

A new global initiative: The Alliance for Freshwater Life



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SIWI WORLD
WATER
WEEK

Sunday, 26 August, 09:00 (FH Cabaret)

allianceforfreshwaterlife.org #AllianceFWLife #WWWeek


Alliance for
Freshwater Life



Doré

Gustave Doré, Crossing the River Styx, 1861



Michel Roggo, Swedish Lapland



Michel Roggo, Okavango







Michel Roggo, Lake Malawi



Michel Roggo, Pantanal



Michel Roggo, Pantanal







Michel Roggo, Serra da Bodoquena

The Origins of our Alliance for Freshwater Life

Will Darwall, IUCN

PRESENTATION OVERVIEW

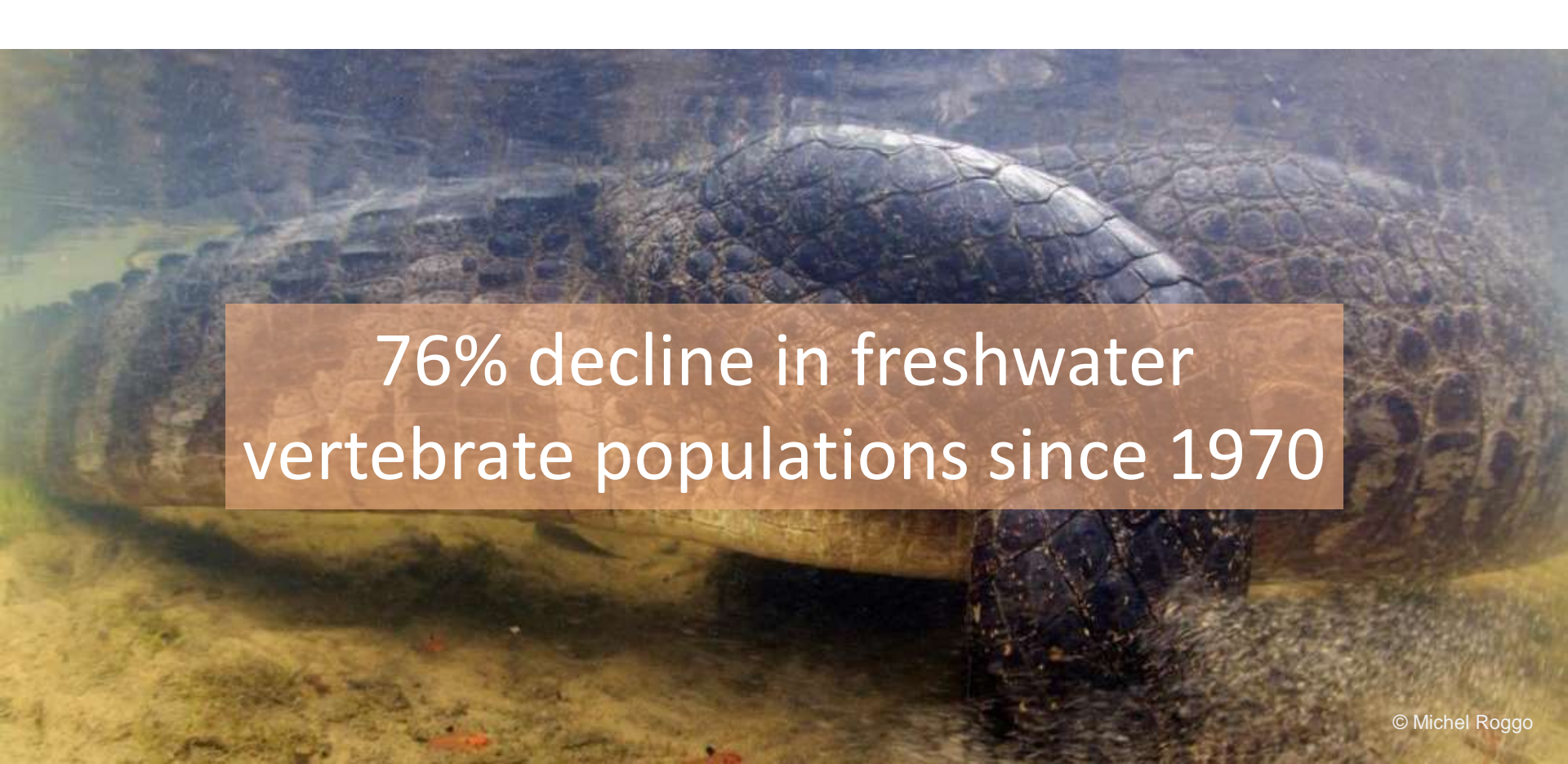
- ❖ The Global Freshwater Biodiversity Crisis
- ❖ Origins of the Alliance for Freshwater Life
- ❖ The Five Pillars of the Alliance

