

UKILN Conference

**Lakes – protecting,
enhancing and restoring.**

**Westport
16th and 17th October 2019**

Hotel Westport Leisure, Spa & Conference Hotel

<http://www.ukandirelandlakes.org>

United Kingdom Ireland Lake Network



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20 Years Living Lakes - A Global Perspective on Lakes

Udo Gattenlöhner
Global Nature Fund, Germany



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Global
Nature
Fund

Who we are



Who we are

Non-profit foundation
for environment and nature



Global
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Fund

Where we are

Where we are

Lake Constance

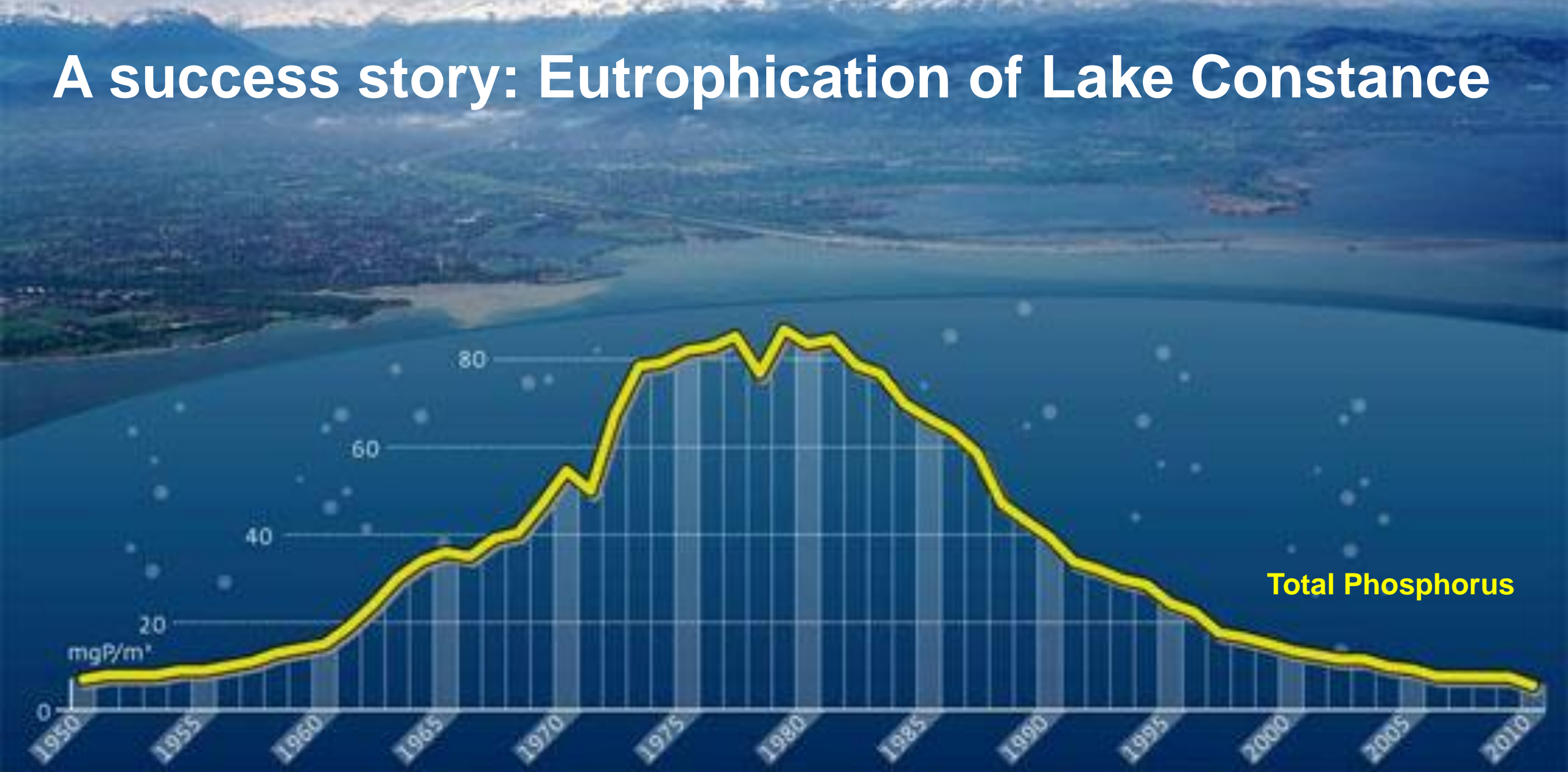
Germany

Switzerland

Austria



A success story: Eutrophication of Lake Constance





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What we do



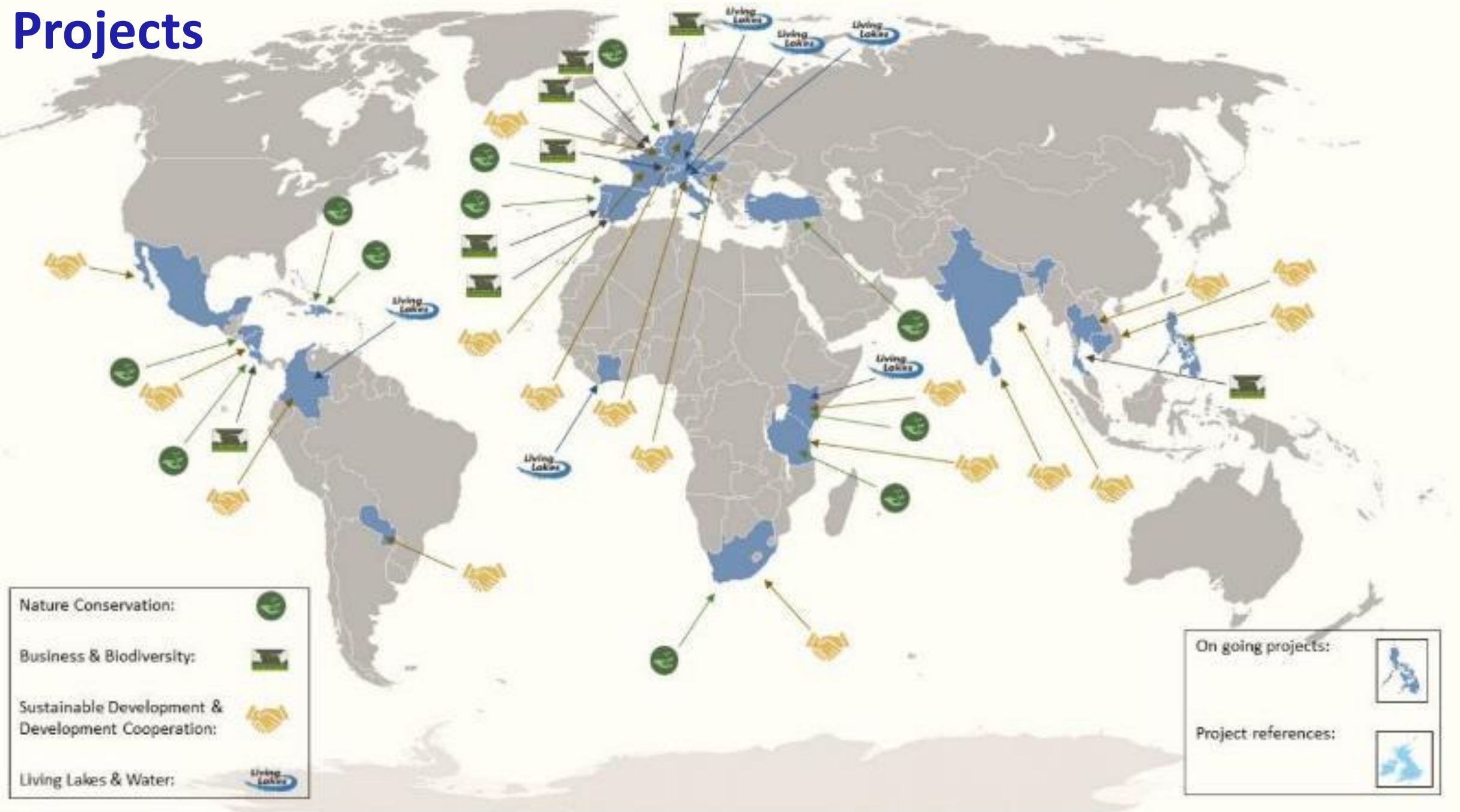
What we do

Living Lakes: Protection of lakes and wetlands

Development Cooperation: Model projects on species & habitats protection, sustainable tourism, poverty alleviation etc.

Business & Biodiversity

Projects





Members of the Living Lakes Network

NORTH AMERICA

- 1 Columbia River Wetlands; Canada

- o Lake Atitlán; Guatemala
- 9 Lake Amatitlán; Guatemala

SOUTH AMERICA

- 10 Laguna de Fiquene; Colombia
- 11 Lake Totá; Colombia
