Global Nature Fund

Living Lakes

Living Lakes

Goals 2019 - 2024
Achievements 2012 - 2018

We save the lakes of the world!

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*) Member of a national or multi-national Living Lakes network.

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We save the lakes of the world!

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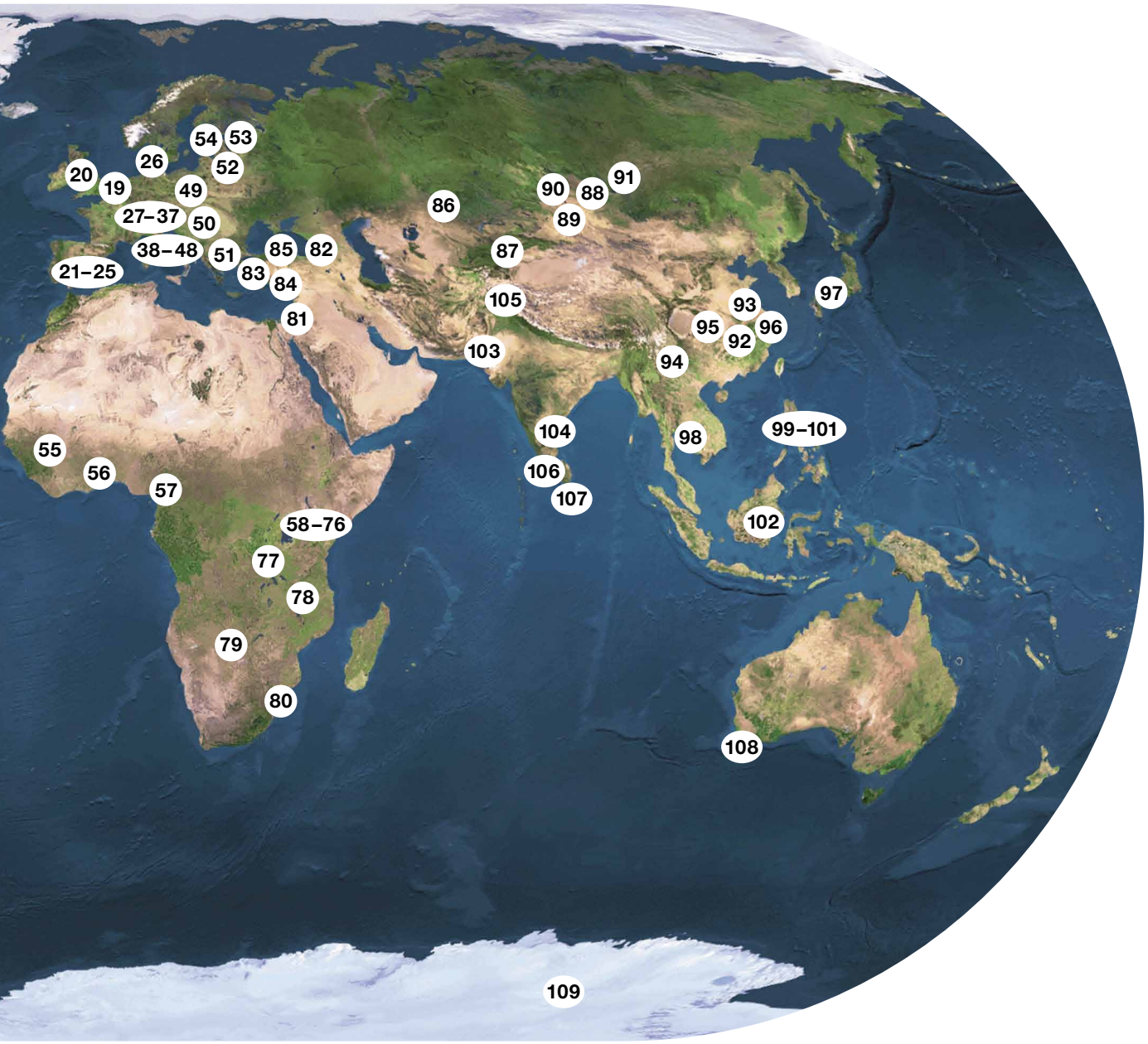
LIVING LAKES
MEMBERS

We save the lakes of the world!