© Michel Roggo

Freshwater Ecosystems:

- < 1% of the Earth's surface
- >10% of all known species

© Michel Roggo

A large tortoise, possibly a Galapagos tortoise, is shown resting on a sandy riverbed. The tortoise's shell is dark and has a distinct scaly pattern. The water is slightly turbid, and the background shows a natural river environment.

76% decline in freshwater
vertebrate populations since 1970

© Michel Roggo




64% of inland wetlands
lost since 1900

© Michel Roggo



1 in 3 species at
risk of extinction



Ecosystem services
valued at USD 29
trillion / year

© Michel Roggo

Focusing on Europe

Taxonomic Group	% Endemic	% Threatened
FW Molluscs	88%	44%
FW Fishes	81%	37%
Amphibians	77%	23%



Freshwater Megafauna (>30kg)

71% are in decline

43% insufficient data for Red Listing

58% threatened

Sturgeon (27 species)

23: Threatened

17: Critically Endangered



© Charlene N Simmons / Flickr

Gone forever...?





Origins of the *Alliance for Freshwater Life*

© Warren Photographic

Chester 2010: IUCN SSC/WI Freshwater Fish SG meeting, a new initiative is proposed to address the global crisis facing FW biodiversity

Census of Marine Life = potential model: 10 years; USD 650 million; 2,700 scientists; 540 expeditions; 6,000+ new spp.

Montserrat, Spain, 2011: Endorsed the idea for an *Alliance*; called for an international expert network

Berlin, IGB, November 2017: Formalised the *Alliance for Freshwater Life*



Vision

A world where people better understand, value, and safeguard freshwater biodiversity

Mission

To halt and reverse the global decline of freshwater biodiversity through research, data synthesis, conservation, education, outreach, and policy-making

Research



to coordinate and support efforts that examine the status, trends, and drivers of change in freshwater biodiversity

Data & Synthesis



to compile, manage, synthesise and provide access to freshwater biodiversity data

Conservation



to inform, support, connect and implement conservation efforts throughout the world

Education & Outreach



to raise the profile of freshwater biodiversity worldwide through education and public engagement

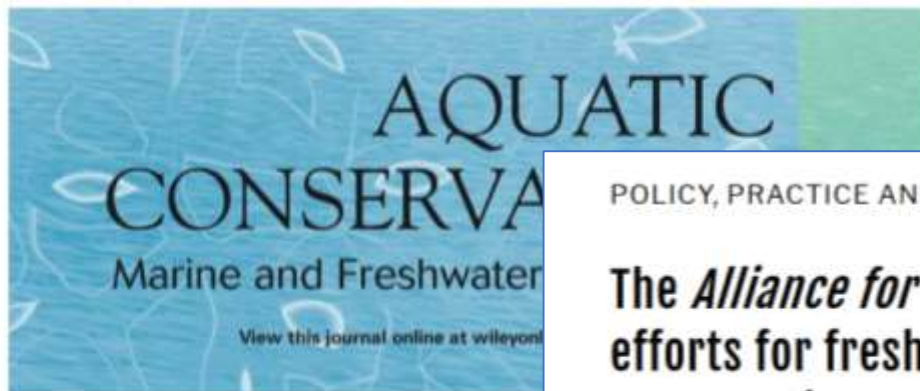
Policy



to engage with policy-makers and provide scientific evidence needed to make informed decisions related to the conservation of freshwater biodiversity



Alliance for Freshwater Life



AFL LAUNCH PAPER NOW AVAILABLE AND VIEWING!