- 12 Lake Titicaca; Peru, Bolivia
- 13 Pantanal Wetlands; Brazil, Bolivia, Paraguay
- 14 Lagunita Komplex; Paraguay
- 15 Laguna de Rocha; Uruguay
- 16 Mar Chiquita; Argentina
- 17 Río Gallegos; Argentina

EUROPE

- 18 Norfolk & Suffolk Broads; Great Britain
- 19 Lake District; Great Britain
- 20 La Nava; Spain
- 21 Lake Albufera; Spain
- 22 Delta de Llobregat; Spain
- 23 La Mancha Wetlands; Spain
- 24 Salobrar de Campos Wetlands; Majorca, Spain
- 25 Kolindssund Wetlands; Denmark
- 26 Lake Constance; Germany, Switzerland, Austria
- 27 Chiemsee; Germany *
- 28 Lake Dümmer; Germany *
- 29 Lake Plön; Germany *
- 30 Lusatian Lakeland; Germany *
- 31 Mindelsee; Germany *
- 32 Upper Swabian Lakes; Germany *
- 33 Lake of Plau; Germany *
- 34 Lake Schwerin; Germany *
- 35 Lake Stechlin; Germany *
- 36 Lake Steinhude; Germany *
- 37 Lake Trasimeno; Italy
- 38 Lake Albano; Italy *
- 39 Lake Bolsena; Italy *
- 40 Lake Bracciano; Italy *
- 41 Colfiorito Wetland and Park; Italy *
- 42 Lake Garda; Italy *
- 43 Lago Maggiore; Italy *
- 44 Lake Nemi; Italy *
- 45 Lake Orta; Italy *
- 46 Lake Piediluco; Italy *
- 47 Lake Vico; Italy *
- 48 Młitcz Ponds; Poland
- 49 Lake Balaton; Hungary
- 50 Nestos Lakes and Lagoons; Greece
- 51 Labanoras Regional Park; Lithuania
- 52 Lake Peipsi; Estonia, Russia
- 53 Lake Võrtsjärv; Estonia

