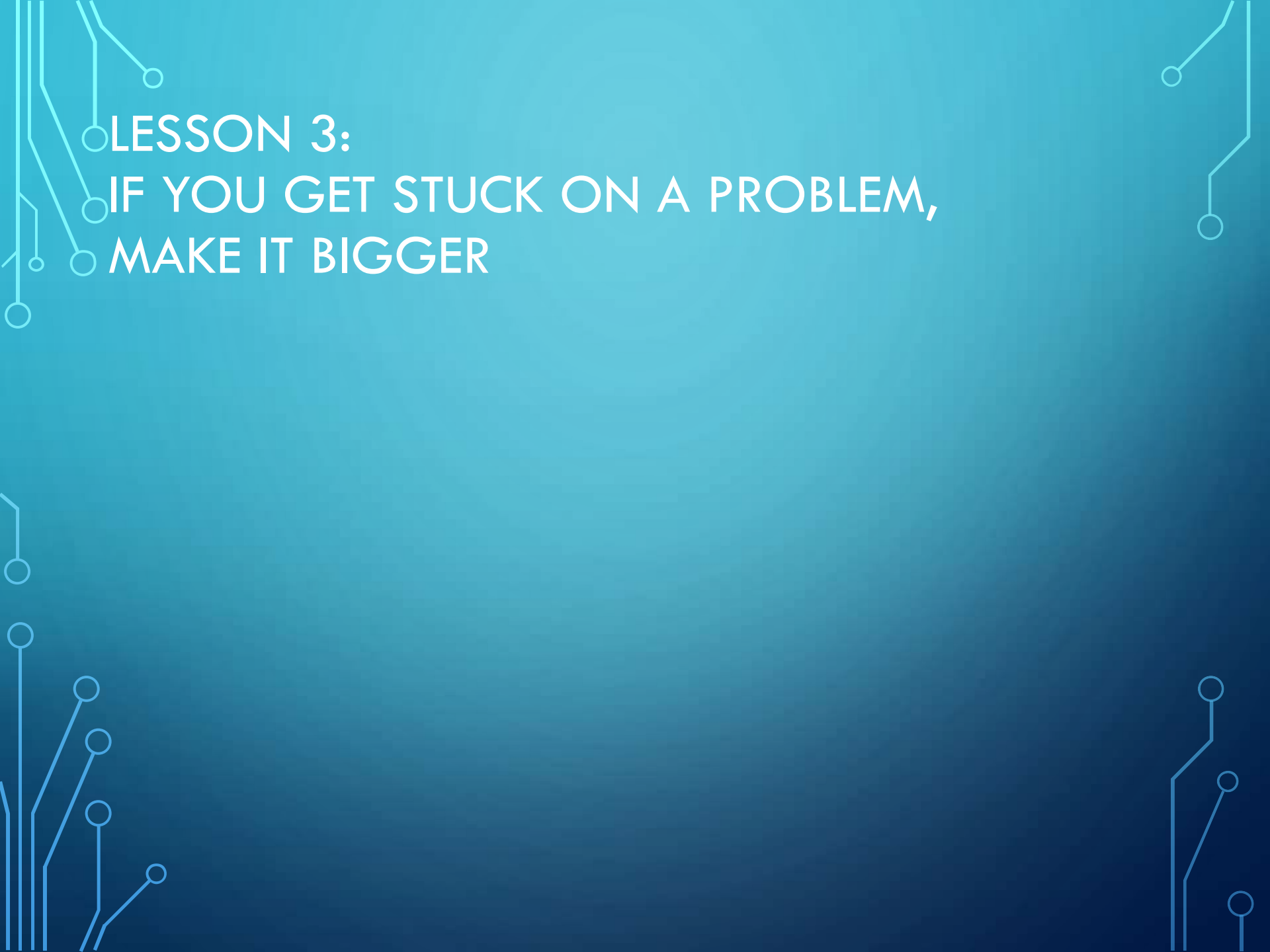
99.7% of Afghanistan in Transboundary Basins

Helmand	49%
Aral Sea	26%
Indus	11%
Hari/Harirud	6%
Murgab	6%
Kowl E Namaksar	2%

© 2014 Transboundary Freshwater Dispute Database
Oregon State University
Cartographer: Chris Paola