POLICY, PRACTICE AND STANDARDS

The *Alliance for Freshwater Life*: A global call to unite efforts for freshwater biodiversity science and conservation

William Darwall, Vanessa Bremerich, Aaike De Wever, Anthony I. Dell, Jörg Freyhof, Mark O. Gessner, Hans-Peter Grossart, Ian Harrison, Ken Irvine, Sonja C. Jähnig, Jonathan M. Jeschke, Jessica J. Lee, Cai Lu, Aleksandra M. Lewandowska, Michael T. Monaghan, Jens C. Nejtgaard, Harmony Patricio, Astrid Schmidt-Kloiber, Simon N. Stuart, Michele Thieme, Klement Tockner, Eren Turak, Olaf Weyl

First published: 13 August 2018; DOI: <https://doi.org/10.1002/aqc.2958>



THANK YOU

The Challenges

**Martha Rojas-Urrego,
Secretary General, Ramsar Convention**

Our team so far...



Research

Michael T Monaghan, IGB

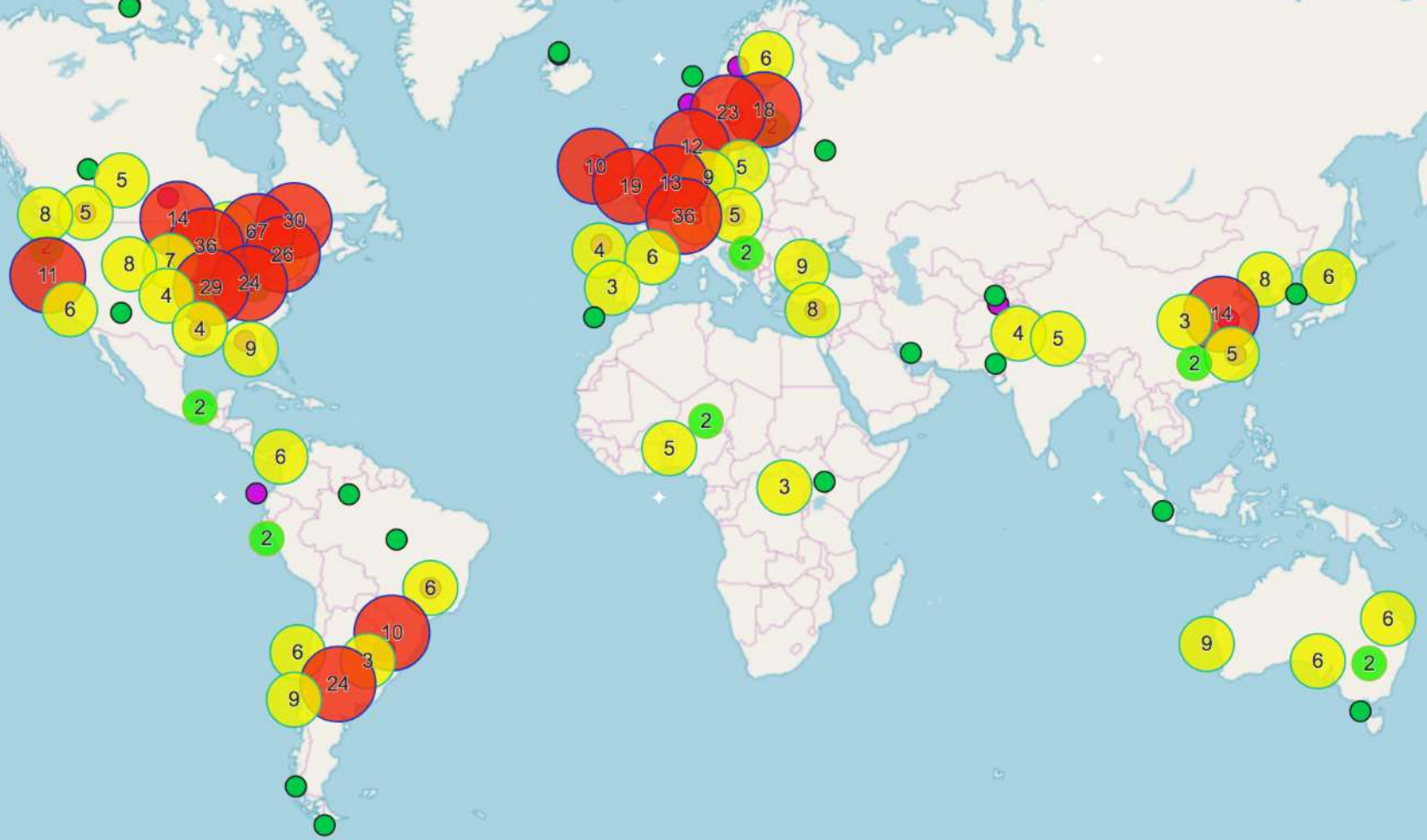
Research

Objectives: to coordinate and support efforts that examine the status, trends, and drivers of change in freshwater biodiversity

- Coordinate research efforts
 - *transnational access to infrastructure and data*
- Align FW Biodiversity research to other initiative (SGDs, IPBES)
- Provide mentor system for poorly represented/funded areas
- Propose and draft calls for funding in FW Biodiversity research

Global Lakes Ecological Observatory Network (GLEON)


500 members in 49 countries



Article | Published: 17 February 2017

Cross-realm assessment of climate change impacts on species' abundance trends

Diana E. Bowler , Christian Hof, Peter Haase, Ingrid Kröncke, Oliver Schweiger, Rita Adrian, Léon Baert, Hans-Günther Bauer, Theo Blick, Rob W. Brooker, Wouter Dekoninck, Sami Domisch, Reiner Eckmann, Frederik Hendrickx, Thomas Hickler, Stefan Klotz, Alexandra Kraberg, Ingolf Kühn, Silvia Matesanz, Angelika Meschede, Hermann Neumann, Robert O'Hara, David J. Russell, Anne F. Sell, Moritz Sonnewald, Stefan Stoll, Andrea Sundermann, Oliver Tackenberg, Michael Türkay, Fernando Valladares, Kok van Herk, Roel van Klink, Rikjan Vermeulen, Karin Voigtländer, Rüdiger Wagner, Erik Welk, Martin Wiemers, Karen H. Wiltshire & Katrin Böhning-Gaese - [Show fewer authors](#)