AFRIKA

- 54 Lake Sonfon; Sierra Leone
- 55 Lake Nokoué; Benin
- 56 Lake Ossa; Cameroon
- 57 Lake Victoria; Kenya, Tanzania, Uganda
- 58 Lake Bogoria; Kenya *
- 59 Lakes of Bugesera Region; Burundi *
- 60 Bujagali Falls; Uganda *
- 61 Lake Bunyonyi; Uganda *
- 62 Lake Chala; Kenya *
- 63 Lake Ihema; Rwanda *
- 64 Lake Jipe; Kenya, Tanzania *
- 65 Lake Kanyaboli; Kenya *
- 66 Lake Katwe; Uganda *
- 67 Lake Kivu; Democratic Republic of the Congo, Rwanda *
- 68 Lake Kyoga; Uganda *
- 69 Mau Forest; Kenya *
- 70 Lake Nabugabo; Uganda *
- 71 Lake Naivasha; Kenya *
- 72 Lake Ol Bolossat; Kenya *
- 73 Lake Rwihinda; Burundi *
- 74 Shompole Wetland; Kenya, Tanzania *
- 75 Lake Wamala; Uganda *
- 76 Lake Tanganyika; Burundi, Democratic Republic of the Congo, Tanzania, Zambia *
- 77 Okavango Delta; Botswana
- 78 Lake St. Lucia; South Africa

111 Member

ASIA

- 79 Dead Sea; Israel, Jordan, Palestine
- 80 Lake Palästom; Georgia
- 81 Lake Uluabat; Turkey
- 82 Lake Ejdir; Turkey
- 83 Lake Sapanca; Turkey
- 84 Lake Tengiz; Kazakhstan
- 85 Lake Issyk-Kul; Kyrgyzstan
- 86 Lake Hovsgol; Mongolia
- 87 Lakes Ulaan, Ailag, Khyargas and Angir-Nuden Mondoohet; Mongolia
- 88 Lake Uvs; Mongolia
- 89 Lake Baikal; Russia
- 90 Lake Poyang; China
- 91 Lake Chao; China *
- 92 Lake Dian; China *
- 93 Lake Dongting; China *
- 94 Lake Tai; China *
- 95 Lake Biwa; Japan
- 96 Lake Tonle Sap; Cambodia
- 97 Laguna de Bay; Philippines
- 98 Lake Sampaloc; Philippines
- 99 Lake Taal; Philippines
- 100 Lake Jempang & Malinau Wetlands; Indonesia
- 101 Deh Akro Wetlands; India
- 102 Lake Pulicat; India
- 103 Lake Wular; India
- 104 Lake Bolgoda; Sri Lanka
- 105 Lake Maduganga and Sri Lanka

ANNUAL REPORT 2018 – 2019

Global Nature Fund (GNF)
Internationale Stiftung für Umwelt
und Natur



Biwa, Japan



Biwa



Poyang, China



Poyang



Baikal, Siberia



Baikal



20 Years Living Lakes



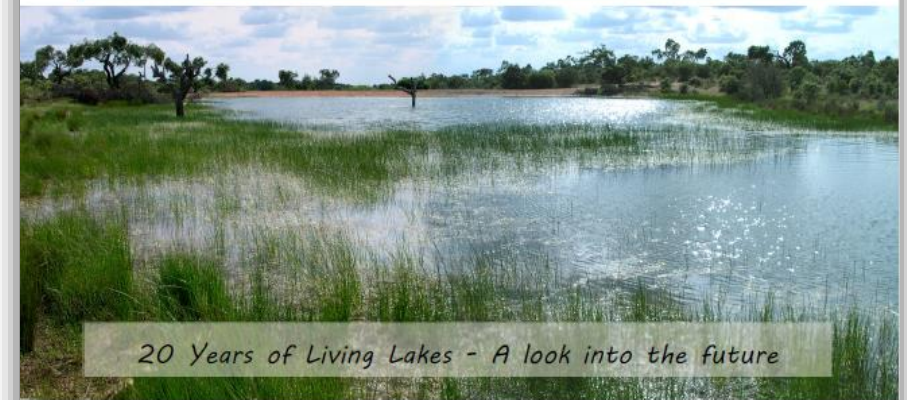
World Congress for Wetland and Lake Restoration

Living Lakes – Business and NGO Partnerships for Climate Change Mitigation and Adaptation

15th International Living Lakes Conference 2019

7th – 9th May 2019

Complex Esportiu-Cultural Petxina, Valencia, Spain



20 Years of Living Lakes - A look into the future

CONFERENCE SPONSORS:



Programme | World Congress on Wetland and Lake Restoration

Conclusion

- Subnetworks are useful for the development of LL

Living Lakes Strategy 2019 – 2025 => Action Plan

- Focus on model projects and practical solutions for the main challenges lakes and wetlands are facing
- Intensify the cooperation with other institutions

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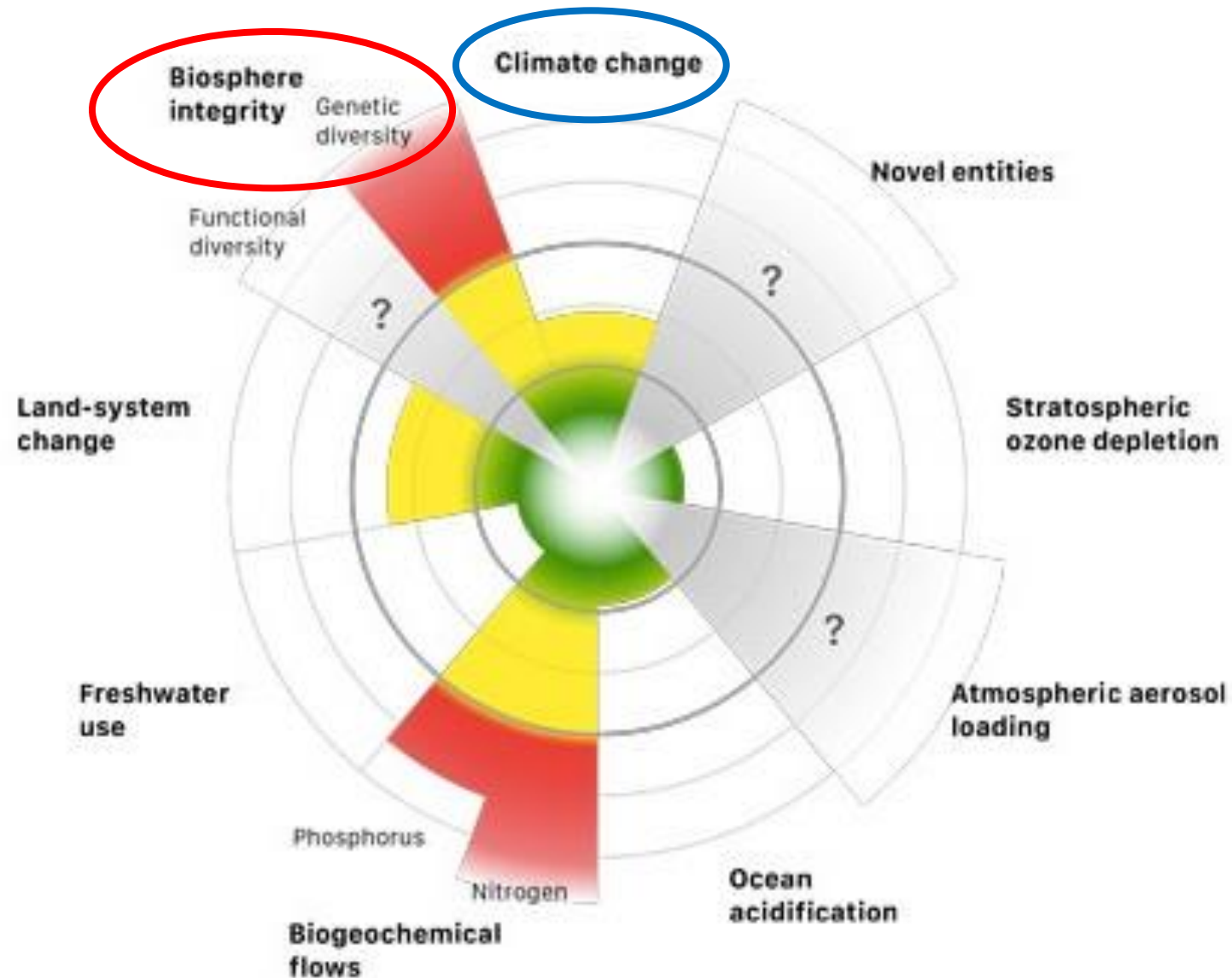
A Global Perspective on Lakes

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Challenges of our times – Planetary Boundaries