Asia North Albers Equal Area Projection
WGS 1984 Geographic Coordinate System



Afghanistan BCU total area- 641,508 (km²)
Afghanistan total area- 643,838 (km²)



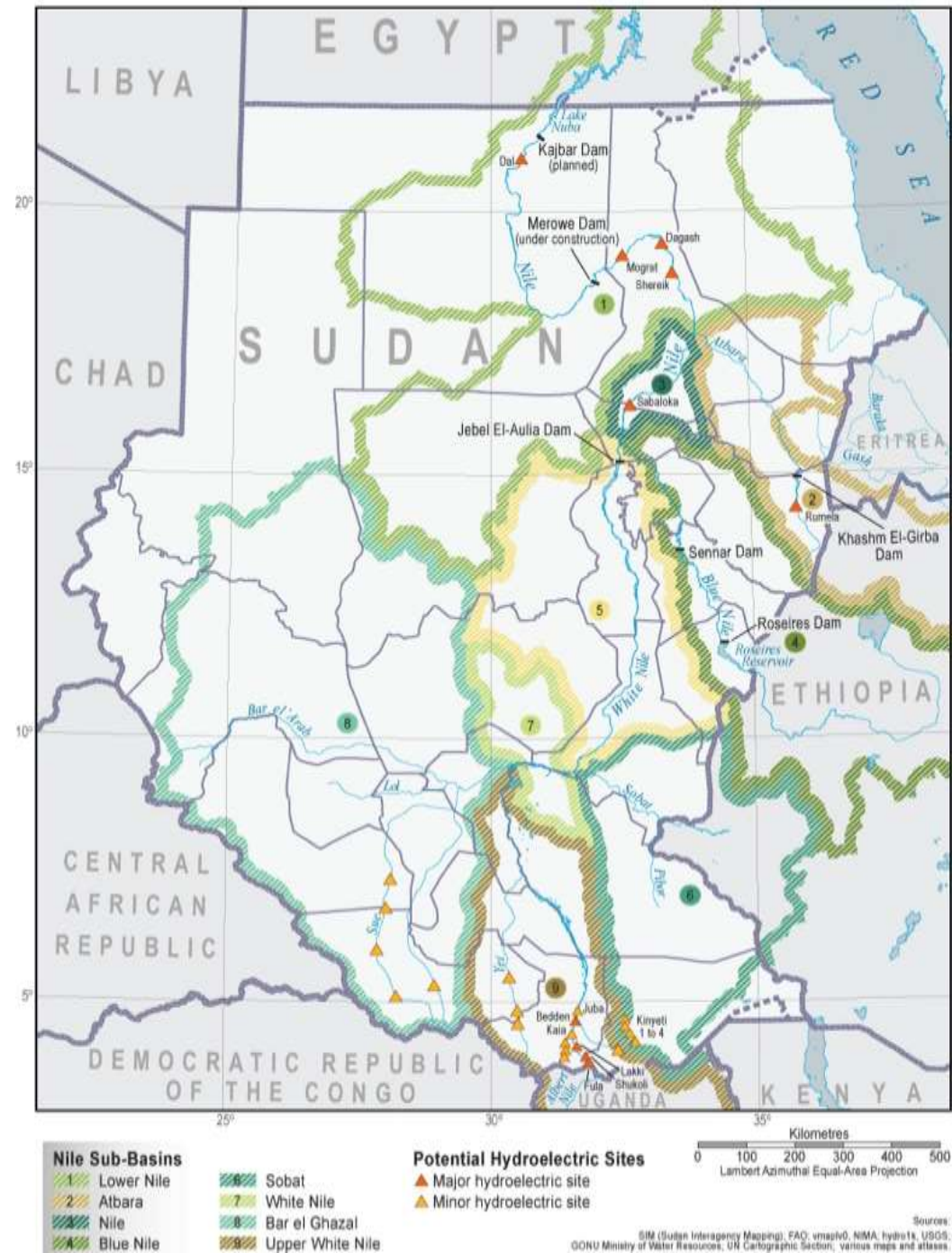
LESSON 3: IF YOU GET STUCK ON A PROBLEM, MAKE IT BIGGER



