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Blitzlichtstudie „Seen und Klimawandel“



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Flash study "Lakes and Climate Change" New publication BfN-Skripten Schriftenreihe 624

Global warming and the associated longer dry periods and more frequent heavy rainfall events are having a noticeable impact on the water balance of lakes and wetlands in Germany and Europe. This leads to additional stress factors for aquatic ecosystems and their biodiversity and highlights increasing conflicts in water use.

Against this background, the current study "Lakes and Climate Change" sheds light on the available research results on the effects of climate change and the associated changes in temperatures, precipitation's amounts and distributions on lakes, small water bodies and wetlands in Germany and also includes findings from other European countries.

The summary with conclusions of the study published as BfN script 624 can be found here:
<https://www.living-rivers.eu/de/artikel-praesentationen/bfn-blitzlichtstudie-seen-und-klimawandel-neuerscheinung-bfn-skripten-schriften-reihe-624>

English summary: https://www.living-rivers.eu/s/EN_KLIMA_SEEN_SUM_22_04_27.pdf

The long version is available here:
https://www.globalnature.org/bausteine.net/f/9916/GNF_Gruene_Liga_BfN_Blitzlichtstudie_Seen_und

Long-term study on water evaporation in lakes presented

In their long-term study of 1.42 million lakes ($\geq 10^5$ m²) worldwide, published on 28 June 2022, Gang Zhao et al. estimate the average total volume of water evaporation for the period 1985 to 2018 to be 1.500km³ annually (+/- 150km³/a), with an annual rate of increase of 3.12km³. The main contributor to this trend was the increased evaporation rate, but also reduced glaciation and (surprisingly for me given many reports of lakes drying up) also the larger total surface area of lakes. Although artificial lakes account for only 5% of the total lake surface area, they contribute 16% to the total evaporation volume.

The entire study with also many regionalised trends can be found under this link:
<https://www.nature.com/articles/s41467-022-31125-6>

UN Climate and SDG Synergy Conference 2022 (Tokyo)

The UN Climate and SDG Synergy Conference 2022 was held in Tokyo on 21 and 22 July. The conference aimed to develop synergies between the SDGs to accelerate the process through integrated planning and action that requires the full engagement of governments, sub-national authorities and civil society, and to ensure a fair transition by prioritising poor and vulnerable communities and those affected by transformation pathways. Although the conference focused

mainly on SDGs 13 and 17 (climate action and partnerships for the goals), the link to other SDGs such as 6 (clean water and sanitation) and 14 (marine conservation) is undeniable.

You can get a picture of the entire conference at the following link:

<https://www.un.org/en/climate-sdgs-conference-2022>

A summary report of both days is available here: <https://enb.iisd.org/climate-sdgs-conference-2022>

Elbe Commission publishes publications on high and low water levels

On the website of the International Commission for the Protection of the Elbe River ICSE/MKOL the report "**Hydrological evaluation of the low water situation 2018 in the Elbe catchment**" is available <https://www.ikse-mkol.org/publikationen/niedrigwasser/1> as well as the **information sheet of the ICSE on the implementation of the FRMD** <https://www.ikse-mkol.org/publikationen/hochwasserschutz/1> are available for download.

EU Taxonomy - Climate Complementary Delegated Act

The EU Taxonomy for Sustainable Activities (2020) aims to classify environmentally sustainable economic activities. It should help the EU to increase sustainable investments and implement the European Green Deal. The Taxonomy Regulation came into force in 2020. It sets six environmental goals, including mitigating climate change, adapting to climate change, sustainable use and protection of water and marine resources, transitioning to a circular economy, pollution prevention and control, and protecting and restoring biodiversity and ecosystems.

Despite these objectives, on 9 March 2022 the EU Commission adopted a Complementary Delegated Act on Climate Policy, adding certain nuclear and gas energy activities to the list of economic activities covered by the EU taxonomy. On 6 July 22, the Parliament rejected a motion opposing the inclusion of nuclear and gas activities in the EU taxonomy. The EU Council did not raise any objections. The delegated act on the taxonomy will therefore enter into force and apply on 1.01.2023. The issue of labelling hydropower as a sustainable activity will be debated and voted on 12.09.2022 during the plenary session of the EU Parliament.