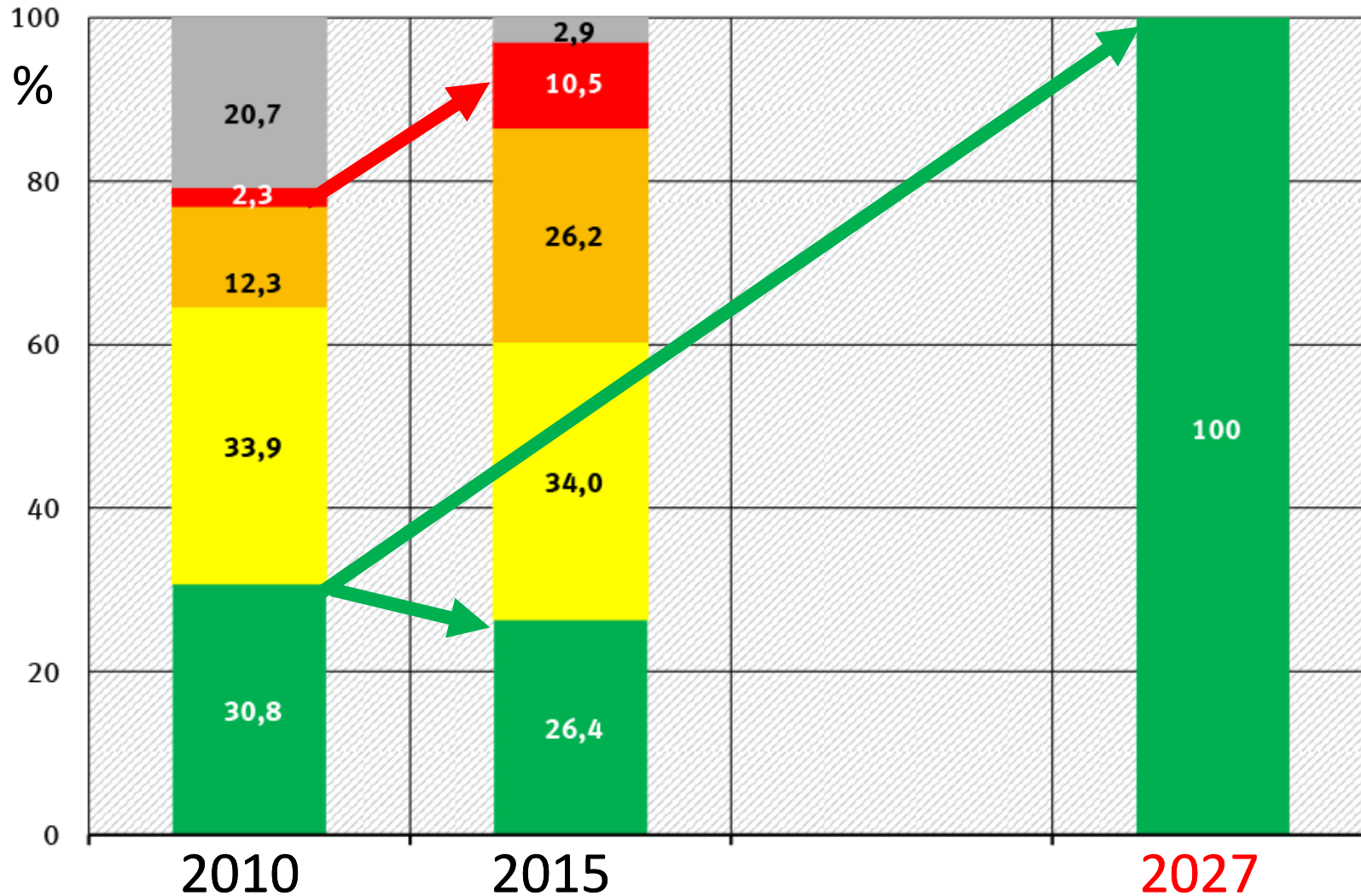
Water Framework Directive 2000 (2000/60/EC)

Major legal framework to protect and restore
all European water bodies

= > Good ecological status by 2015

= > Good ecological status by 2027!

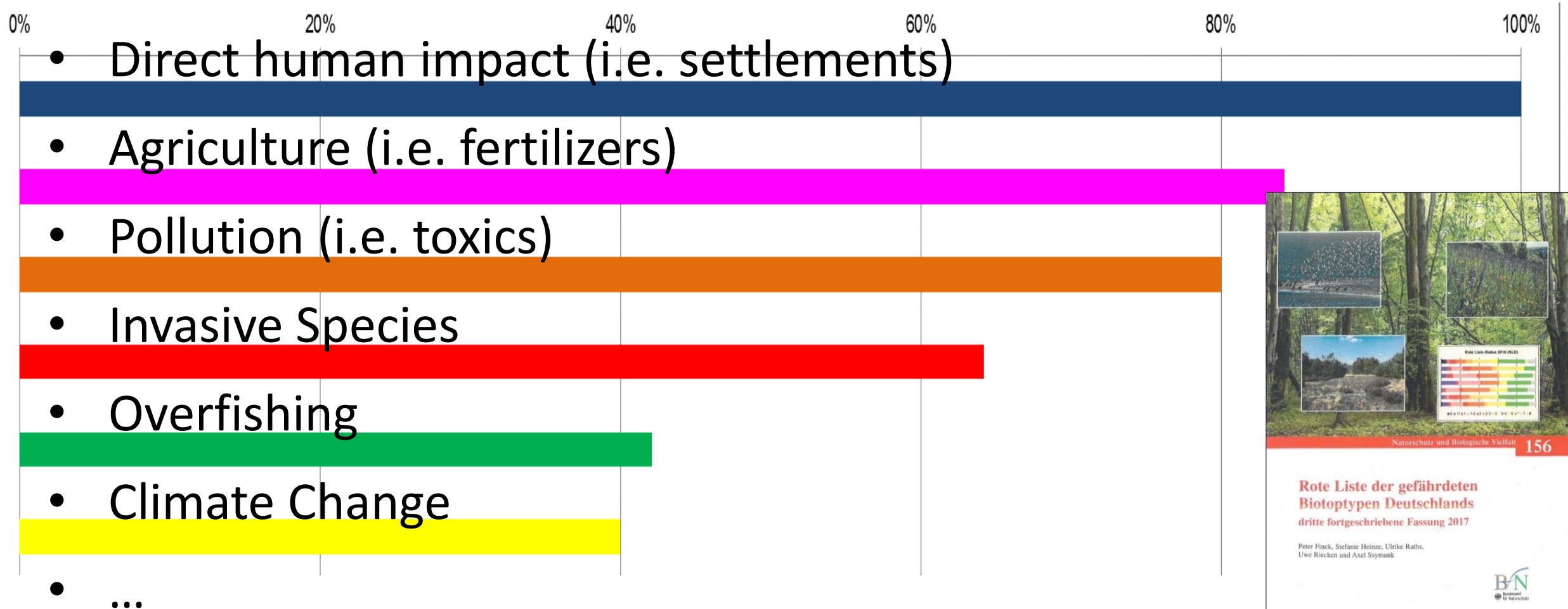
Ecological status of lakes in Germany (WFD 2015)