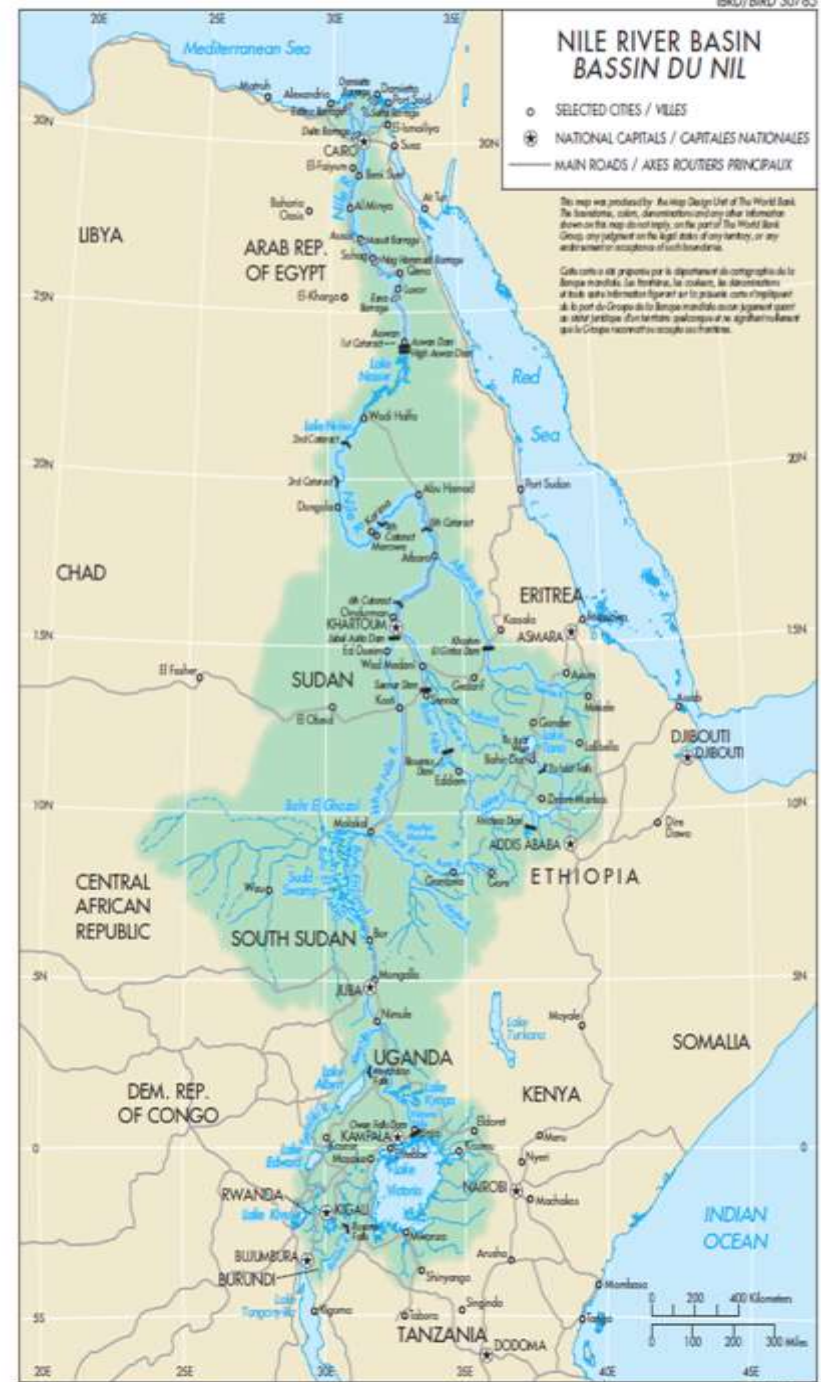


Dams and Hydroelectric Schemes

Source: UNEP/DEWA/GRID-Europe 2006

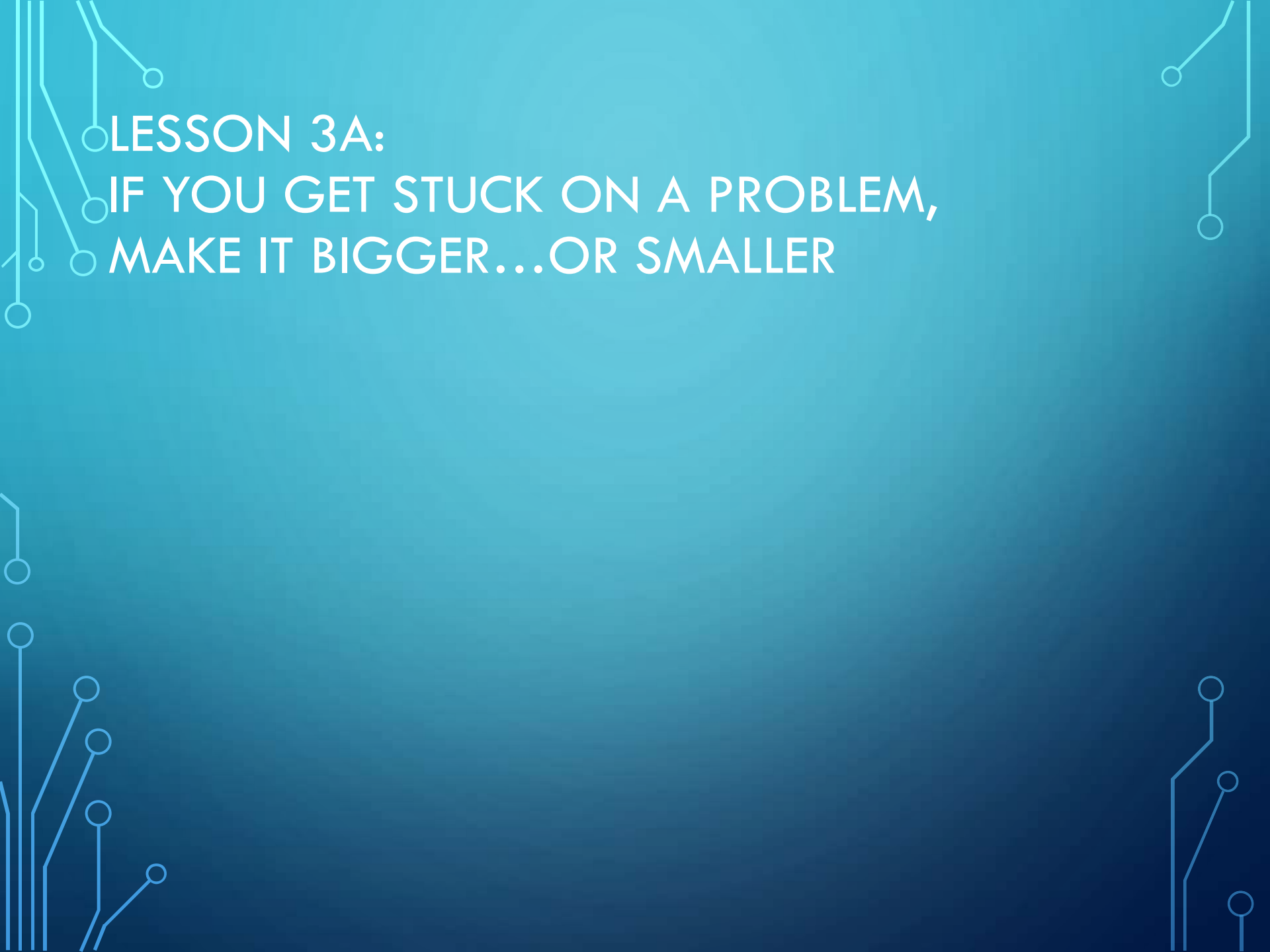


- Hydromet (1961), entirely technical, eventually led to:
- Undugu (1983), and,
- Tecconile (1993) – annual academic meeting, and finally to:
- Nile Basin Initiative