More about the EU-Taxonomy here : https://ec.europa.eu/info/business-economyeuro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en

Discover more about the Climate Complementary Delegated Act here :

<https://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022R1214>

EEB Policy Brief PAC 2.0 on Nature-Compatible Renewable Energies

On 27 July 22, the EEB published the new Policy Brief PAC 2.0 on nature-friendly renewable energies.

The EEB calls for no new hydropower plants to be approved, built or financially supported and for unnecessary dams to be removed. Existing plants should be ecologically upgraded, have improved facilities for fish migration and comply with minimum ecological flows. While complying with the latest BAT (Best Available Techniques), reserves for renewable energy generation could be developed by increasing the installed capacity of larger existing plants.

If the benefits to biodiversity and ecosystems go beyond the energetic output generated, priority must be given to the dismantling of dams. It is important not only to assess the individual site, but also to consider the overall impact on fish migration and ecological continuity and natural habitats in the river basin.

This policy brief is in preparation for the EU Parliament's plenary session on RED III in September 2022. With gas and nuclear activities now listed in the EU taxonomy as economically environmentally sustainable activities, there is an urgent need to raise our voice against the possible inclusion of hydropower in the list.

You can find EEB's policy brief here: https://eeb.org/wp-content/uploads/2022/07/Policy-Brief_Nature-positive-renewable-energy.pdf

EEB's feedback on "Renewable Energy Projects - Approval Procedures and Power Purchase Agreements" can be found here: https://ec.europa.eu/info/law/better-regulation/have-yoursay/initiatives/13334-Renewable-energy-projects-permit-granting-processes-power-purchaseagreements/F3329868_en

Forum Fischschutz: 6th Factsheet on Fish Protection and Fish Descent

In February 2022, the Forum Fischschutz & Fischabstieg published a factsheet on "Fish protection and fish descent measures - practical examples at a glance". The factsheet presents the evaluation of data collected in the framework of the project "Atlas for Fish Protection & Descent", which was launched in February 2016. This atlas provides an overview - especially in German-speaking countries - of all common fish protection and descent facilities that cover a typical performance and discharge spectrum.

The atlas currently contains information on 89 sites with a fish protection facility, 82 sites with a fish descent facility and 111 sites with an accompanying survey. The contents and data of the atlas can be downloaded in a structured form so that they can be adapted and evaluated according to individual information needs.

The 6th fact sheet can be downloaded here: https://forum-fischschutz.de/sites/default/files/FSFFS_06-01.pdf

More information about the Atlas for Fish Protection and Descent can be found here: <https://forum-fischschutz.de/datenbank-standorte>

Barrier Tracker Campaign 2022

The World Fish Migration Foundation, WWF, AMBER International, Dam Removal Europe, the European Anglers Alliance and Swansea University have launched a Citizen Science project called "Barrier Tracker" for the summer of 2022. Any citizen can connect to the app and also participate in the project while on holiday by registering weirs and fish migration barriers on rivers here: <https://apps.apple.com/al/app/barrier-tracker/id1246829944> (AppStore) or https://play.google.com/store/apps/details?id=com.natural_apptitude.amber (GooglePlay).

This project aims to provide an initial assessment of river continuity and highlight where restoration is most needed, supporting the EU Biodiversity Strategy 2030 target of 25,000 km of free-flowing rivers and in particular identifying structures that no longer serve a function.

To learn more about AMBER and the map of tracked barriers: <https://portal.amber.international>

For more information about the Barrier Tracker Campaign 2022, click here: <https://damremoval.eu/barrier-tracker-campaign-2022/>

European Rivers Summit 2022 in Brussels

From 29 September to 1 October 22, the European Rivers Summit 2022 will take place in Brussels. The Summit aims to promote the restoration and protection of European rivers, prevent new dams for hydropower and irrigation, and remove outdated barriers to achieve the goals of the European Green Deal and the EU Biodiversity Strategy 2030. This is an opportunity for river activists to engage with policy makers in Brussels. The event is divided into a two-day conference and a third day visiting a river restoration site.