**70% of all lakes
don't have a good
ecological status**

Quelle: Umweltbundesamt, Berichtsportal WasserBLICK/Bundesanstalt für Gewässerkunde 2015, Bewirtschaftungspläne für die Periode 2016 bis 2021

Challenges to water ecosystems in Germany



Source: BfN Germany

Water Regulation - POST BREXIT Scenarios

	Norway Option	Regulated No-Deal Brexit	Chaotic No-Deal Brexit
Water Framework Directive	Few changes	Changes likely	Larger negative changes
Drinking Water Directive	No or few changes	Few changes	Larger negative changes
Urban Wastewater Directive	No or few changes	Few changes	Larger negative changes
Bathing Water Directive	No or few changes	Changes likely	Larger negative changes
Groundwater Directive	No or few changes	Changes likely	Larger negative changes

Source: own graphic

Water Regulation - POST BREXIT Scenarios

- A high risk that current water protection regulations will be weakened
 - in terms of i.e. the good ecological status or time frames
- Risk that new standards will not be adopted in the UK
 - if financial implications or investments are required
- More divergence in water policies within the UK is possible
- General water policy across the UK will rather have few changes.
 - Cross-border river basins (Scotland, England, Wales) are already managed according to legislative & administrative frameworks different from the EU
- Basins between Ireland & UK (NI) will require coordination to achieve WFD standards

Water Regulation - POST BREXIT Scenarios

UK 25 YEAR ENVIRONMENT PLAN ("A Green Future") will become more relevant

- > 75 % of waters close to a natural state
- Reducing damaging abstraction
- Restoring 75% of freshwater sites to favourable conditions



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Green Filters Latin America



Mangrove rehabilitation India



PRO PLANET – Biodiversity at Lake Constance



PRO PLANET - Apples from Lake Constance



Lake Constance Foundation

Patrick Trötschler

www.proplanet-label.com

PRO PLANET - Apples from Lake Constance

Project partners

REWE Group - food retailer

Obst vom Bodensee GmbH - farmer organisation

Lake Constance Foundation - NGO



PRO PLANET - Apples from Lake Constance

- Phase 1: 2009-2010
 - **Baseline study**
- Phase 2: 2011-2013
 - **Implementation in the Lake Constance region**
- Phase 3: 2012- ongoing
 - **Expansion to other regions**

PRO PLANET - Apples from Lake Constance

Biodiversity: Perennial wildflower strips



PRO PLANET - Apples from Lake Constance

Diverse seed mix of wildflower and grass on machine tracks



PRO PLANET - Apples from Lake Constance

Nesting boxes for wild bees and other pollinators



PRO PLANET - Apples from Lake Constance

Ecological structures: stone piles, orchards, deadwood, ponds ...