Source: NBI RPTP 2011



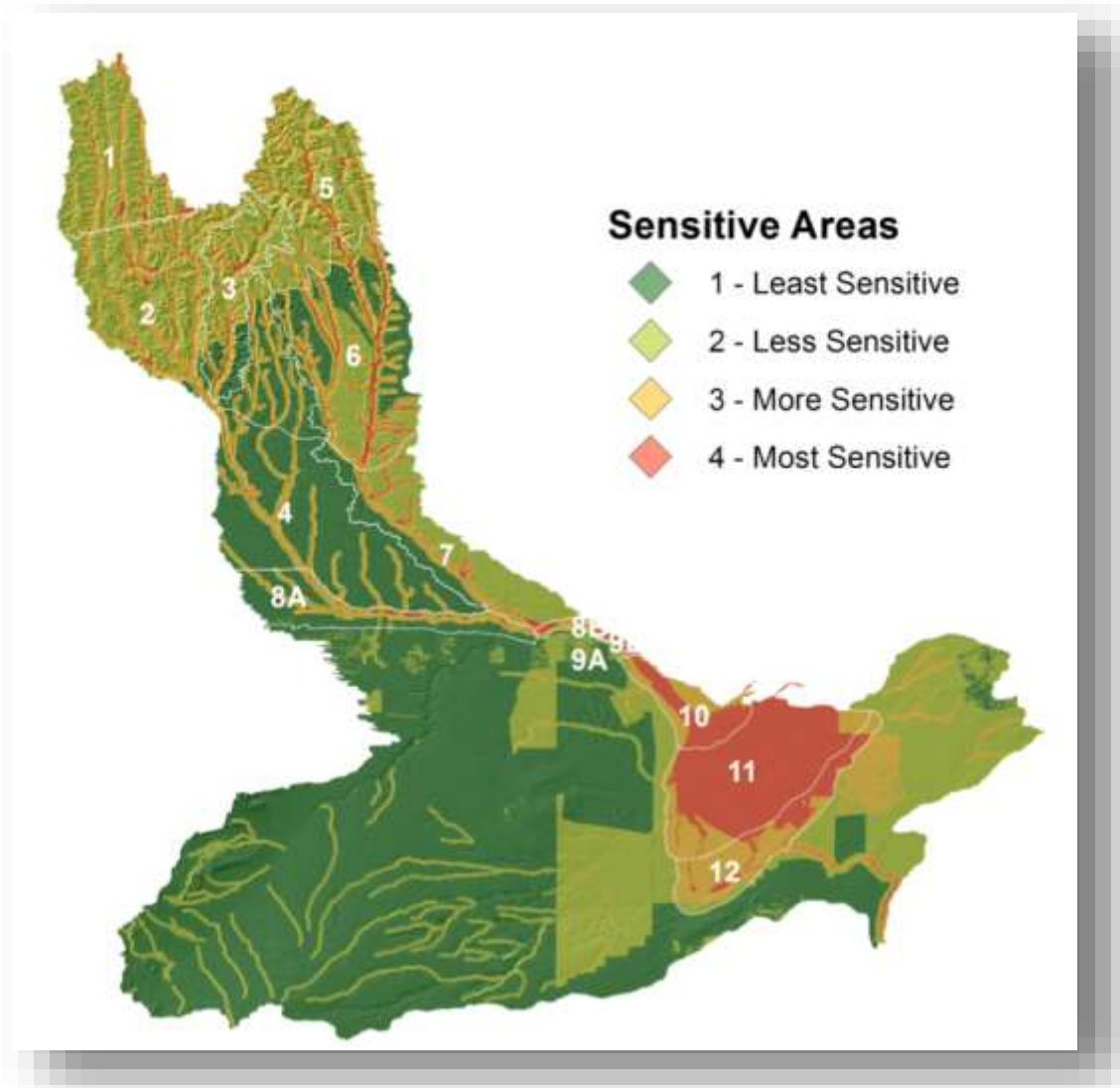


LESSON 3A: IF YOU GET STUCK ON A PROBLEM, MAKE IT BIGGER...OR SMALLER

Negotiated Basin Development Space

Environmental Sensitivity Rankings

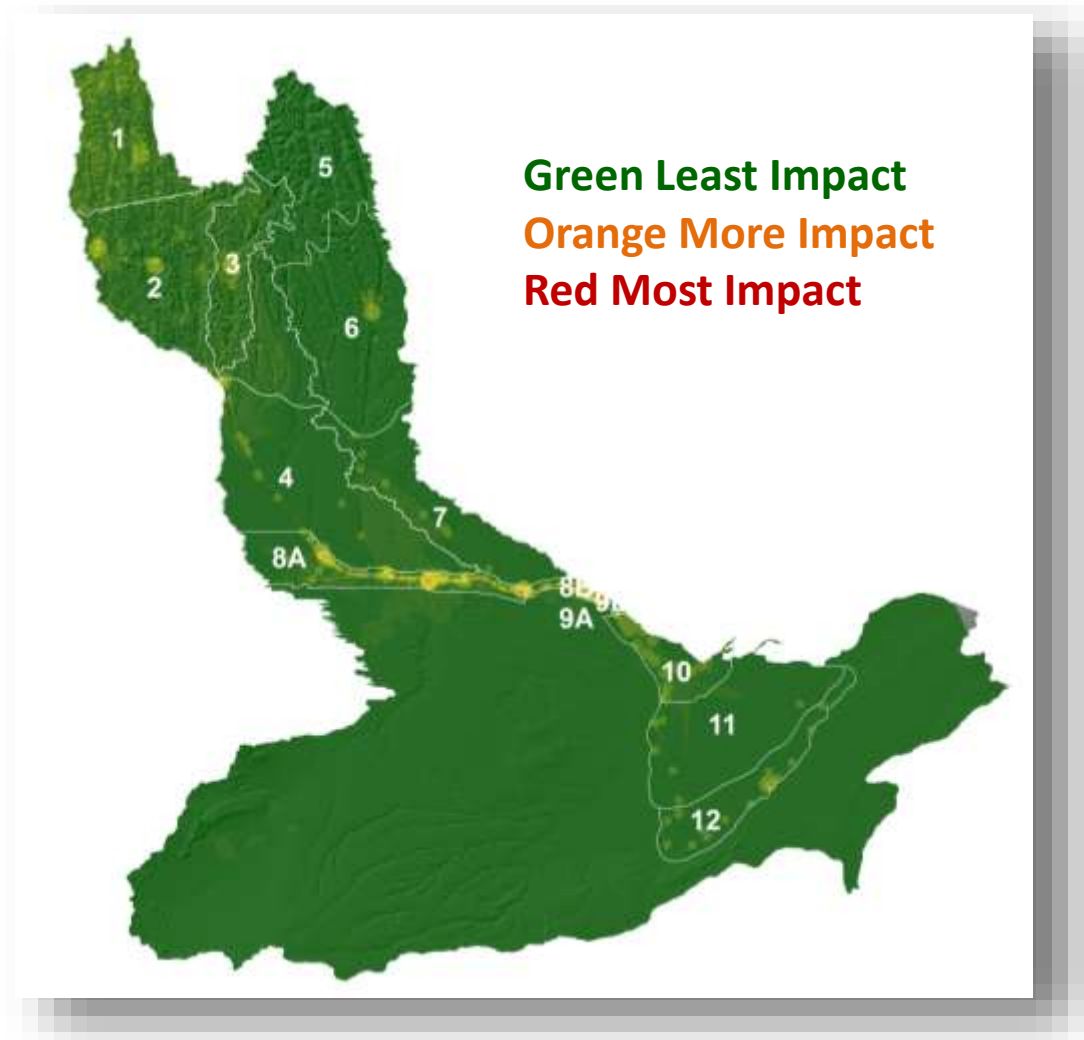
(Reflecting Interest and Values)