Nature Ecology & Evolution **1**, Article number: 0067 (2017) | [Download Citation](#) 



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Data

Ingrid Timboe, AGWA

TMI, IDK or SMH: Data in the Anthropocene



Ingrid Timboe
Alliance for Global Water Adaptation
(AGWA)
26 August 2018

Shifting Baselines

- We traditionally make management decisions based on reference conditions.
- Climate change fundamentally alters the reliability of this data for predicting future states.
- Deep uncertainty about the future means that decisions cannot come from data alone.

Lost in Translation

- Lack of awareness does not stem from a lack of data
- Water language is the language of engineers
 - Quantity, quality, frequency, timing, duration, etc.

Lost in Translation

If we want people to care about freshwater ecosystems we need to speak their language, not ours

Research for data's sake is not good research

- Who is your data designed for?
 - Is it relevant to their needs? To their field and socio-cultural context?
 - Can they access, understand, and take action?
- For these reasons, end users **MUST** be active research participants and leaders, not passive recipients of “our” knowledge

Mexico's National Water Reserves Program



- WWF-Mex and CONAGUA sponsored project to establish a national system of water reserves
- In collaboration with water users, rural communities, academic institutions, NGOs, and the federal government

Mexico's National Water Reserves Program



- Demonstrates that water reserves ensure a healthy functioning of the water cycle, as well as the environmental services they provide
- Build capacity for implementation of e-flows backed by official national guidelines throughout the country

Conservation

Michele Thieme, WWF

Conservation

Objectives: to inform, support, connect, and implement freshwater biodiversity conservation

The *Alliance* proposes to initially focus on the following activities:

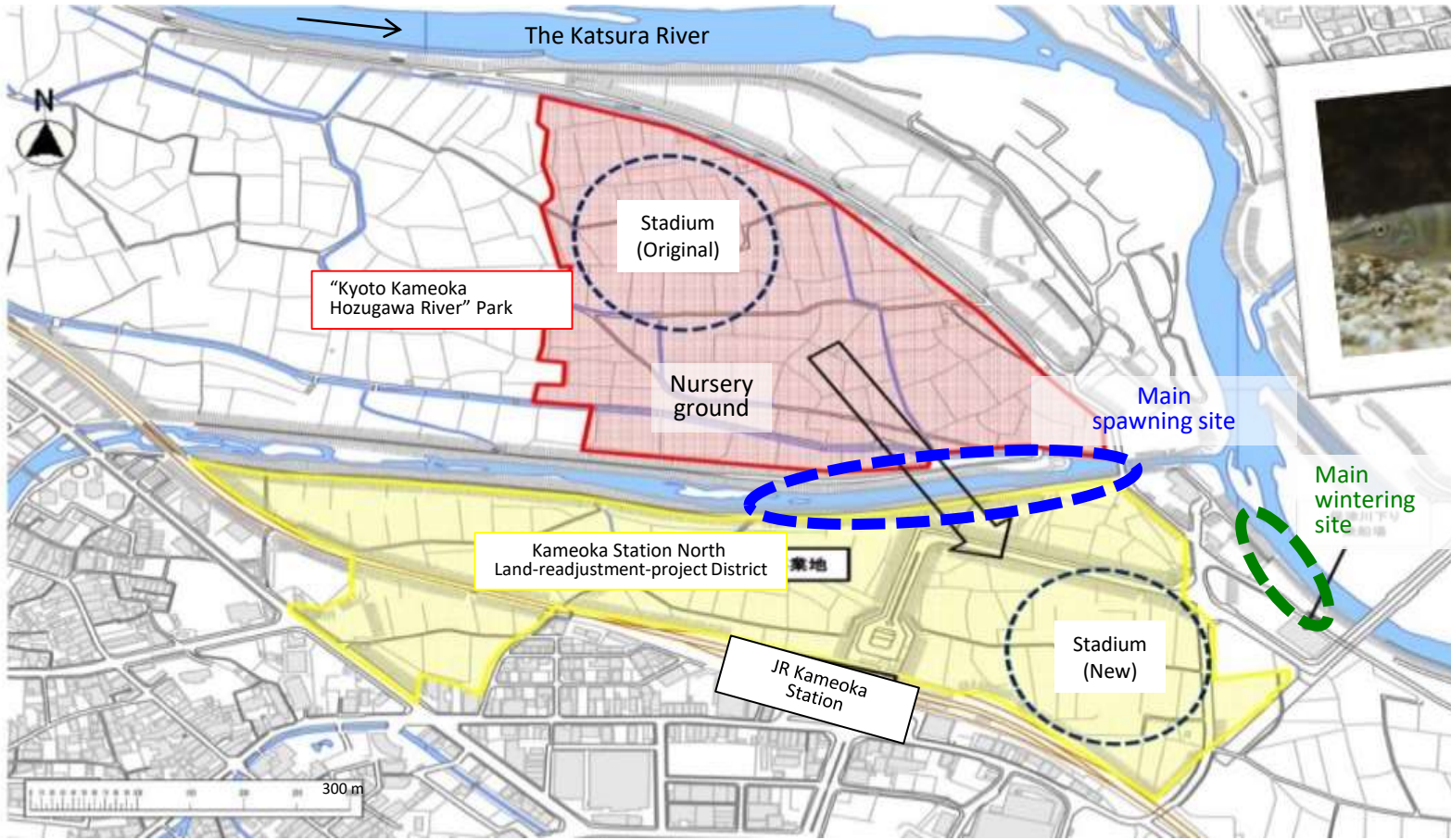
- **Expert Network:** to share and disseminate information and technology
- **Blueprint for Action & Protected Area gap analysis:** to develop a global “Blueprint for Action” identifying important freshwater ecosystems or sites & gaps in protection
- **Conservation Action:** action in those ecosystems or sites prioritised through the Blueprint for Action
- **Funding Platform:** to showcase projects for site-based conservation action of freshwater species and ecosystems