PRO PLANET - Apples from Lake Constance

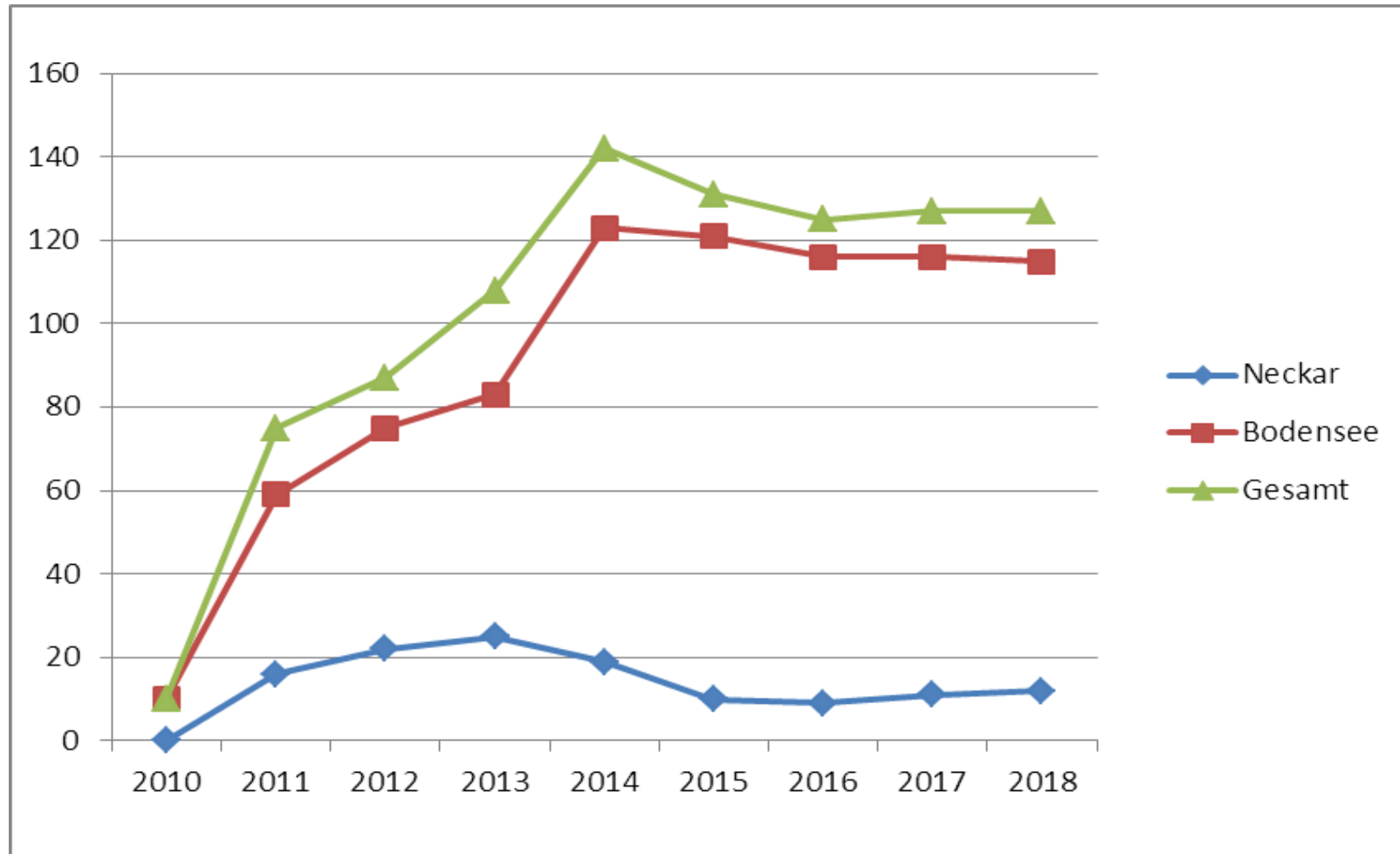
Results



- Monitoring **2010** (Baseline)
56 wild bee species
5 endangered wild bee species
- Monitoring **2017**
117 wild bee species:
25 endangered wild bee species

PRO PLANET - Apples from Lake Constance

Number of farmers participating



PRO PLANET - Apples from Lake Constance

Success factors & lessons learnt

Multi Stakeholder Collaboration

...learn from each other

Invest in long-term partnerships

...success stories on biodiversity need time and patience

Motivate farmers to efficient voluntary measures

... in a project, farmers are partners, not suppliers

Proof your biodiversity performance

...good monitoring is key for measures and communication

Biodiversity is complex - but beautiful

...Biodiversity can be emotional & colourful

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Climate Change and the effect on Lakes

Tyndall Centre for Climate Change Research

- Scenarios for 23 lakes until 2080
- Effects on average temperatures and precipitation (winter & summer)
- Emissions-Scenario SRES A2
- 9 models (IPCC)



Climate Change:
An Overview and its Impact on the Living Lakes

Professor Mike Hulme^{1,2},
Dr Declan Conway^{3,1} and Dr Xianfu Lu^{4,1}

¹ Tyndall Centre for Climate Change Research, UK

² School of Environmental Sciences, UEA, Norwich, UK

³ School of Development Studies, UEA, Norwich, UK

⁴ The International Global Change Institute, University of Waikato, New Zealand

A report prepared for the 8th Living Lakes Conference

"Climate change and governance: managing impacts on lakes"

Held at the Zuckerman Institute for Connective Environmental Research,
University of East Anglia, Norwich, UK
7-12 September 2003

Tyndall[®] Centre
for Climate Change Research

Climate Change - Expected impacts on water ecosystems



- **Increase in rainfall in winter**
 - > higher risks of floods and storms
- **Decreasing precipitation in summer**
 - > higher risk of droughts and pests
- **Sinking water table**
 - > Negative impacts on fish (i.e. spawning)
 - > Negative impacts on biodiversity
 - > Increase in shoreline erosion



Adaptation Strategies

- Reduce the vulnerabilities of people to shifts and extremes in hydro-meteorological trends (extreme events such as floods and droughts).
- Protect and restore ecosystems providing critical land and water resources and ecosystem services.
- Close the gap between water supply and demand.