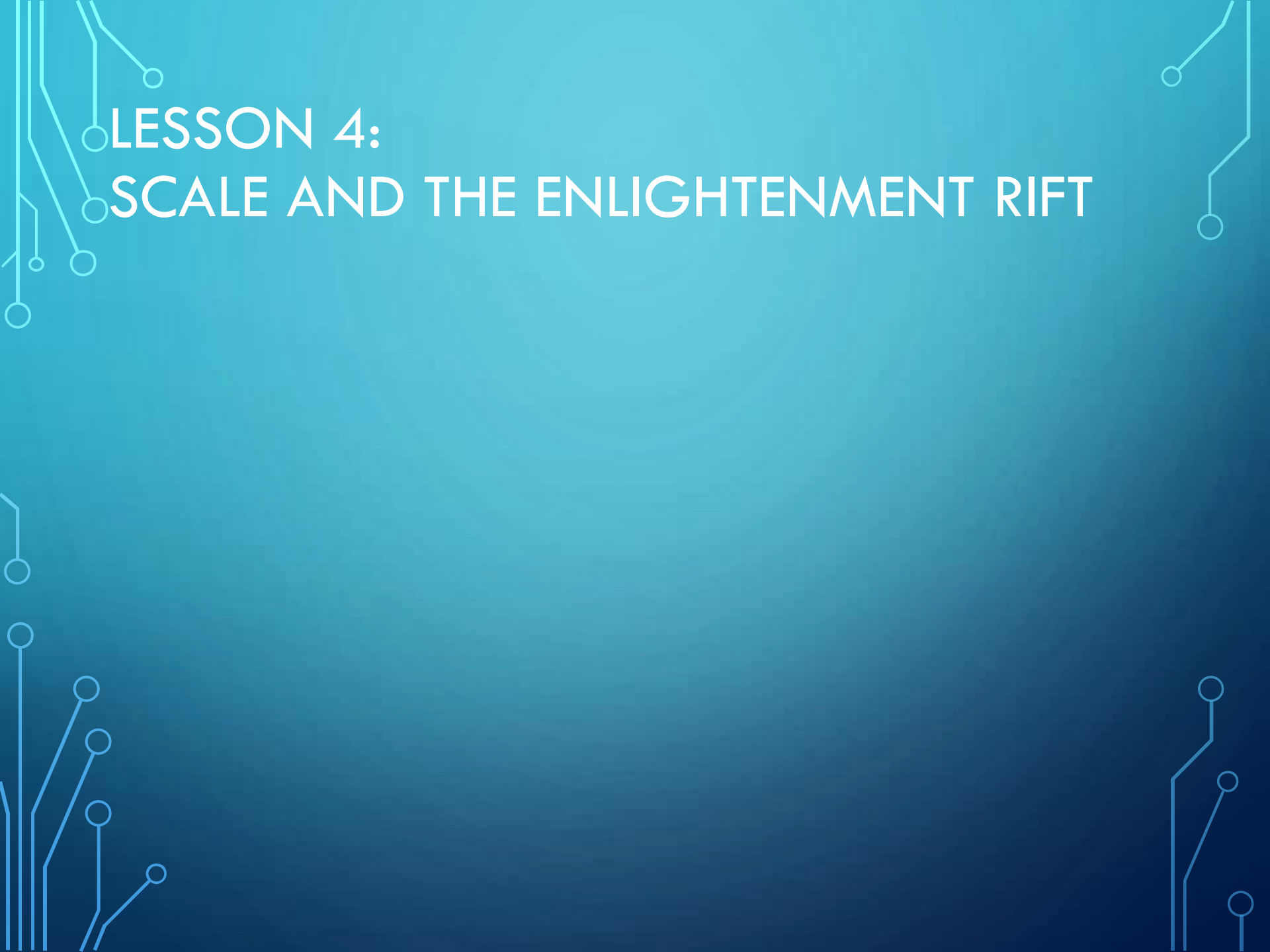


Negotiated Basin Development Space

Development Pressure Rankings

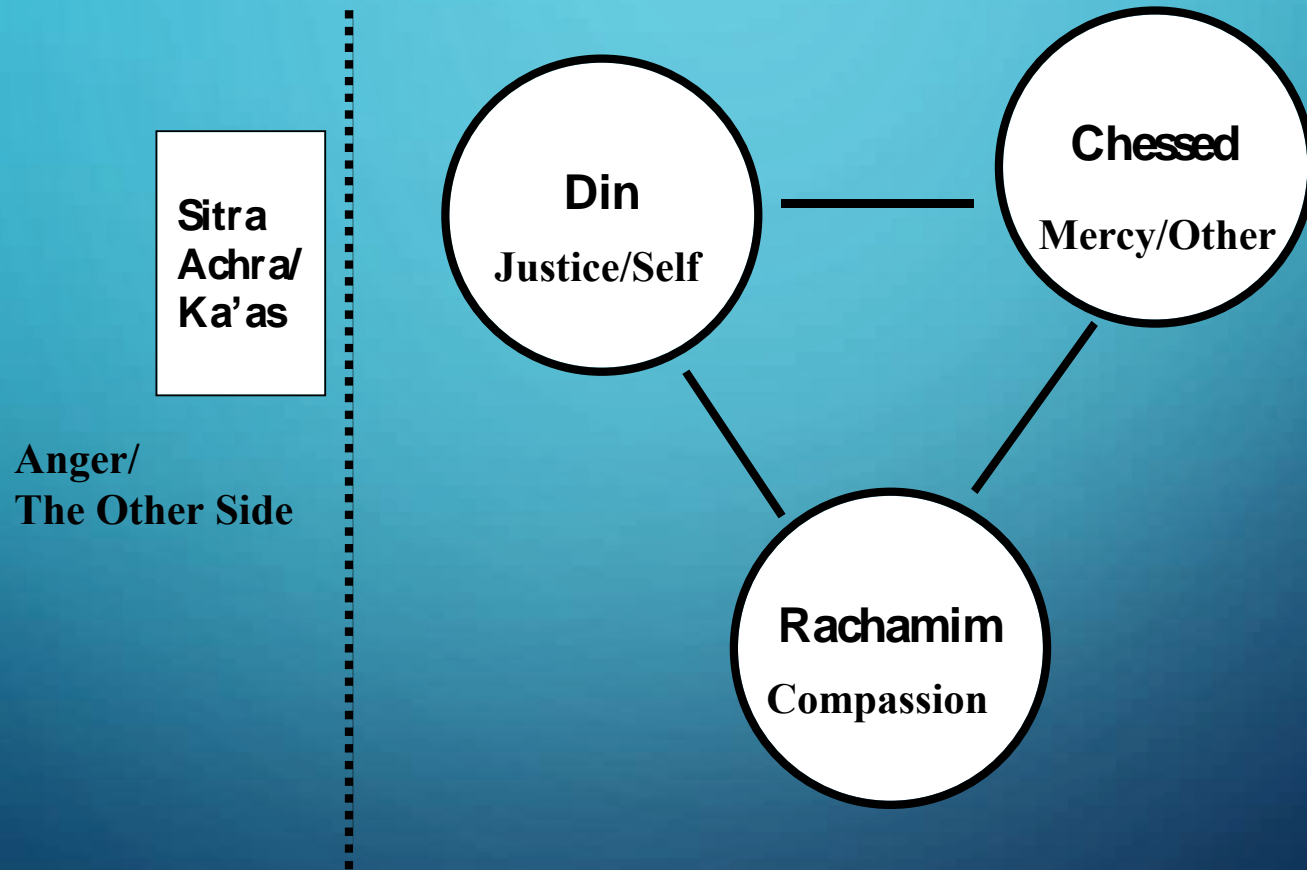
(Reflecting Interest and Values)