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*National member of a national or multinational Living Lakes Network.

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Living Lakes Achievements and Goals

In a growing network – currently consisting of 111 member lakes represented by 140 partner organisations from 50 countries worldwide – common strategies, approaches, developments and experiences need to be regularly evaluated and reflected.

With the new **Living Lakes Achievements and Goals 2019 – 2024** publication, the Living Lakes Network continues to inform about what has been achieved by the Living Lakes partners and what will be in the focus of the upcoming five years. The report is timely published for the 15th Living Lakes Conference in Valencia and the 20th anniversary of the Living Lakes Network.

All partners were requested to submit information about the most important achievements since 2012 as well as the main objectives of their work for the nearer future. The third "Living Lakes Achievements and Goals" brochure provides an overview from 56 partner organisations all over the world. The report shows the contributions of Living Lakes to international conventions and to solutions for complex issues, wetlands, lakes and their catchment areas are exposed to. Jointly, the network has been very active and achieved a lot: 270 concrete results presented in this publication underline the expertise and dedication of the Living Lakes partners towards a better protection of lakes and wetlands. Furthermore the overall balance confirms that the enormous challenges can be approached more successfully with intense cooperation and active platforms such as the Living Lakes network which was created to support the organisations in their challenging activities.

We looked back, we look ahead and we look beyond and developed a common agenda for the next five years. Despite many success stories, the situation of wetlands worldwide has not improved. Increasing populations impose increasing pressures on water bodies in too many countries. Increasing demands for raw material from mining and intensive agriculture as well as other overexploitation of natural resources, put servere pressures on lakes and wetlands, even at the most remote places of the world. Maintaining the ecosystem services, indispensable for the people's survival, and stopping the dramatic loss of biodiversity at the same time, will remain two of the most important challenges in the future. More than 280 goals of Living Lakes partners presented in this goals brochure show the willingness and capability to contribute to solve those burning problems.

On the occasion of the 20th Anniversary, the Living Lakes coordinator Global Nature Fund launched a Living Lakes strategy process to update the strategic plan for the future development of the network. The revised plan will improve the network structure and processes as well as the exchange and cooperation with stakeholders. It will be an orientation for where to put our efforts as a network and will ensure that Living Lakes will continue to fulfil its mission in the future.

The Living Lakes Strategy will be approved by the partners during the 15th Living Lakes general assembly and will be soon published on the Living Lakes Website.

Mission, vision and objectives did not change. The Living Lakes network will – unfortunately - not run out of work, and we will go on to "**Save the lakes of our world**".

We save the Lakes of the world!

Living Lakes Mission

We save the Lakes of the world!

Living Lakes is an international network and partnership with the mission to enhance the protection, restoration and rehabilitation of lakes, wetlands, other freshwater bodies of the world, and their catchment areas by means of supporting the transfer of knowledge and technologies, and excellence and innovation in common projects, fostering a common political agenda and increasing the public awareness on the multiple values of lakes and wetlands and the urgent need to protect them.

Living Lakes Vision

Lakes, wetlands, and freshwater bodies worldwide shall be healthy ecosystems, preserved and where necessary, sustainably used to safeguard indispensable ecosystem services for future generations.

Living Lakes Objectives

- Conserving biodiversity of wetlands, lakes and lake regions as well as the valuable ecosystem services provided by lakes and wetlands.
- Preservation of freshwater and saline water resources including ground water bodies, lake and wetland ecosystems.
- Restoring degraded and disappearing wetland and lake ecosystems.
- Improving the quality of life for local communities.
- Commitment towards a sustainable use and development of wetland ecosystems.
- Promoting the use of applied sciences and technologies for the conservation of these ecosystems.
- Supporting educational programmes and cooperation with local communities towards the conservation of these ecosystems and related biodiversity.
- Disseminating information and increasing awareness regarding the multiple values of these ecosystems.

Living Lakes Agenda 2019 to 2024

Developing the Living Lakes Network

- Extend the network continuously up to 130 lakes and wetlands areas represented by active partner organisations from all over the world.
- Improve the quality of networking by means of digitalisation, innovative participatory approaches and training for partners. Foster south-south cooperation without disregarding the importance of south–north dialogues.

