

Water Conflict Management & Transformation

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&

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Oregon State University, USA

Montana Lakes Conference, Whitefish, MT

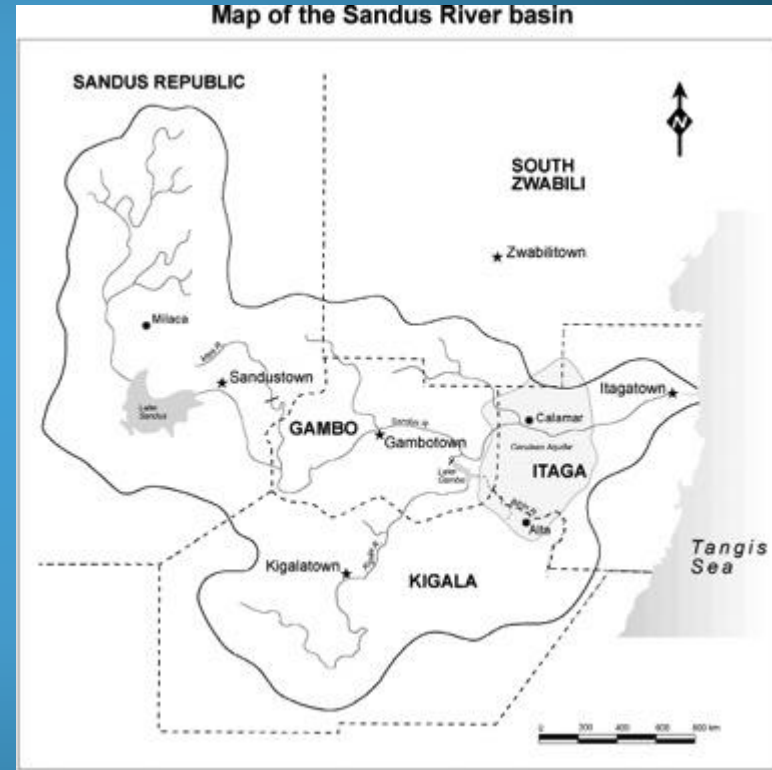
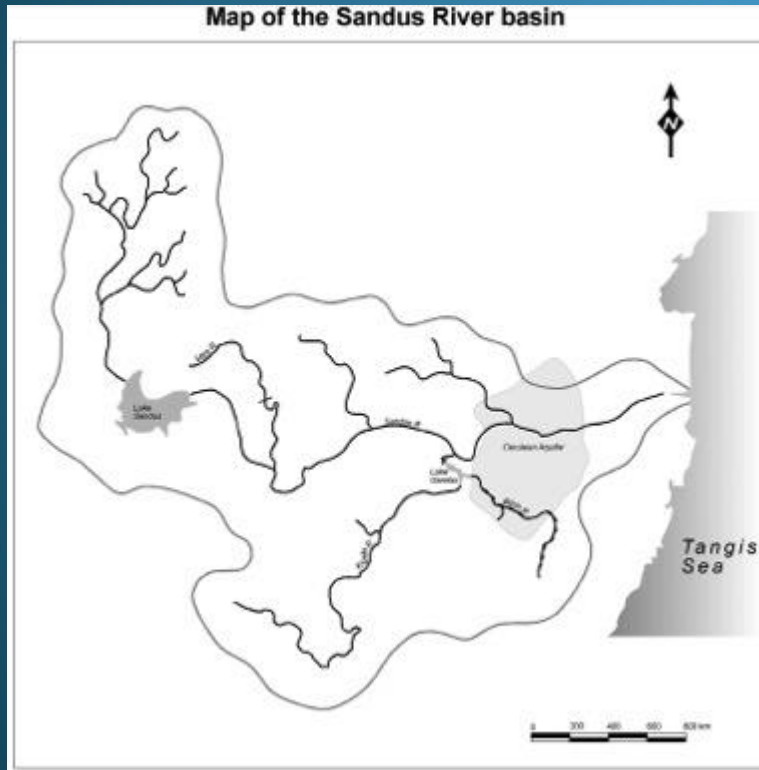
October 18, 2023



WWW.TRANSBOUNDARYWATERS.ORST.EDU



What is Water Conflict Management & Transformation??



What changes when a border is present?

What capacity do we need to address the change?

What is Water Conflict Management & Transformation??



What changes when a border is present?

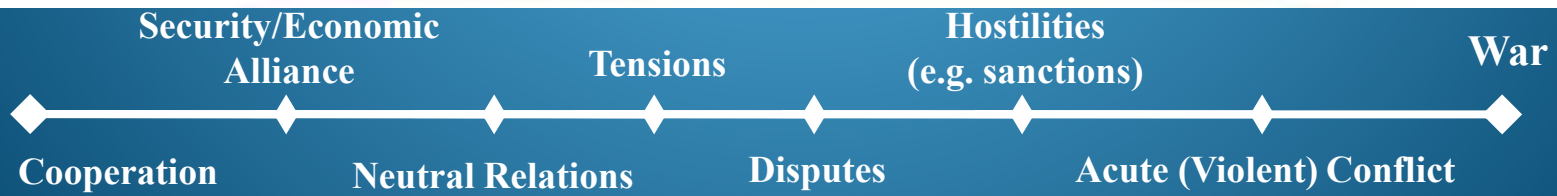
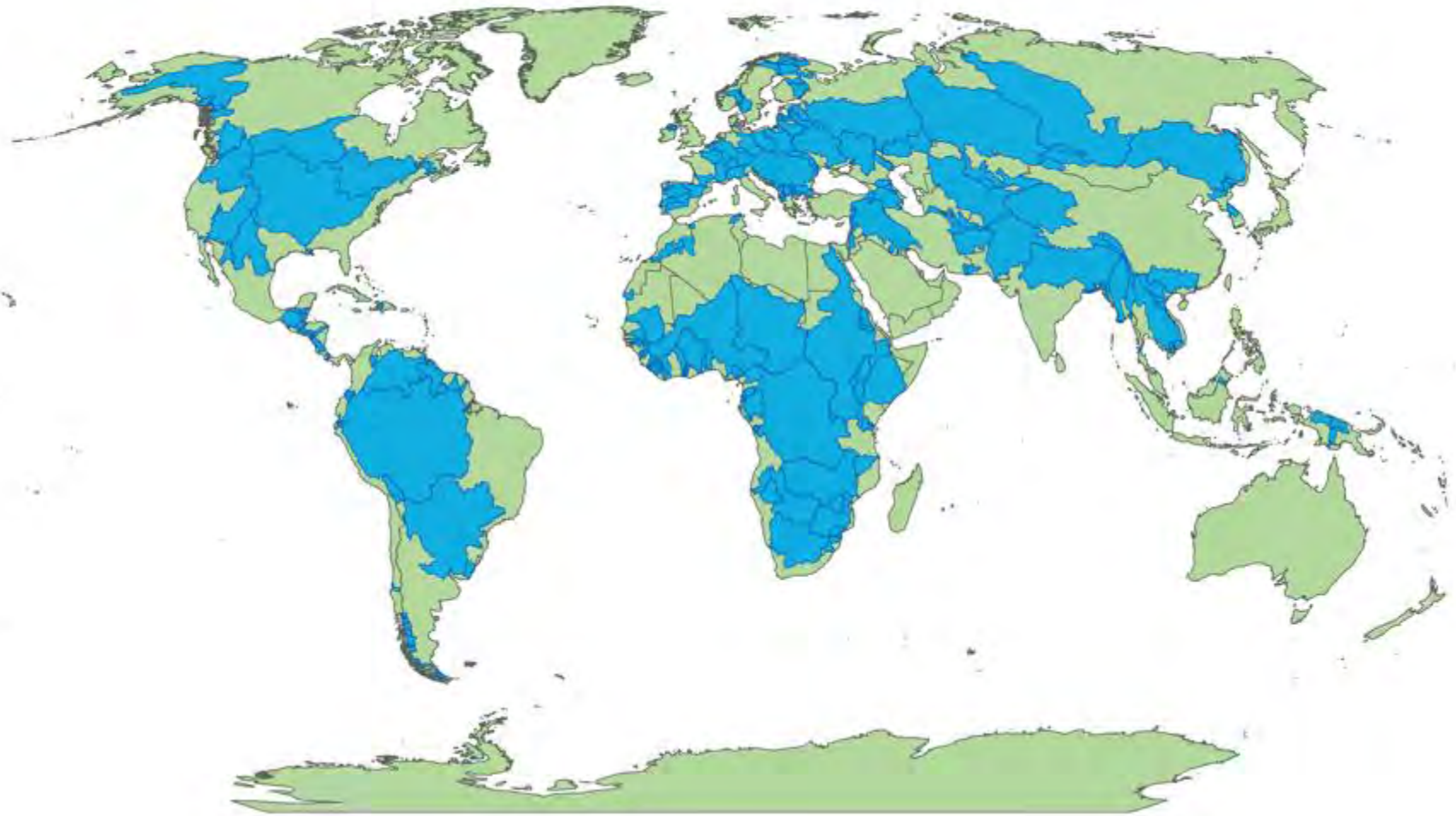
What capacity do we need to address the change?