LESSON 4: SCALE AND THE ENLIGHTENMENT RIFT

BALANCE IN CONFLICT

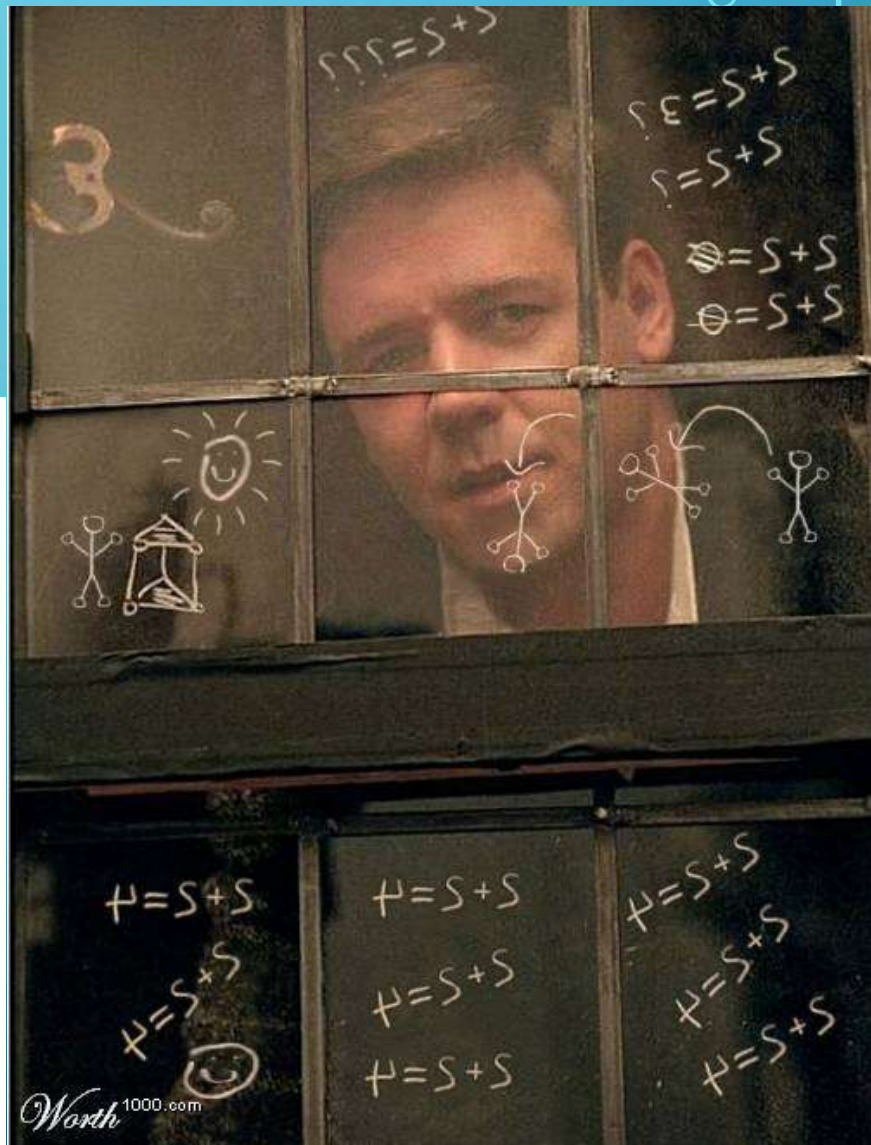
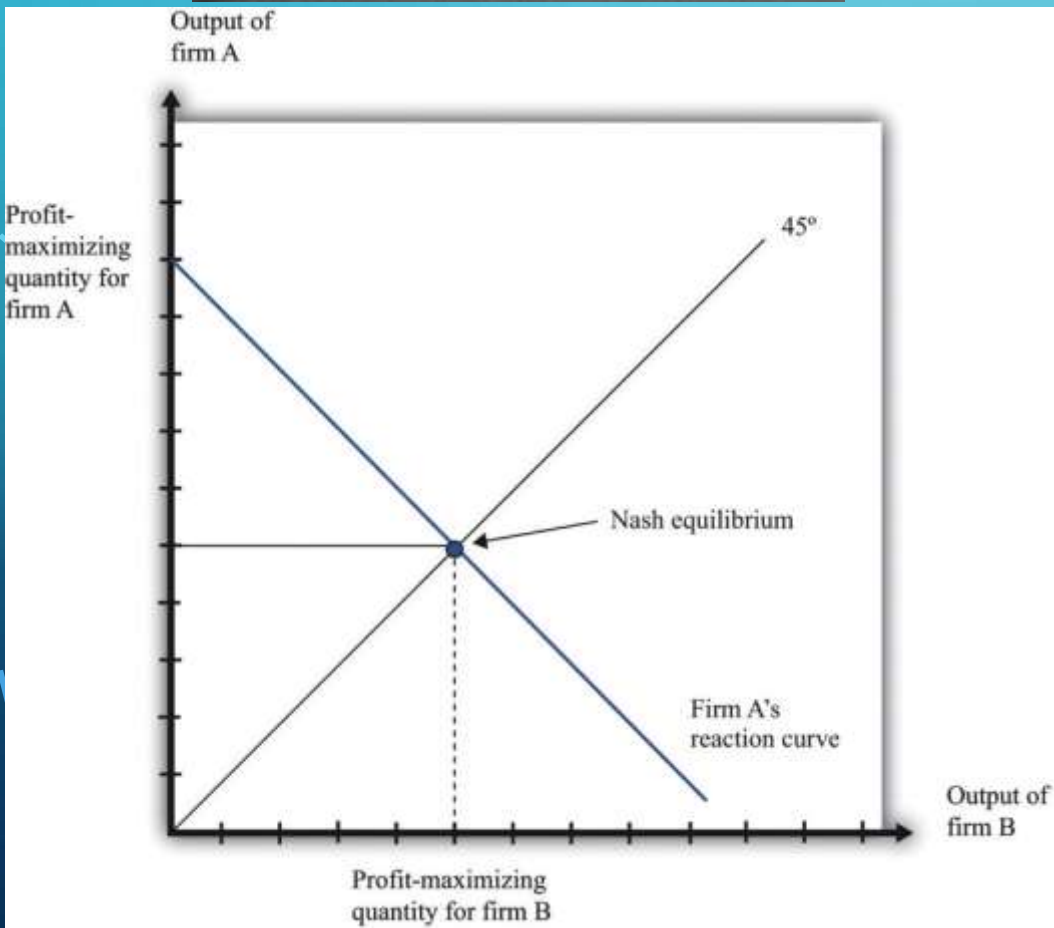


Universal?