Speakers from various organisations such as RiverWatch, World Fish Migration Foundation or WWF will participate.

You can register via this link: <https://riverssummit.org>

Photo competition "My favourite stream, my favourite river" in Saxony

From the 383 photos of water bodies as close to nature as possible submitted to the competition « **My Favourite Stream, My Favourite River** », a jury nominated the 30 best photos for the final selection according to professional and photographic criteria. You can vote for your favourite photo on the website of the Free State of Saxony until 30 September 2022: <https://www.wasser.sachsen.de/unsere-baeche.html>.

The five photos with the most votes will win. The winners will be awarded prizes by the Minister of the Environment of the Free State of Saxony, Mr Wolfram Günther, at the 19th Saxon Water Days on 1 December 2022 in Dresden.

Action Plan for Integrated Nutrient Management (INMAP)

Public consultation until 26 August 22

The natural life cycles of nutrients (nitrogen and phosphorus) are essential for sustaining life. However, nutrient losses in many places lead to excessive air, soil and water pollution and contribute significantly to biodiversity loss. The EU Commission is calling for additional measures both to improve food security and to protect human health and preserve ecosystems.

The **Integrated Nutrient Management Action Plan** INMAP will aim to achieve the European Green Deal target of reducing nutrient losses by at least 50% and fertiliser use by at least 20% by 2030 and will complement the Pollution Action Plan. The public consultation on the INMAP will run until 26 August 2022 and NGOs and other stakeholders are invited to provide their feedback.

You can answer the questionnaire at the following link: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12899-Nutrients-action-plan-for-better-management/public-consultation_en

World Mangrove Day 2022

International Mangrove Ecosystem Conservation Day is celebrated every year on 26 July and aims to raise awareness of the importance of mangrove ecosystems as "unique, special and vulnerable ecosystems" and to promote solutions for their sustainable management, conservation and use.

Together with other coastal ecosystems, mangrove forests are among the most effective nature-based solutions against climate change (keyword "blue carbon"). Mangroves are one of the most effective and economical ways to offset carbon emissions. Each mangrove tree can absorb and store an average of 11 kg of CO₂ per year.

In addition, mangrove forests provide many important ecosystem services to local communities and contribute to a wide range of the United Nations Sustainable Development Goals (SDGs). They contribute to the well-being, food security and protection of coastal communities worldwide. They harbour a rich biodiversity and provide a valuable nursery habitat for fish and crustaceans. Mangroves are also a form of natural coastal protection against storm surges, tsunamis, rising sea levels and erosion.

Yet mangroves are disappearing three to five times faster than forests worldwide, with serious ecological and socio-economic impacts. According to current estimates, the mangrove area has halved in the last 40 years. (UNESCO)

For more information on the International Mangrove Ecosystem Conservation Day 2022, click here: <https://www.unesco.org/en/days/mangrove-ecosystem-conservation-day>

Learn more about the mangrove ecosystem here: <https://www.youtube.com/watch?v=sKg-WuUG0ac>

Action Network Small Water Bodies - Dialogue Events in Berlin

A serie of dialogue events will take place in August and September 2022 within the framework of the dialogue events will take place. As many small and large bodies of water in Berlin are in poor condition, the network aims to promote measures to restore and protect them.

<https://bln-berlin.de/aktionsnetz-kleingewaesser/>

On Saturday, 27.08.2022 (11:00 - 14:00) - Packereigraben:

Meeting point: 11:00 a.m. S-Bf. Waidmannslust (south exit).

The GRÜNE LIGA Berlin e.V. and is organising a dialogue event at the Packereigraben with the Aktionsnetz Kleingewässer. Some small water analyses, such as physical-chemical examinations, will be carried out. The various measures planned to restore and promote the habitat of small animals will be explained to the participants.