Water and Conflict

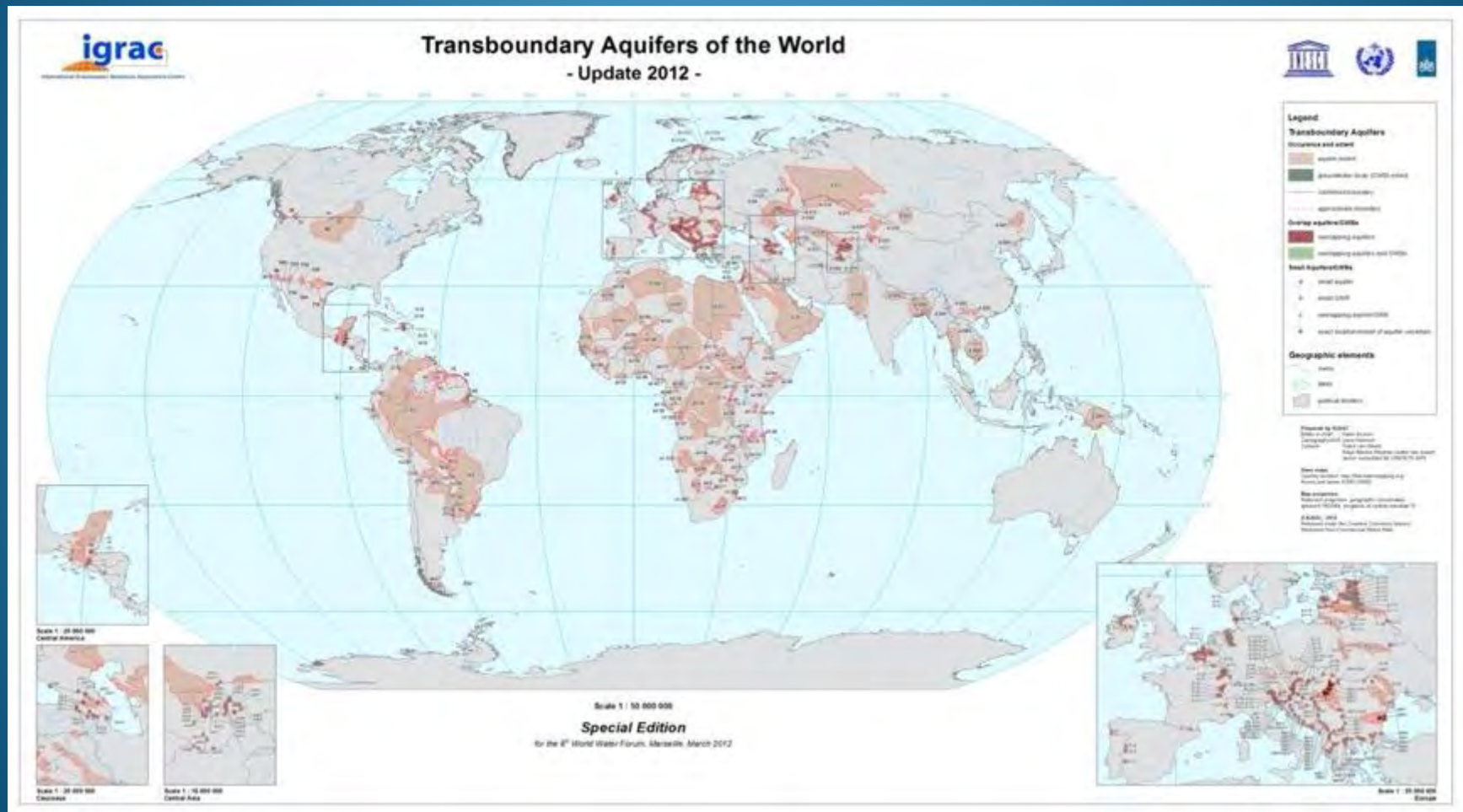
“Fierce competition for fresh water may well become a source of conflict and wars in the future.”

- Kofi Annan, March 2001

Scale of Conflict



Transboundary Aquifers of the World



Water Conflict & Cooperation: Assumptions & Evidence

PREVAILING WISDOM:

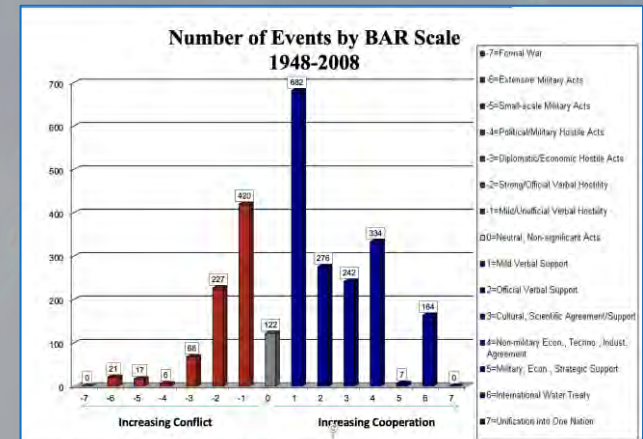
“Conflicts over water are widespread, inevitable, intractable, and violent.”

EVIDENCE:

- At the international scale:
 - 2/3% of interactions are cooperative
 - “Conflict” is mostly verbal (press and politicians)
 - 800 water-related treaties, generally adhered to, even through conflict

BUT

- Disputes seem to be increasing
- Not all cooperation is “good”
- Likelihood & intensity of conflict increases at sub-national level



Source: De Stefano, L., P. Edwards, L. de Silva and A. T. Wolf 2010. "Tracking Cooperation and Conflict in International Basins: Historic and Recent Trends." *Water Policy*, Vol 12 No 6 pp 871-884. Adapted with permission of the authors.