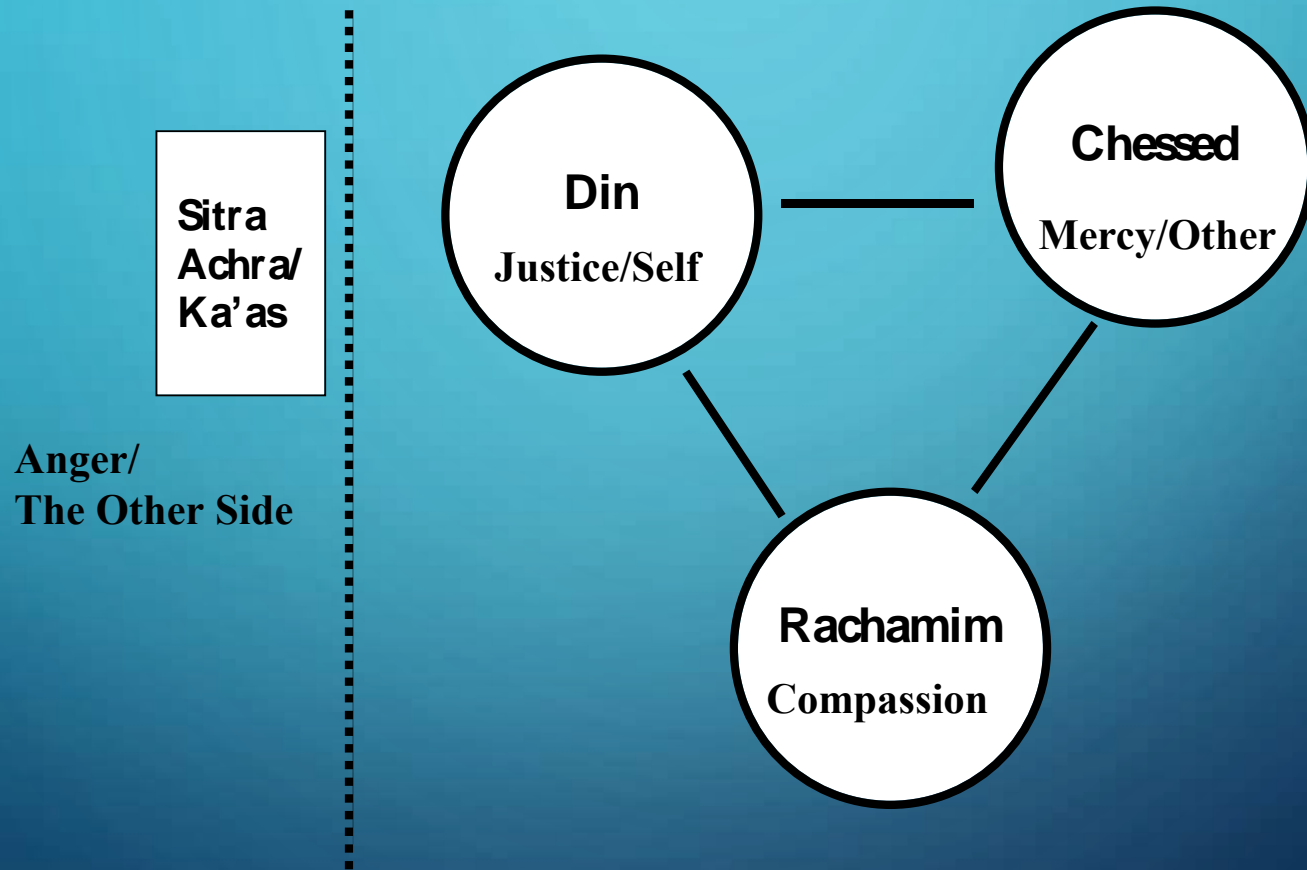
YIN YANG







BALANCE IN CONFLICT

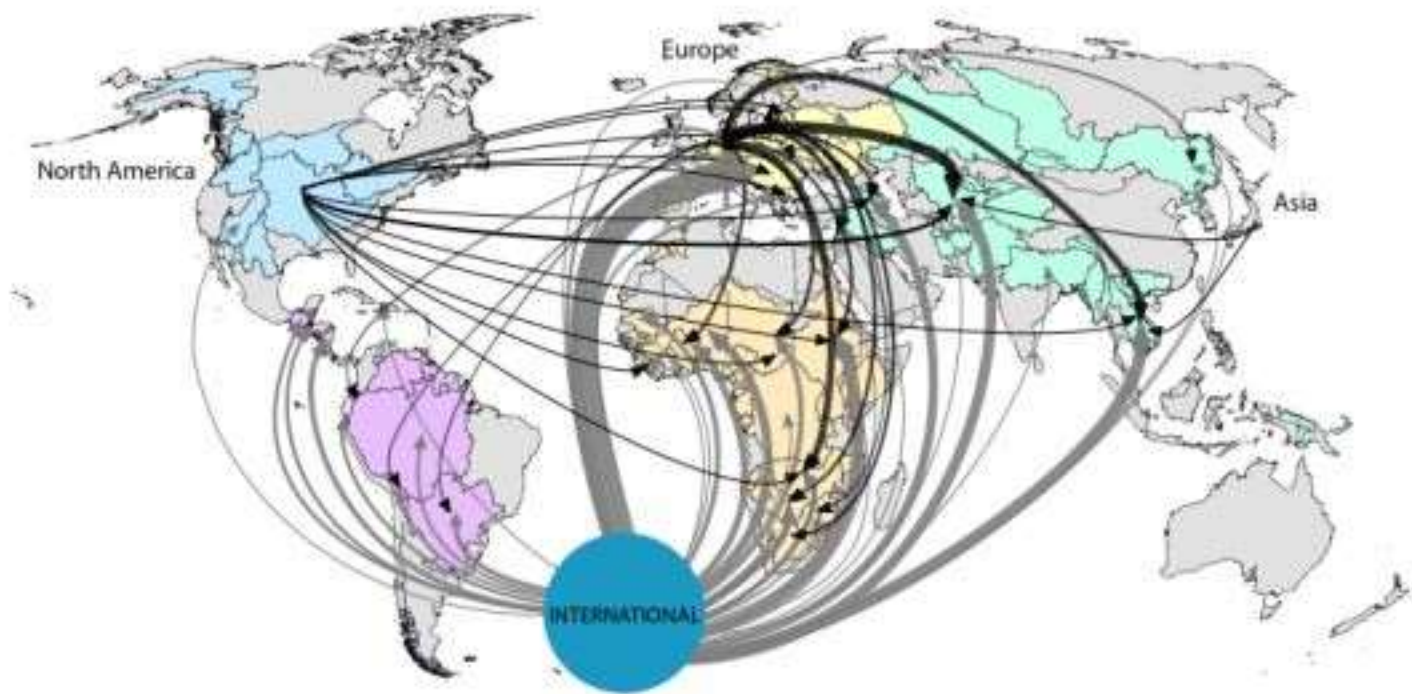


Universal?