**WORLD FISH
MIGRATION DAY**









© Cambodia WWF / Gerry Ryan





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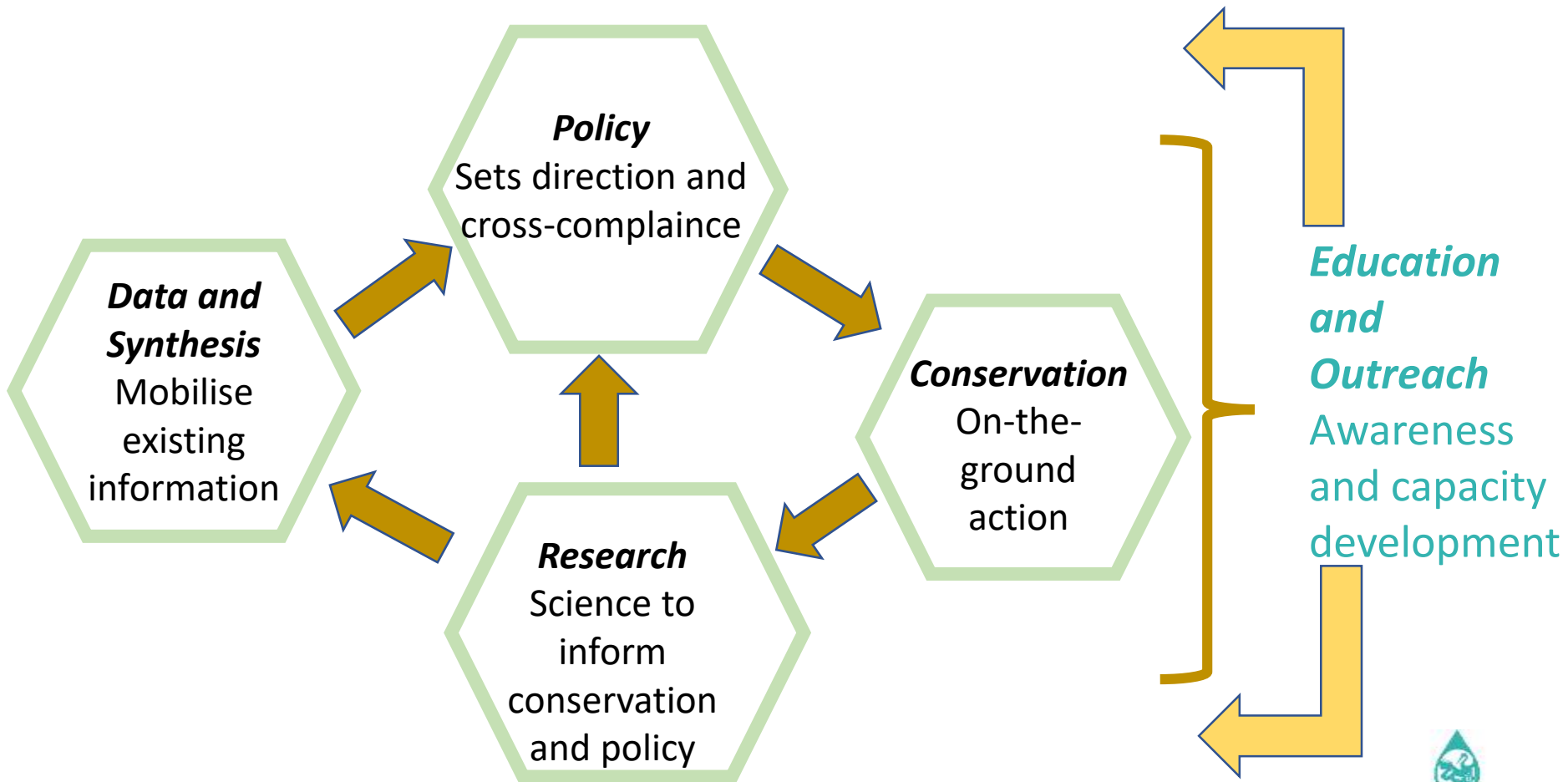
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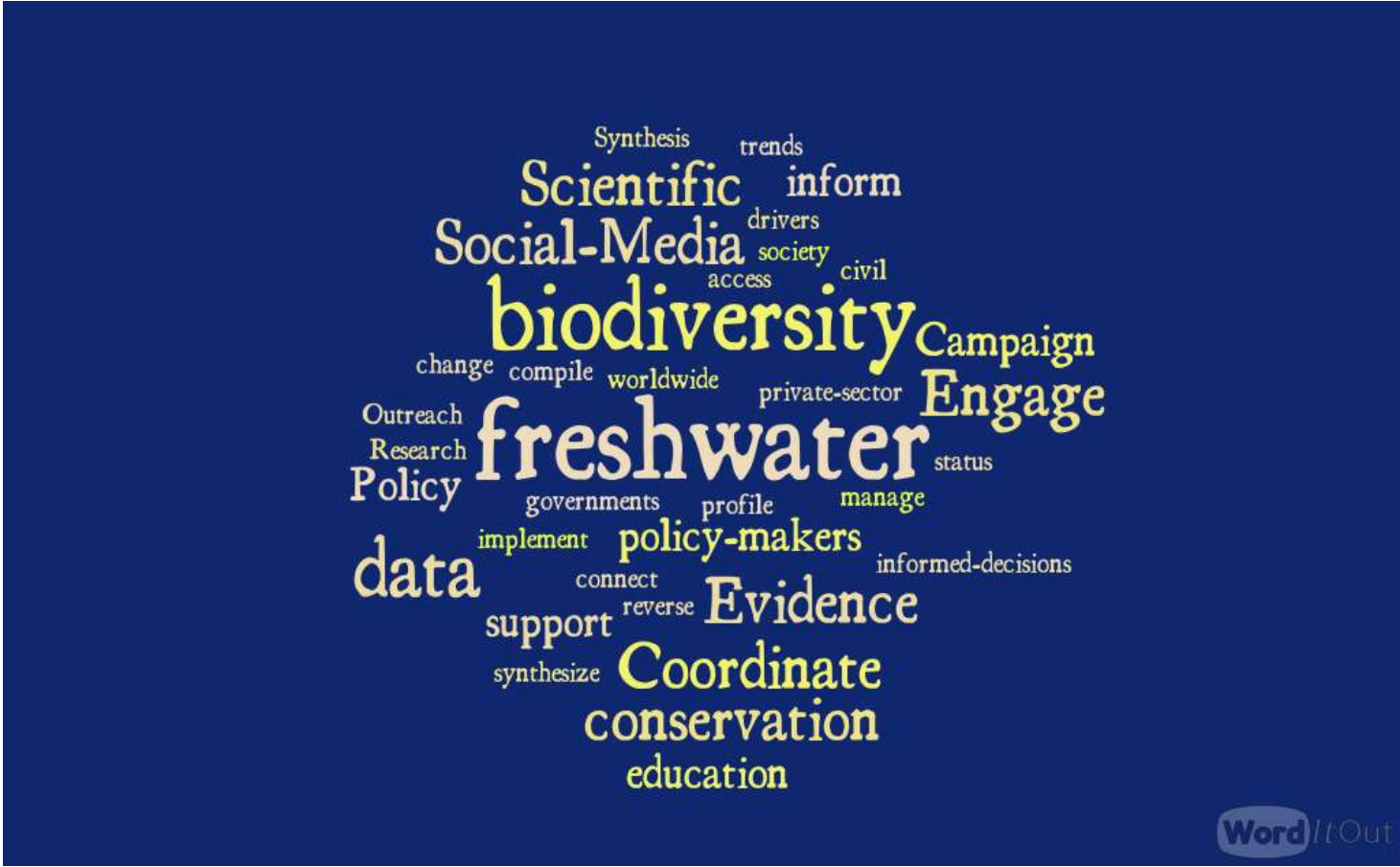