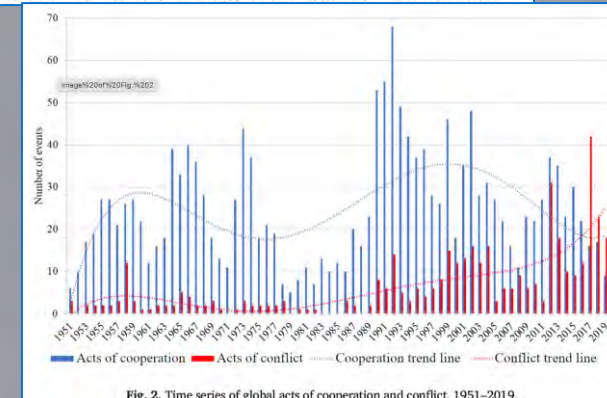
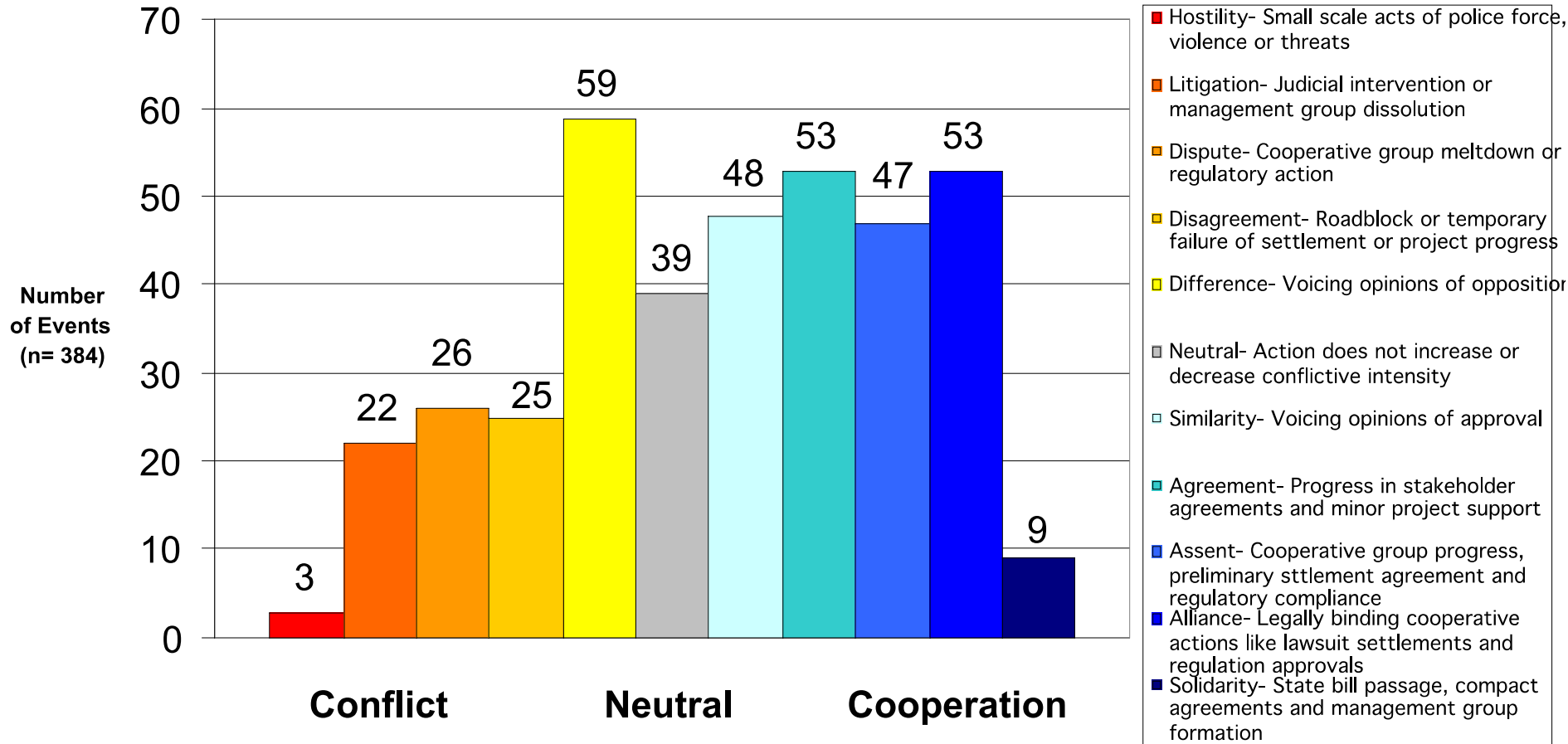


Fig. 2. Time series of global acts of cooperation and conflict, 1951-2019.

Source: Kåresdotter, E. et al. (2023) Water-related conflict and cooperation events worldwide. *Science of the Total Environment*, 868.

Number of Media Reported Events in Oregon along a Cooperation- Conflict Spectrum from 1990 to 2004



Source: Fesler, K. (2006) [Analysis of social interactions concerning Oregon's water resources between 1990 and 2004.] Unpublished Data.

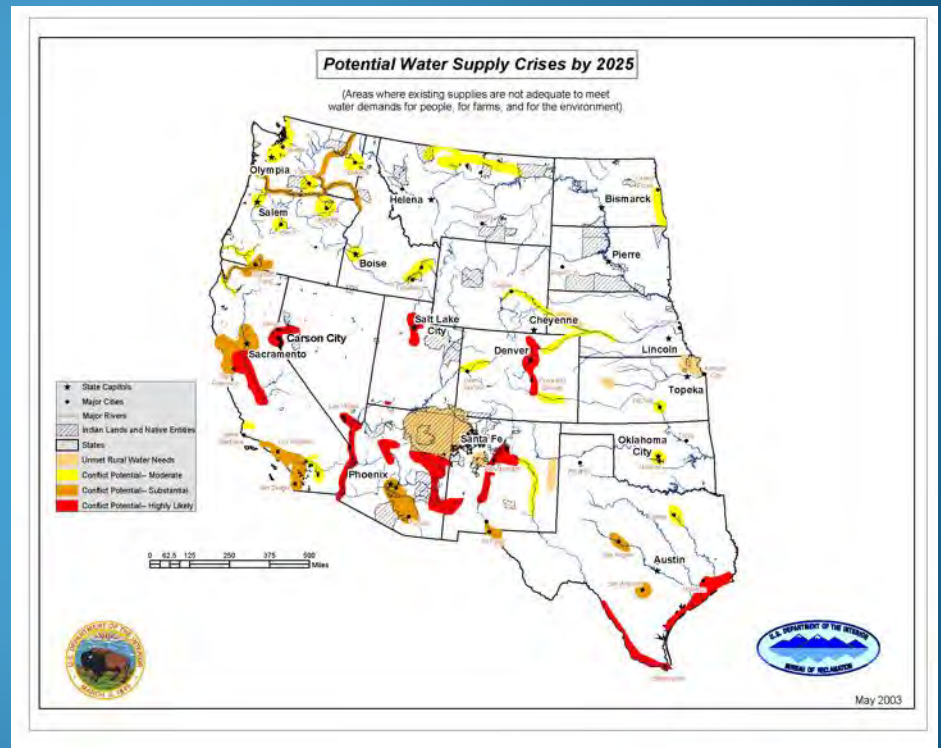
**Capacity Building:
Process Tools
For Water Conflict Management
& Transformation**

Lesson 1:

“Process is everything.”

Management & Conflict Management

- Managers reported that they routinely spent 50-100% of their time managing water conflict
- The higher the management level, the more time was spent in managing conflict
- Training across levels was sporadic
- Is conflict rewarded?



Who's thinking about this?



Global Water Security

INTELLIGENCE COMMUNITY ASSESSMENT
ICA 2012-08, 2 February 2012
This is an IC-coordinated paper.

PRE-DECISIONAL WORKING DRAFT

Declaration on U.S. Policy and the Global Challenge of Water

A Report of the CSIS Global Water Futures Project

DECLARATION COCHAIRS
William H. Frist
E. Neville Isdell

DIRECTOR
Erik R. Peterson

ASSISTANT DIRECTOR
Rachel Posner



MARCH 2009

3D Planning Guide Diplomacy, Development, Defense

31 July 2012



Delft University of Technology



Military Engineering Centre of Expertise

Water Management as a Peace Mechanism

An integrated and comprehensive new policy framework for the
application of water management in stabilisation operations

RESEARCH SUMMARY

Philip Huizinga

erlands, Delft, October 2015

Who's thinking about this?

RECLAMATION
Managing Water in the West

**Sharing Water, Building Relations:
Managing and Transforming
Water Conflict in the US West**

Instructor Manual



Network for Sustainable Hydropower Development in the Mekong Countries (NSHD-M)

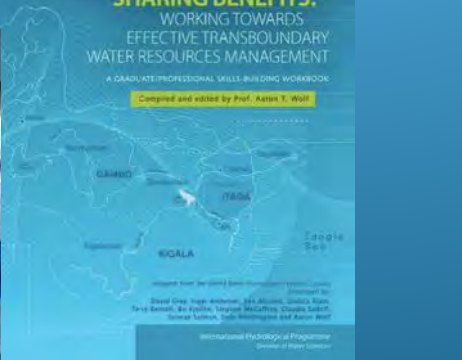
Documentation
**Training of Trainers on
Transboundary Cooperation and Hydropower
Development**

Vientiane, Laos, 22-24 July 2014



**SHARING WATER,
SHARING BENEFITS:**
WORKING TOWARDS
EFFECTIVE TRANSBOUNDARY
WATER RESOURCES MANAGEMENT
A GRADUATE PROFESSIONAL SKILLS-BUILDING WORKBOOK

Compiled and edited by Prof. Armin T. Wolf



Delft University of Technology



Military Engineering Centre of Expertise

Water Management as a Peace Mechanism

An integrated and comprehensive new policy framework for the application of water management in stabilisation operations