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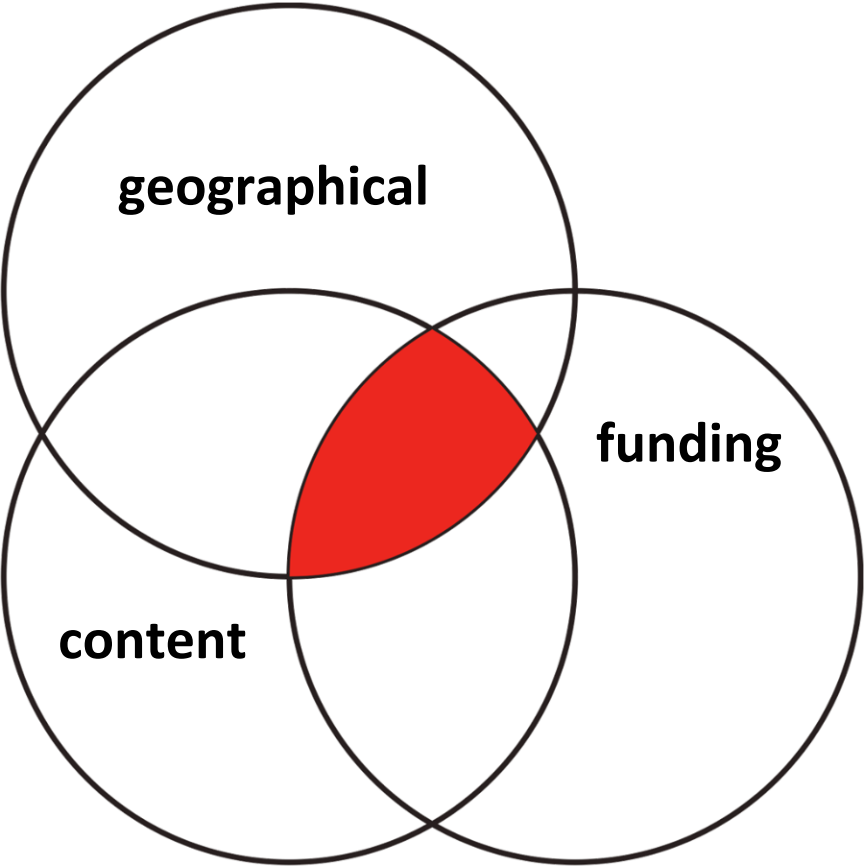
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Cooperation : GNF – UK&ILN



Projects

- Sustainable agriculture
- Biodiversity Checks for SMEs in lake regions
- Greening of Premises
- Pro-biodiversity business
- Micro plastics in lakes
- ...
- ...



Project Funding

- Public Sector funding
- Private Sector funding
- Donations
- Services

Some Conclusions

Better protection and restoration of lakes, wetlands and floodplains...

- ... is urgently needed, challenging but feasible
- ...provides ecosystem services like drinking water, biodiversity or flood prevention
- ... mitigates Climate Change
- ... should be implemented in cooperation with water management and other relevant authorities



Let us protect our beautiful lakes and wetlands together

Contact

Global Nature Fund (GNF)

International Foundation
for Environment and Nature

Udo Gattenlöhner

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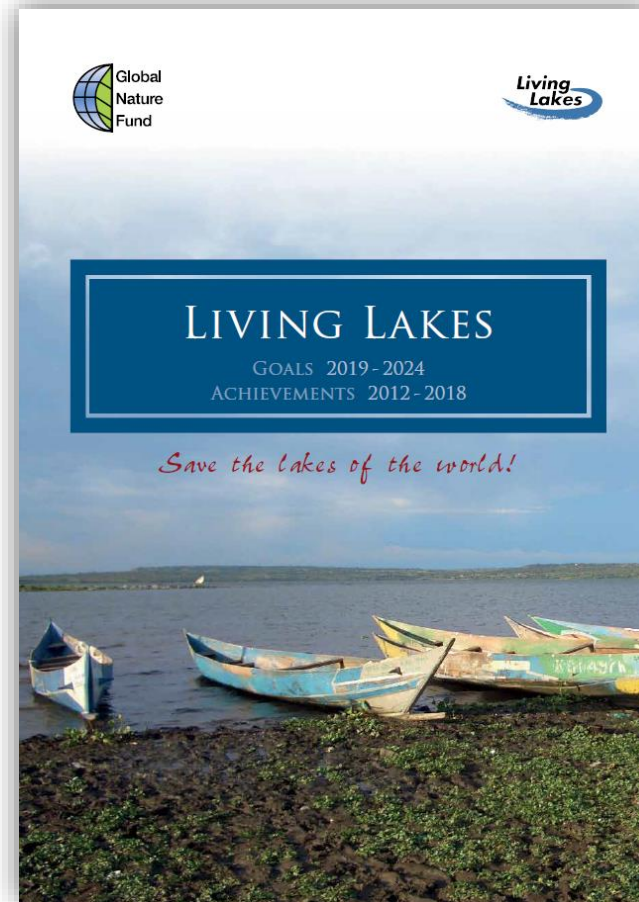
gattenloehner@globalnature.org

www.globalnature.org

www.business-biodiversity.eu

Living Lakes Publications – Download

www.globalnature.org/publications



What can we do?

Science: - Speak louder

Private Sector: - Change Economic Paradigms

Politics: - Regulatory Frameworks
- Taxes on harmful products & services

Civil Society: - Push Decision Makers

Us/People: - Sufficiency

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