Further information and the flyer can be found here: <http://bln-berlin.de/wpcontent/uploads/2022/07/DialogPackereigraben27August22Flyer.pdf>

Registration at wasser@grueneliga.de

On Monday, 29.08.2022 (17:00) - Forest Lake:

Meeting point: 17:00, Haus der Jugend Zehlendorf, Argentinische Allee 28, 14163 Berlin.

BUND Berlin e.V. in cooperation with the Association for Environmental Protection and Landscape Conservation for the Waldsee in Berlin Zehlendorf e.V. and the Haus der Jugend Zehlendorf is organising a dialogue at the Waldsee. Together with the participants and representatives from politics and administration, it is planned to get an idea of the state of the lake during a boat trip, to discuss ecological characteristics and challenges, and then to present the legal situation on land and discuss possible solutions for the protection of the lake.

Further information and the flyer can be found here: <http://bln-berlin.de/wp-content/uploads/2022/07/Flyer29.08.pdf>.

Registration at kleingewaesser@bln-berlin.de

On Saturday, 10.09.2022 (14:00 - 17:00) - Panke:

Meeting point: 14:00 Ossietzkyst. /Majakowskiring.

B90/GRÜNE in cooperation with BUND Berlin e.V. and Aktionsnetzwerk Kleingewässer organise an excursion along the Panke. The aim of the walk along the approx. 2 km long watercourse is to gain an overview of the watercourse. Studies will be carried out on selected sections and ecological features and challenges will be identified. In addition, the requirements and measures of water protection will be addressed in order to jointly discuss solutions for the upgrading of the "Blue Pearl" and other small water bodies in Pankow.

Further information can be found here: <https://www.bund-berlin.de/service/termine/detail/event/dialogveranstaltung-blaue-perlen-in-pankowie-rolle-der-kleingewaesser-fuer-berlin/>

On Sunday, 11.09.2022 (10:00 - 13:00) - Karow Ponds:

Meeting point: 10:00 a.m. at the Pankgrafenbrücke

Children, young people and adults explore the Panke in its flowing area at the level of the Karower Teiche together at this dialogue event with the Aktionsnetz Kleingewässer. First, we will get an overview of the ecosystem of the wetlands, and then we will thoroughly investigate the small fauna of the Panke. In the process, we also want to determine the biological quality of the water. Physical-chemical analyses complement the investigation of water quality.

In addition to identification literature, we will also use technical equipment to identify animal and plant species.

Further information and the flyer can be found here: <http://bln-berlin.de/wpcontent/uploads/2022/07/Flyer11.09.pdf>.

Registration at the Museum für Naturkunde at wissensfluss@mfn.berlin

Dates preview 2022 International :

24 – 30 July 2022 Barby - At the ferry http://www.elbe-saalecamp.de/html/approach.html	Elbe outlook - 30th anniversary of commitment to living river landscapes International Elbe-Saale Camp 2022. In 2022, the Elbe-Saale Camp will enter its 30th year. A good occasion to look back as well as forward. A warm invitation to all friends of free-flowing rivers! http://www.elbe-saale-camp.de/
23 August – 1 September 2022 Stockholm, Sweden	World Water Week 2022 https://www.worldwaterweek.org
5 – 6 October 2022	3rd Symposium “Vital waters in Baden-Württemberg” www.vitale-gewaesser-bw.de
5 – 17 Dec. 2022 Montréal, Canada	UN Biodiversity Conference (COP15) https://www.unep.org/events/conference/un-biodiversity-conference-cop-15

6 – 8 December 2022 Paris, France	UN- Water Summit for Groundwater https://www.un-igrac.org/agenda/un-water-summit-groundwater
Wednesday, 22 March 2023	World Water Day
22 March – 24 March 2023	United Nations 2023 Water Conference https://sdgs.un.org/un-2023-conference-water-action-decade

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