RESEARCH SUMMARY

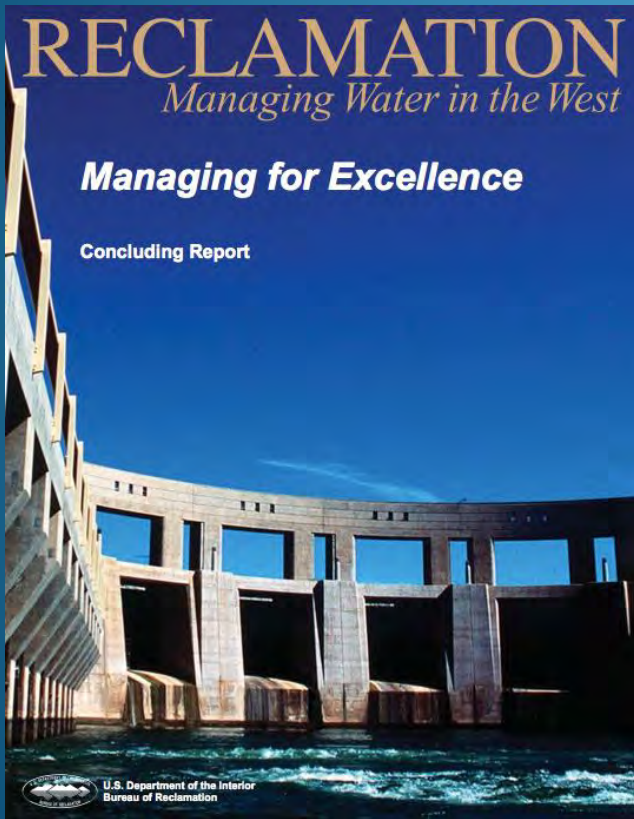


**Effective Negotiation for
Transboundary Waters:
A Skills Building Course**

October 2015

Prepared for the MRC by:
Dr. Armin T. Wolf (Oregon State University)
Dr. Todd Jarvis (Oregon State University)
Hanoi Knowledge (HANO-K) - The Center for People and Forests
April 2015

Collaborative Competencies 2006-2008



“Reclamation has modified position descriptions for all of its employees to address collaborative competency requirements for each individual position. The Commissioner has communicated...with all employees regarding the expectation of collaboration in all Reclamation activities, providing examples of successful practices. Further, individual development plan templates have been established which include training plans for employees on collaborative competencies...”

Lesson 2:

“The process is not rational.”



GETTING TO “YES”

- **Separate the PEOPLE from the problem**
- **Focus on INTERESTS, not positions**
- **Invent OPTIONS for mutual gain**
- **Insist on Objective CRITERIA**

PROCESS TECHNIQUES

- SEATING ARRANGEMENT
- SHARED VISION EXERCISES
- VENTING
- ACTIVE & TRANSFORMATIVE LISTENING
 - Repeat main points
 - "I" not "you"
 - Future not history
- LETTING GO OF OWNERSHIP
- BREAKS FOR CONNECTING



The
**Spirit of
Dialogue**

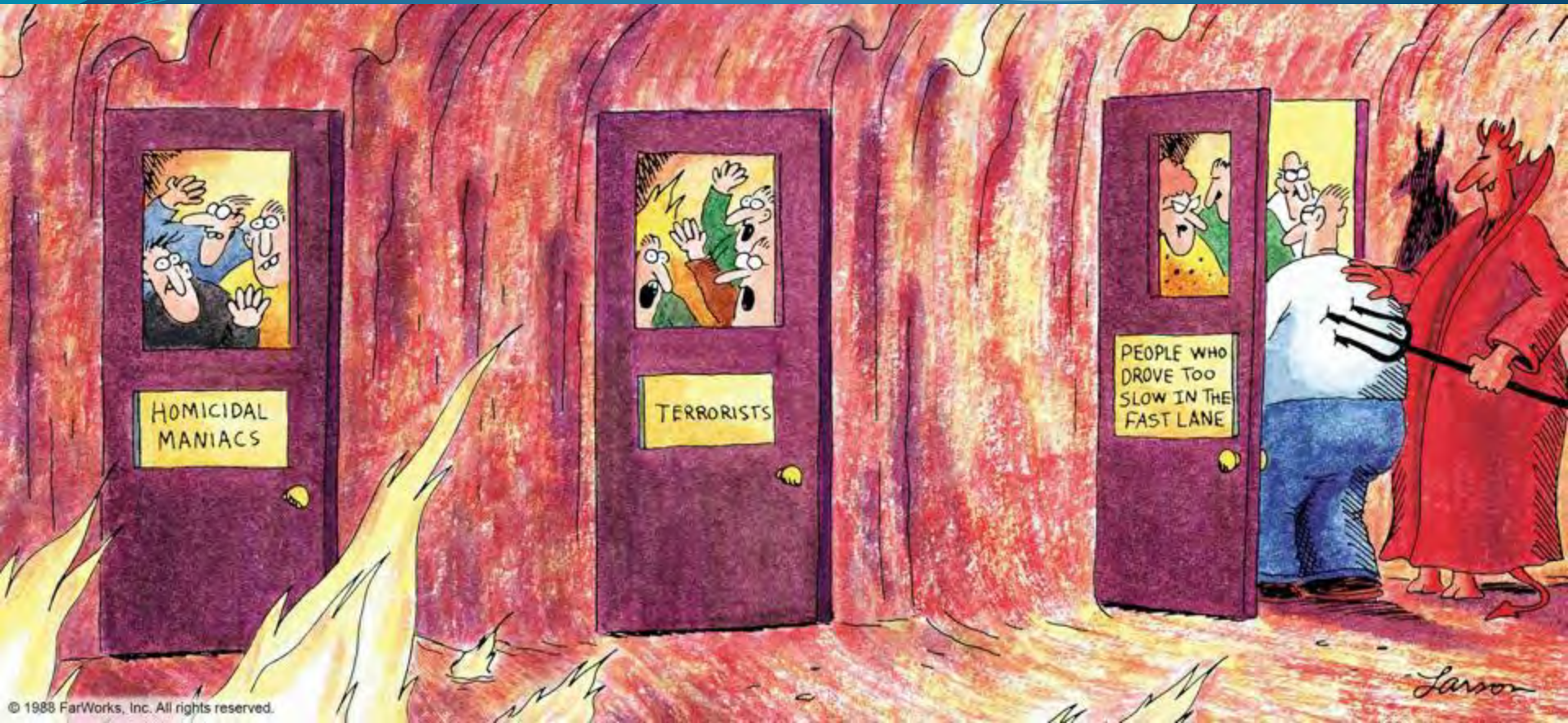
*Lessons
from Faith Traditions in
Transforming Conflict*

Aaron T. Wolf



Island Press, Fall 2017
Code 4SPIRIT for 20% discount

The Four Worlds Within & Without



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Write down one or two things that trigger you,
NOT something that evokes trauma.
What is the issue and your position on the issue?

Breakout Exercise

1. When in the breakout room, divide between speaker and listener.
2. Listener chooses a topic and position from their own list.
3. Speaker speaks against listener's topic for 4 minutes as passionately as possible.
4. Listener:
 1. Listens without speaking
 2. Pays attention to what happens in their body
5. Switch roles – new listener chooses new topic and position

Four Worlds Framework: Four Needs and Four Claims

NEEDS FOR:

- Intrapersonal
- Interpersonal
- Groups
- Nations

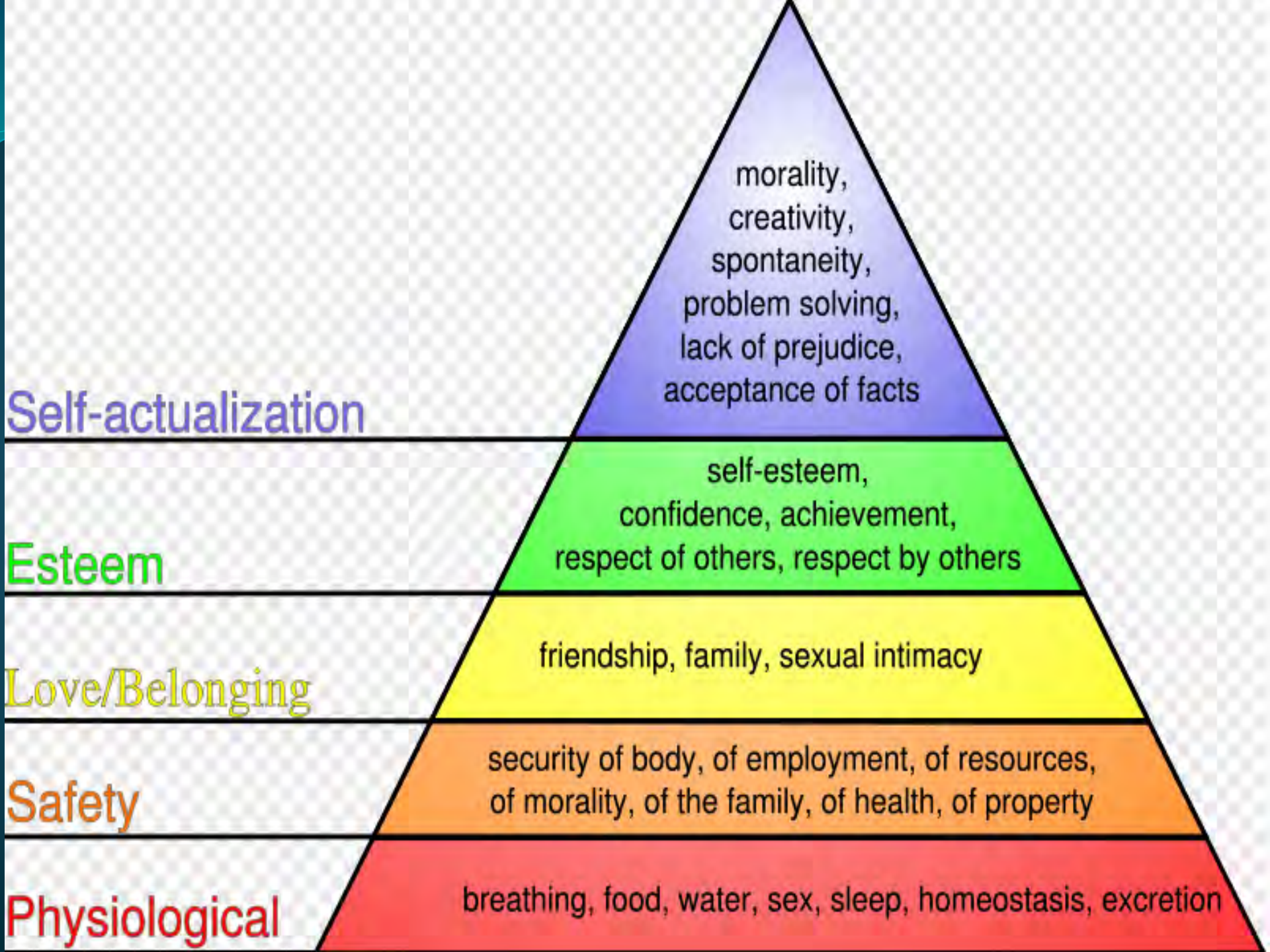


Spiritual	Harmony
Mental	Values
Emotional	Interests
Physical	Positions

CLAIMS:

Expressions of
needs in
negotiations





morality,
creativity,
spontaneity,
problem solving,
lack of prejudice,
acceptance of facts

self-esteem,
confidence, achievement,
respect of others, respect by others

friendship, family, sexual intimacy

security of body, of employment, of resources,
of morality, of the family, of health, of property