We save the lakes of the world!

- Strengthen the cooperation with local authorities in lake regions and create a structure for exchange and the elaboration of joint projects.
- Promote the International Conventions with relevance for the protection of lakes and wetlands and support the achievement of their objectives.
- Extend monitoring and evaluation of the Living Lakes projects and activities

Excellence and Innovation in Common Projects

- Initiate a minimum of 100 ambitious projects on conservation and sustainable development of lake regions.
- Focus on the protection of ecosystem services of lakes and wetlands and underline the importance of lakes as hotspots for biodiversity.
- Increase the number of joint projects among Living Lakes members.
- Foster and mainstream the involvement of the business sector in strategies and projects for the protection of lakes and wetlands and related biodiversity.

Transfer of Knowledge and Technologies

- Promote activities and exchange on climate mitigation and adaptation in lake regions and beyond.
- Mainstream effective and affordable wastewater treatment systems and undertake other measures to improve water quality of wetlands and lakes.
- Foster the communication on successful measures for habitat management and restoration, education and community development.
- Foster communication of measures towards sustainable agriculture and fishery and for sustainable development of tourism.
- Intensify the focus on applied science, participatory monitoring, and participatory lake stewardship.
- Intensify the involvement of youth in all dimensions: capacity building, project planning and realization and policy.
- Support a global alliance for the protection of endangered mangrove habitats.

Towards the Living Lakes Agenda 2019 to 2024

Looking back

The Living Lakes Agenda 2024 results from the feedbacks of 56 partner organisations out of 50 countries on six continents. The analysis presented here is the impressive demonstration of the joint commitment and power of the Living Lakes partners to contribute significantly to the overall objectives of the Living Lakes Network. Having asked for the five most important achievements of each partner, 179 entries indicate a strong involvement into the main Living Lakes objectives: restoration, conservation and management of wetlands and lakes. The 20 Aichi Targets of the UN Convention on Biodiversity and the Sustainable Development Goals 14 and 15 provide guidance to these activities.

Also beyond the UN Decade of Education for Sustainable Development 2005 to 2014, the activities of Living Lakes in education, maintained in high intensity. Furthermore, the partner feedbacks show a strong involvement in community development. The work on topics like sewage water treatment, agriculture and some lighthouse activities e.g. on innovative models to raise funds for conservation (Aichi Target 20), demonstrate the high innovative power of a strong and committed Living Lakes community.

A comparison with the official national Ramsar reports from countries with Living Lakes partners, indicates the strong contribution of Living Lakes to the achievement of the main goals within the Ramsar Convention: again, the emphasis on habitat restoration, conservation and management. The comparison indicates some lack of opportunities of grass root organisations for effective adovcay. Lack of law enforcement is still a big problem in many countries and should be tackled more in the future. National authorities ask for feedback of the Living Lakes specialists in many countries, and many contribute actively to the national reports. Many Living Lakes partners participate in national and transboundery research activities and in the monitoring of environmental issues. More and more coordinate citizens sciences approaches in order to strenghten participatory monitoring. Again, the comparison shows the dedication of Living Lakes partners towards innovative approaches, to touch new issues and find innovative solutions.

Looking ahead and beyond

Also in the future, emphasis of Living Lakes partner organisations will be on **habitat restauration, conservation and management**. The protectedplanet.net platform still shows the lack of plans for management and development for many protected wetlands worldwide. Unsatisfying legislation and law enforcement goes hand in hand with this lack of regulation. The meaning of aquifers became more apparent in the past years, so working with agriculture and other sources of negative impacts like mining is another priority for the next years.

Living Lakes members collaborate successfully with municipalities for many years, not exclusively in community development projects. Municipalities in lake regions have a special responsibility for the protection of lakes and wetlands they border on. Degradation or destruction of lakes and lakes' ecosystem services are also caused by lake communities, which are affected most by this at the same time. **Sustainable community development** turned out to be a success model to solve issues in recent years, and will be fostered and pronounced in the next years: partners announce 50% more activities here.