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Outreach

Ken Irvine, IHE Delft





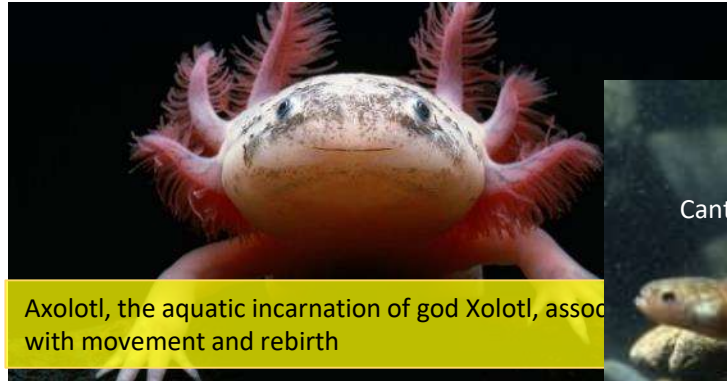
WordItOut

Publications

POLICY, PRACTICE AND STANDARDS

The *Alliance for Freshwater Life: A global call to unite efforts for freshwater biodiversity science and conservation*

AQUATIC CONSERVATION
Marine and Freshwater Ecosystems



Axolotl, the aquatic incarnation of god Xolotl, associated with movement and rebirth

<https://undp-biodiversity.exposure.co/fair-share>

AFL Outreach

WILEY

Actions & Successes



Canterbury Mudfish

Inspiration and awareness

Universal Declaration of River Rights

[A]ll rivers are entitled to the fundamental rights set forth in this Declaration, which arise from their very existence on our shared planet.

The fundamental rights held by all rivers include:

- The right to exist
- The right to flourish
- The right to be free from pollution
- The right to be free from dams and other barriers
- The right to be free from over-extraction
- The right to be free from over-exploitation

In order to ensure full implementation:

- Each river shall be entitled to a guardian to monitor and enforce its rights.
- Governments shall ensure adequate funding to realize these rights.

To read the full text and support the Universal Declaration of River Rights visit:
www.earthlawcenter.org/river-rights

©EarthLawCenter.org www.earthlawcenter.org 800.822.8227

<https://www.earthlawcenter.org/river-rights/>

Policy

**Vanesa Rodríguez Osuna, CUNY
Advanced Science Research Center and
Sequa gGmbH**

Policy

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)



Science-Policy: What can we learn from the IPBES process that is relevant for this Alliance?



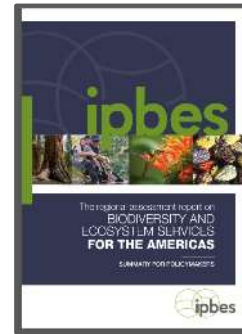
Food and Agriculture
Organization of the
United Nations



Policy

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)

- Examples of key findings of IPBES: The Americas Regional Assessment
- Positive policy outcomes of IPBES that can inspire the Alliance for Freshwater Life



<https://www.ipbes.net/assessment-reports/americas>

Policy

Scientists provide input to the High Level Panel on Water

- Science-policy interface: Mandate from policy makers
- **Ecosystem-based water security and the Sustainable Development Goals (SDGs)**
- Key issues
- Calls-to-Action



Contact

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&

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World Café Discussion Period (25 mins)

Please join one of our five pillars for discussion:

- **Research**
- **Data**
- **Conservation**
- **Outreach**
- **Policy**

Questions to consider:

- How can you contribute?
- How can we improve on this?
- What ideas should we be drawing on and emulating?
- What have we missed?

Wrap up and Conclusion

- **What were the key takeaways from your group discussion?**
- **How can we move forward together as an Alliance?**

Thank you for joining us!

- Visit our website at <http://allianceforfreshwaterlife.org>
- Follow us on Twitter [@AFL_org](https://twitter.com/AFL_org)
- Tweet us your suggestions using the hashtag [#AllianceFWLife](https://twitter.com/hashtag/AllianceFWLife)
- Reach us via email at info@allianceforfreshwaterlife.org