breathing, food, water, sex, sleep, homeostasis, excretion

Self-actualization

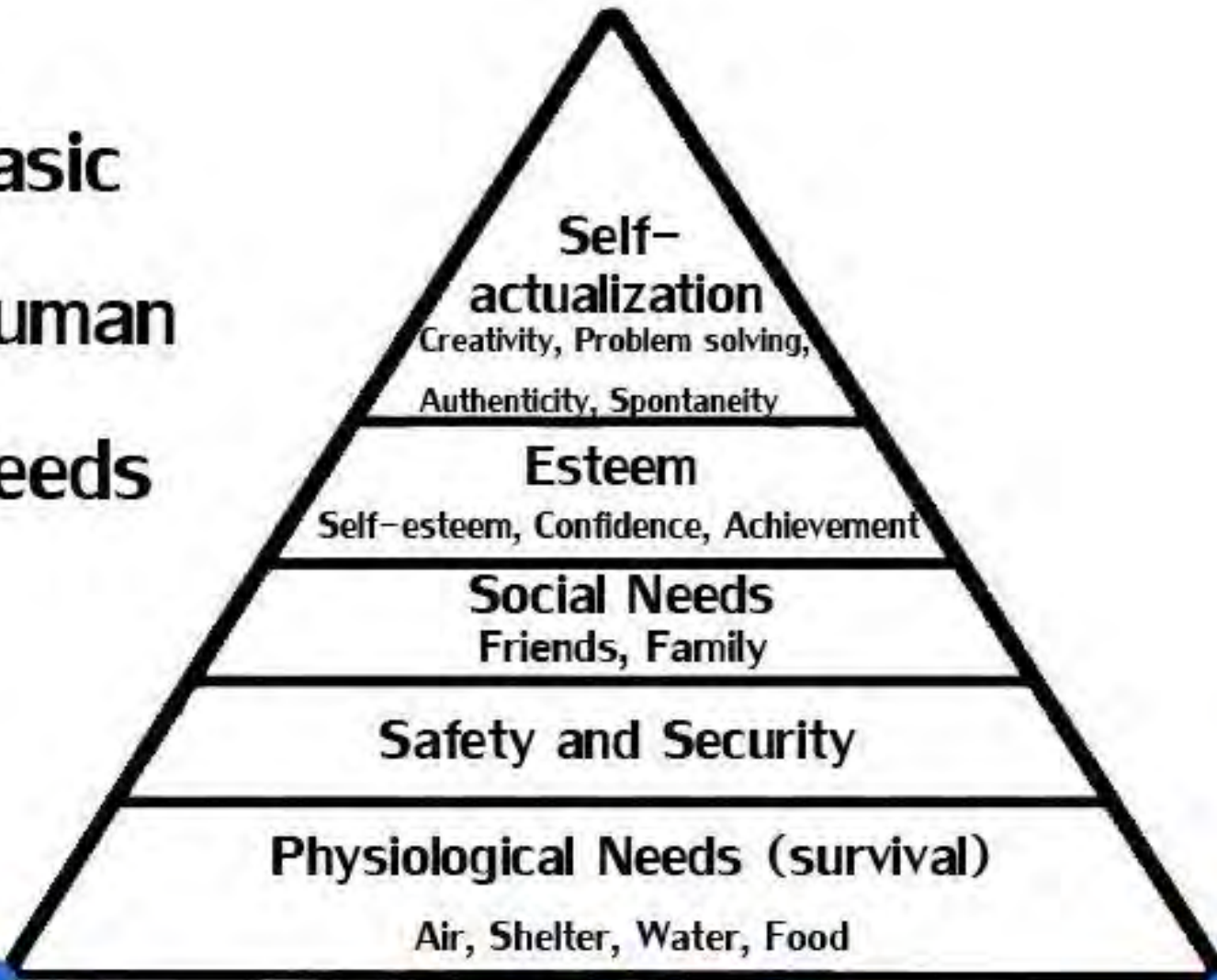
Esteem

Love/Belonging

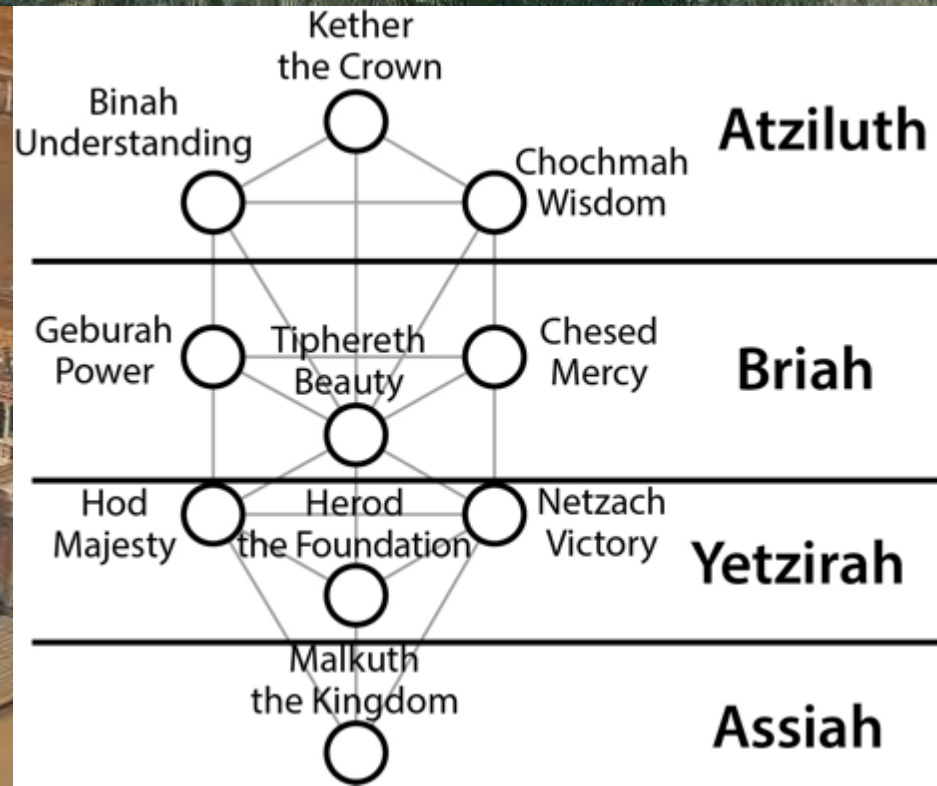
Safety

Physiological

**Basic
Human
Needs**



WiFi





Vishnu's 4 totems

- *mace* – physical strength
- *lotus flower* – glory of existence
- *discus* – mind chakra
- *conch* – AUM: primeval sound of all creation



Four Sights:

- Aged: *annika* – impermanence
- Sick: *dukha* – suffering/disconnection
- Dead: *annata* – tenuous link between being and non-being
- Ascetic: spiritual path





4 Elements of the 4 Corners and 4 Quarters



Men

Father sky

Objective

• West
Physical

• North
Mental

Medicine Wheel from
Shoshone-Bannock
and Oglala Lakota
Traditions

Source: Sammy
Matsaw Jr. 2016

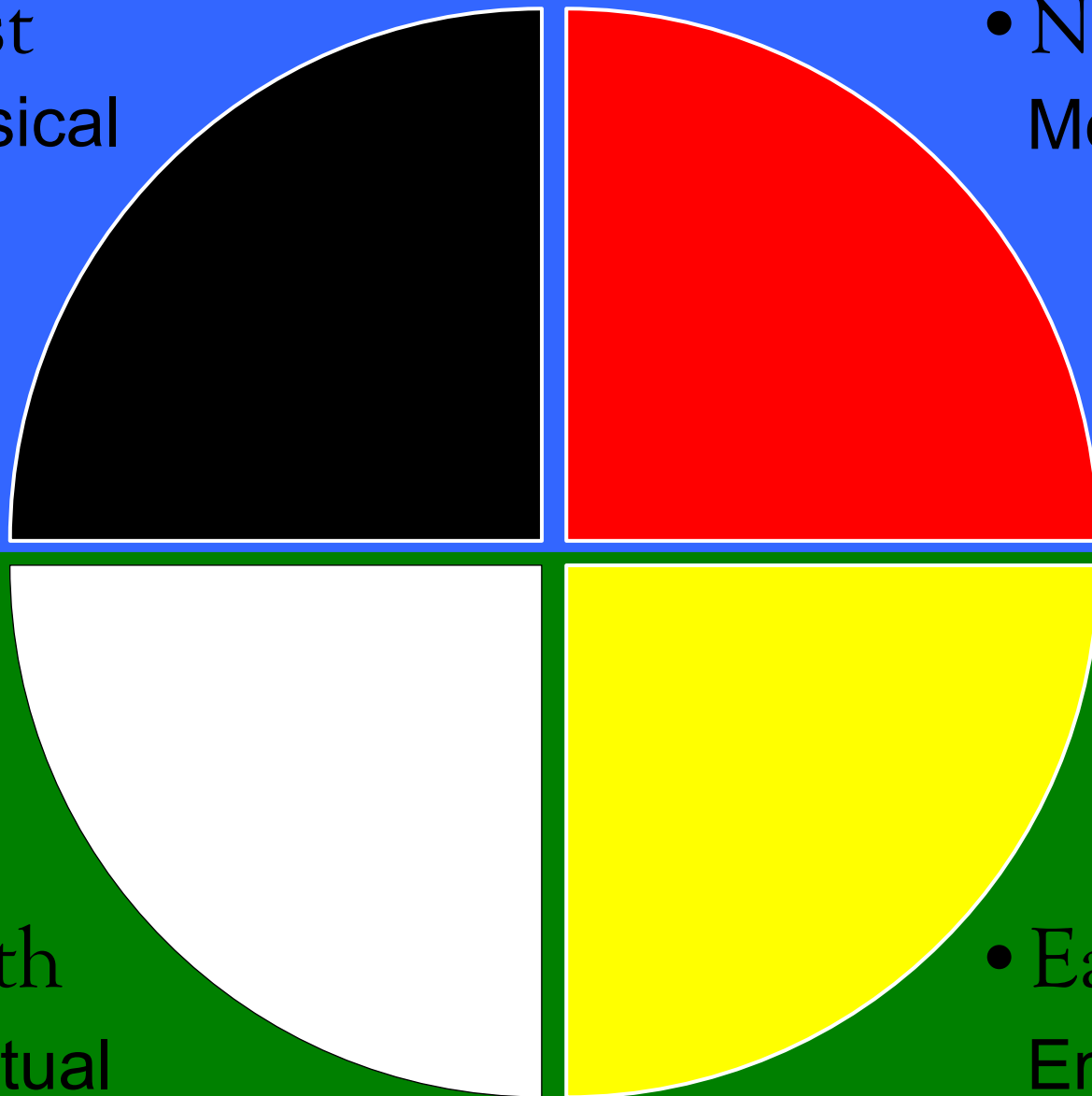
• South
Spiritual

• East
Emotional

Women

Mother earth

Subjective



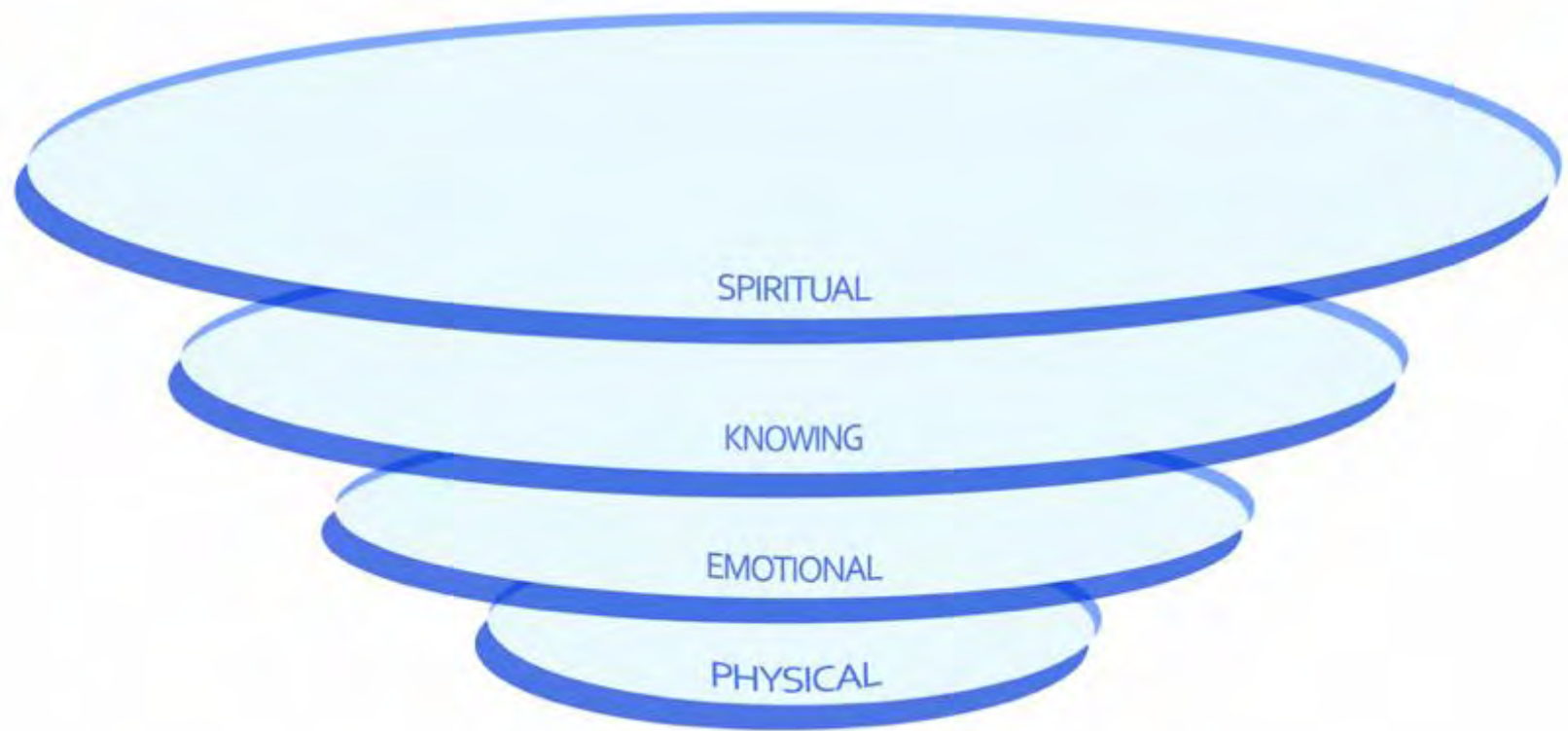
Four Worlds Framework in Islam & Latin American Shamanic Totems