Sulha: Reconciliation

- From *musalaha*, reconciliation: hostilities ended, honor re-established, and peace restored in the community.
- Two basic elements: rights and honor.
- *Tarrahdhin*: “Resolution of a conflict that involves no humiliation.”





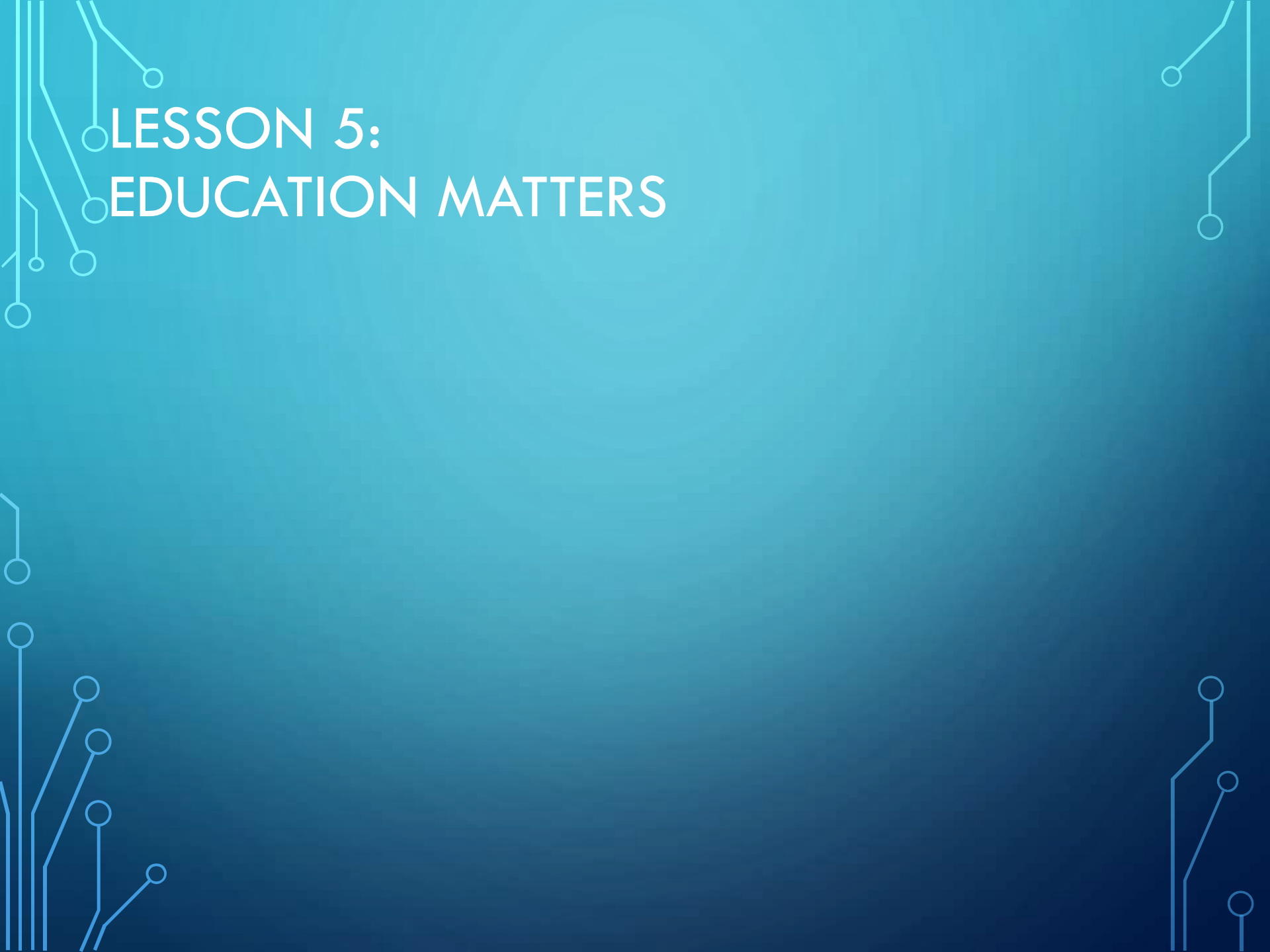
© Transboundary Freshwater Dispute Database
Oregon State University, 2008. Robinson Projection

Legend

- > 15 projects and/or fundings; eg. Danube
- > 5 projects and/or fundings; eg. Aral Sea, Mekong, Nile
- > 1 project and/or 1 funding; eg. Colorado, Ganges-Brahmaputra-Meghna

Regions of the funding sources

International
Asia
Europe
North America



LESSON 5: EDUCATION MATTERS

Water Diplomacy Training



MSc in Water Cooperation & Peace

A joint program between UNESCO-
IHE, UPeace and OSU



UNESCO-IHE
Institute for Water Education



Profiles

**CONFLICT FOUNDATION
UPEACE**

**WATER FOUNDATION AND
CONFLICT MANAGEMENT
SPECIALIZATION
IHE**

**CONFLICT MANAGEMENT
SPECIALIZATION AND
INTEGRATION
OSU**

**PROFESSIONAL MASTER
PROJECT
OSU/ICIWaRM**

**MASTER OF SCIENCE
THESIS
UPEACE - UNESCO-IHE - OSU**

**JD or MASTER OF LAWS
UO**

Conclusions

- Countries don't exist; boundaries do...or don't
- Scale matters, and absolute scale matters absolutely
- If you get stuck on a problem, make it bigger...or smaller
- We must heal the enlightenment rift
- Universities are the center of the universe...

Thank you!