NEEDS FOR:

- Intrapersonal
- Interpersonal
- Groups
- Nations



Spiritual	Marifah (attune- ment)	Eagle
Mental	Hakika (truth)	Humming -bird
Emotional	Tarikhah (prayer of the heart)	Jaguar
Physical	Sharia (law)	Serpent





INTRAPERSONAL

INTERPERSONAL

GROUPS

COMPLEX SYSTEMS

SPIRITUAL

KNOWING

EMOTIONAL

PHYSICAL

INTRAPERSONAL

INTERPERSONAL

GROUPS

COMPLEX SYSTEMS

Four Worlds Framework: Four Needs and Four Claims

NEEDS FOR:

- Intrapersonal
- Interpersonal
- Groups
- Nations



Spiritual	Harmony
Mental	Values
Emotional	Interests
Physical	Positions

CLAIMS:

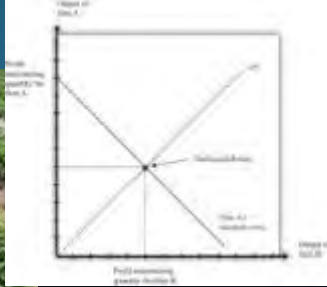
Expressions of
needs in
negotiations



Water??

“The issue is never the issue.”

Four Worlds in Water:



Mental



Physical



Spiritual



Emotional



Lesson 2

The Spirit of Dialogue: Connecting with the “Other”

- *“If you get stuck on a problem, make it bigger:”*
Elevating the conversation
- *“If you get stuck on a problem, make it smaller:”*
Nuancing the conversation
- *“If you get stuck on a problem, reframe for shared values.”*
Or’s -> and’s
- *“If you get stuck on a problem, focus on actions.”*
Consent & consensus

Single most important skill for all four: LISTEN!

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



**Annex on Article 14(b) to be resolved by the Nile
River Basin Commission
within six months of its establishment**

At the end of the negotiations, no consensus was reached on Article 14(b) which reads as follows: *not to significantly affect the water security of any other Nile Basin State*, all countries agreed to this proposal except Egypt and Sudan.

Egypt proposed that Article 14(b) should be replaced by the following wording:

(b) not to adversely affect the water security and current uses and rights of any other Nile Basin State.





Dams and Hydroelectric Schemes

Source: UNEP/DEWA/GRID-Europe 2006

Nile Sub-Basins, Dams and Hydroelectric Schemes



Regional Power Development Strategy



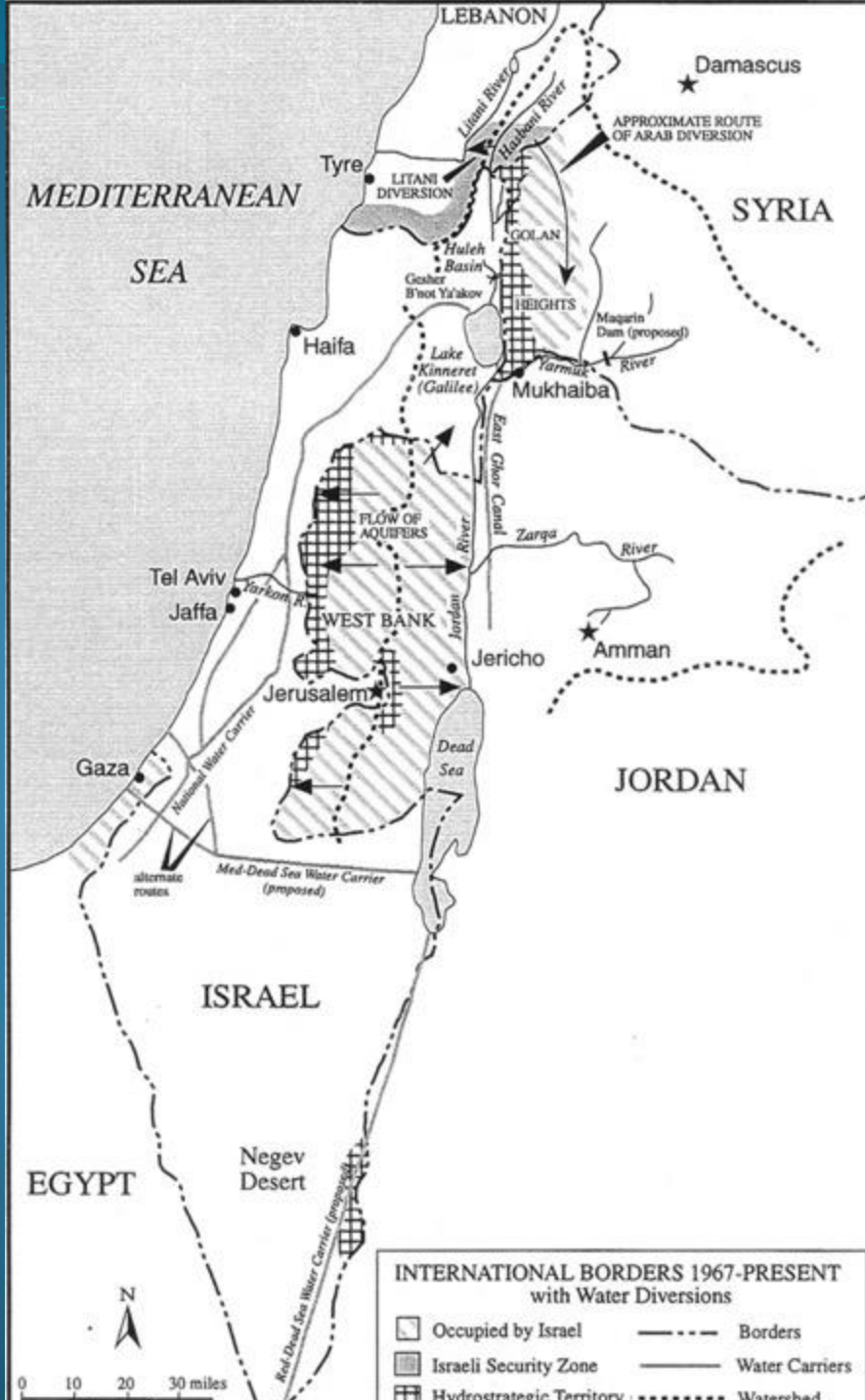
Source: NBI RPTP 2011

Lesson 3:

The Spirit of Dialogue: Connecting with the “Other”

- “If you get stuck on a problem, make it bigger:”
Elevating the conversation
- “*If you get stuck on a problem, make it smaller:*”
Nuancing the conversation
- “If you get stuck on a problem, reframe for shared values.”
Or’s -> and’s
- “If you get stuck on a problem, focus on actions.”
Consent & consensus

Single most important skill for all four: LISTEN!





Breakout Exercise

1. When Israel and Jordan negotiated their borders, both sides wanted a small strip of farmland along the Yarmuk River.
2. It had been Jordanian from 1948-1967, then Israelis had farmed it until peace talks started in the early 1990s.
3. In breakout, divide roles -- one Jordanian and one Israeli.
4. Solve the issue.

You have 3 minutes.





Lesson 4:

The Spirit of Dialogue: Connecting with the “Other”

- “If you get stuck on a problem, make it bigger:”
Elevating the conversation
- “If you get stuck on a problem, make it smaller:”
Nuancing the conversation
- *“If you get stuck on a problem, reframe for shared values.”*
Or’s -> and’s
- “If you get stuck on a problem, focus on actions.”
Consent & consensus

Single most important skill for all four: LISTEN!





The boundaries and names shown and the designations used on this map

Listening

- **Active Listening**

- Paying Attention

- Body Language
 - Separate out cultural, personal differences

- Eliciting

- *Ask.* Ask (non-threatening) questions. Useful both to better understand the speaker, and also to reassure them that you are really listening;

- Reflecting

- *Repeat main points.* This lets the speaker know that they have really been heard, a powerful psychological message, as well as helping to focus the dialogue;
 - *"I" not "you" statements.*
 - *Future, not history.*

Listening

- Active Listening
 - Paying Attention
 - Eliciting
 - Reflecting
- Transformative Listening
 - Space
 - Tracking
 - Offer without insisting
 - Check for completeness
- Most will listen once listened to
- Transformation dissipates anger, allows for empathy
- Helps understand interests behind positions (anger masks pain or vulnerability)



Breakout Exercise

1. When in the breakout room, choose a sensitive topic with your partner, but NOT one that will evoke trauma.
2. Decide on roles to play on opposite sides of the issue.
3. While in role, find 3 things you can agree to.

You have 3 minutes.

Lesson 5:

The Spirit of Dialogue: Connecting with the “Other”

- “If you get stuck on a problem, make it bigger:”
Elevating the conversation
- “If you get stuck on a problem, make it smaller:”
Nuancing the conversation
- “If you get stuck on a problem, reframe for shared values.”
Or’s -> and’s
- “*If you get stuck on a problem, focus on actions.*”
Consent & consensus

Single most important skill for all four: LISTEN!



Nuancing includes asking the right question: Not, “How do I get more data?” but, “What is the LEAST amount of data needed for a reasonably good decision?”



Four Worlds Framework: Four Needs and Four Claims

NEEDS FOR:

- Intrapersonal
- Interpersonal
- Groups
- Nations



Spiritual	Harmony
Mental	Values
Emotional	Interests
Physical	Positions

CLAIMS:
Expressions
of needs in
negotiations



“If you get stuck on a problem,
make it bigger.”

- *Elevating the conversation*

“If you get stuck on a problem,
make it smaller.”

- *Nuancing the conversation*

“If you get stuck on a problem,
reframe it.”

- *Or's -> and's*

“If you get stuck on a problem,
focus on actions.”

- *Consent & consensus*

Single most important skill for all
four: LISTEN!

LESSON 6:

Don't forget the spirit –
and fun! – of water:

Elevating the
conversation

“New” Directions - Spiritual Aspect of Water

- Whanganui River has legal personhood in NZ, must be treated as living entity; settlement gives standing
 - 2 guardians -- one from the Whanganui Iwi (Maori) trust and one from the crown
- Ganges and Yamuna Rivers in India also received personhood, citing NZ, with three guardians
- Implications for water diplomacy?

Elevating the Conversation (cont.)



Egyptian Coptic Church tapped to play the role of mediator in Nile river dispute - Al-Monitor: the Pulse of the Middle East

Egyptian Coptic Church tapped to play the role of mediator in Nile River dispute

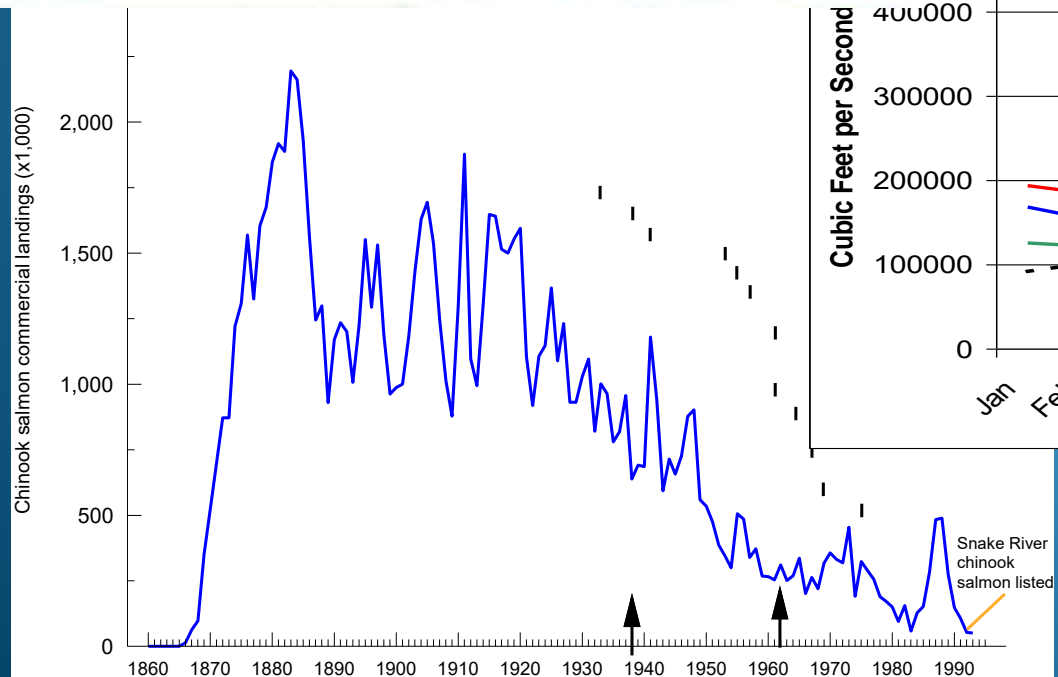
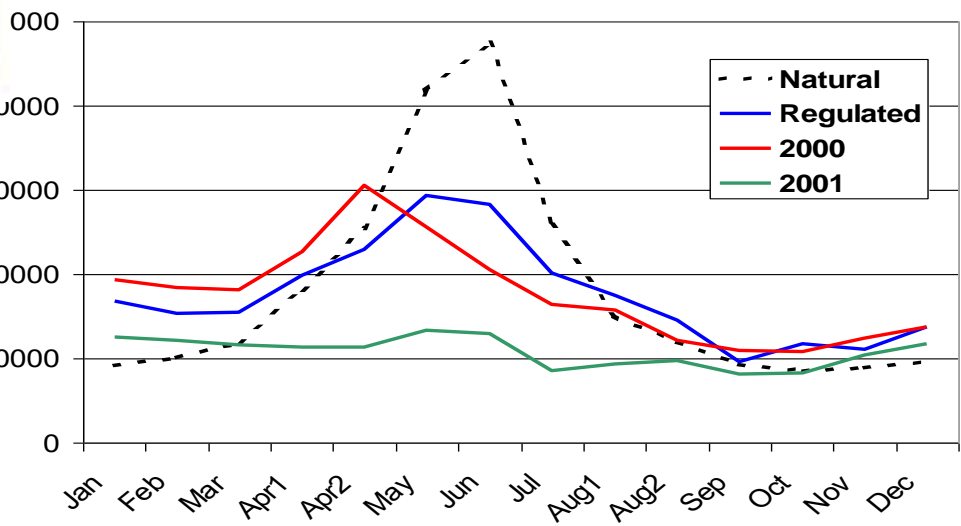


Coptic Pope Tawadros II (R), head of the Coptic Orthodox Church, shakes hands with former army chief Abdel Fattah al-Sisi upon Sisi's arrival for a visit the night before Easter, in Cairo, April 19, 2014. Sisi was elected president a month later. (photo by REUTERS)

Universities Consortium for Columbia Basin Governance



2000 & 2001 Flows at The Dalles -- compared to average





River Festivals



We drink it. They live in it.
We all rely on it.



River Festivals



New Directions: Spiritual Aspect of Water

All things in the natural world have *mauri* (life force) and *wairua* (a spiritual dimension). Respect for the spiritual integrity of the environment and the *atua* (God) that created it will ensure that the *taonga* (treasure) can be protected and passed on to succeeding generations.

*NEW ZEALAND NATIONAL POLICY STATEMENT
for Freshwater Management 2014*



Thank you!