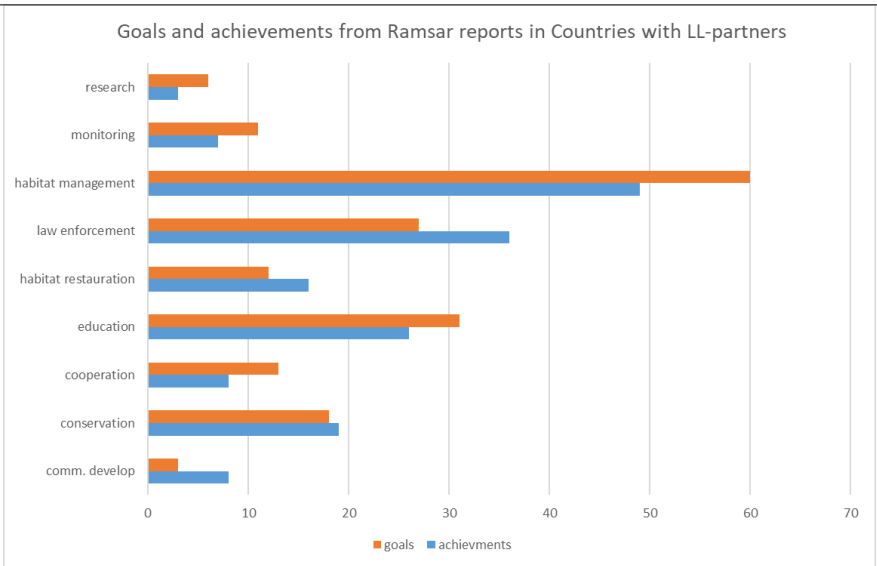
Many lakes still suffer from lack of sound sewage water treatment – even if treatment plants are installed and all types of technologies are available. Partners plan to almost double activities here and put emphasis on well-tried techniques like green filters, which provide solutions for off grid communities. Green filters contribute also significantly to the treatment of non-point contamination of lakes as shown by the City of Valencia and Laguna L`Albufera.

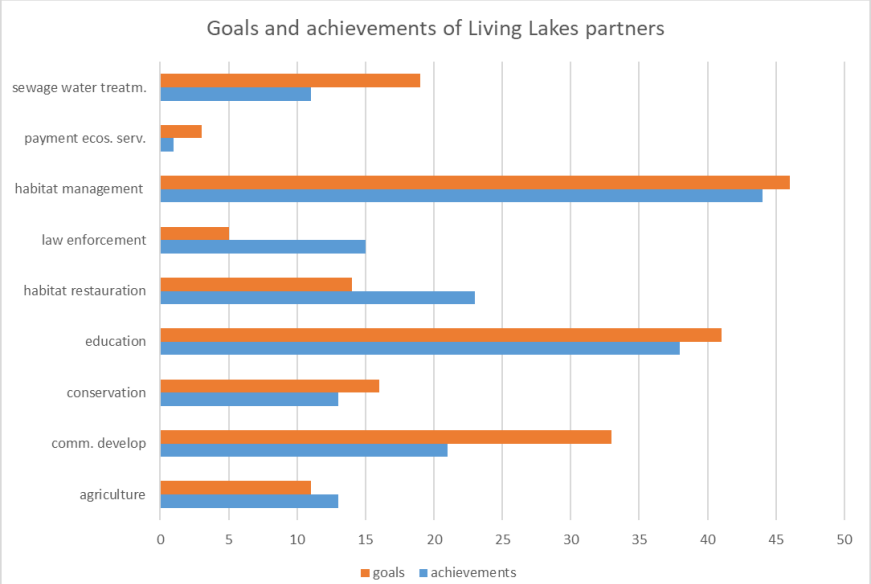
One concern is not yet reflected in the partners' goals for the upcoming years. Plastic waste and mircoplastics are known as a dramatic threat for our oceans. Latest studies show that microplastics and medical substances are found in almost every open water in Europe. Littering and the total lack of waste management are a serious issue in many countries and a source of contamination for lakes and wetlands. Living Lakes partner will need to work more strongly in activities to avoid, reduce and recycle waste.

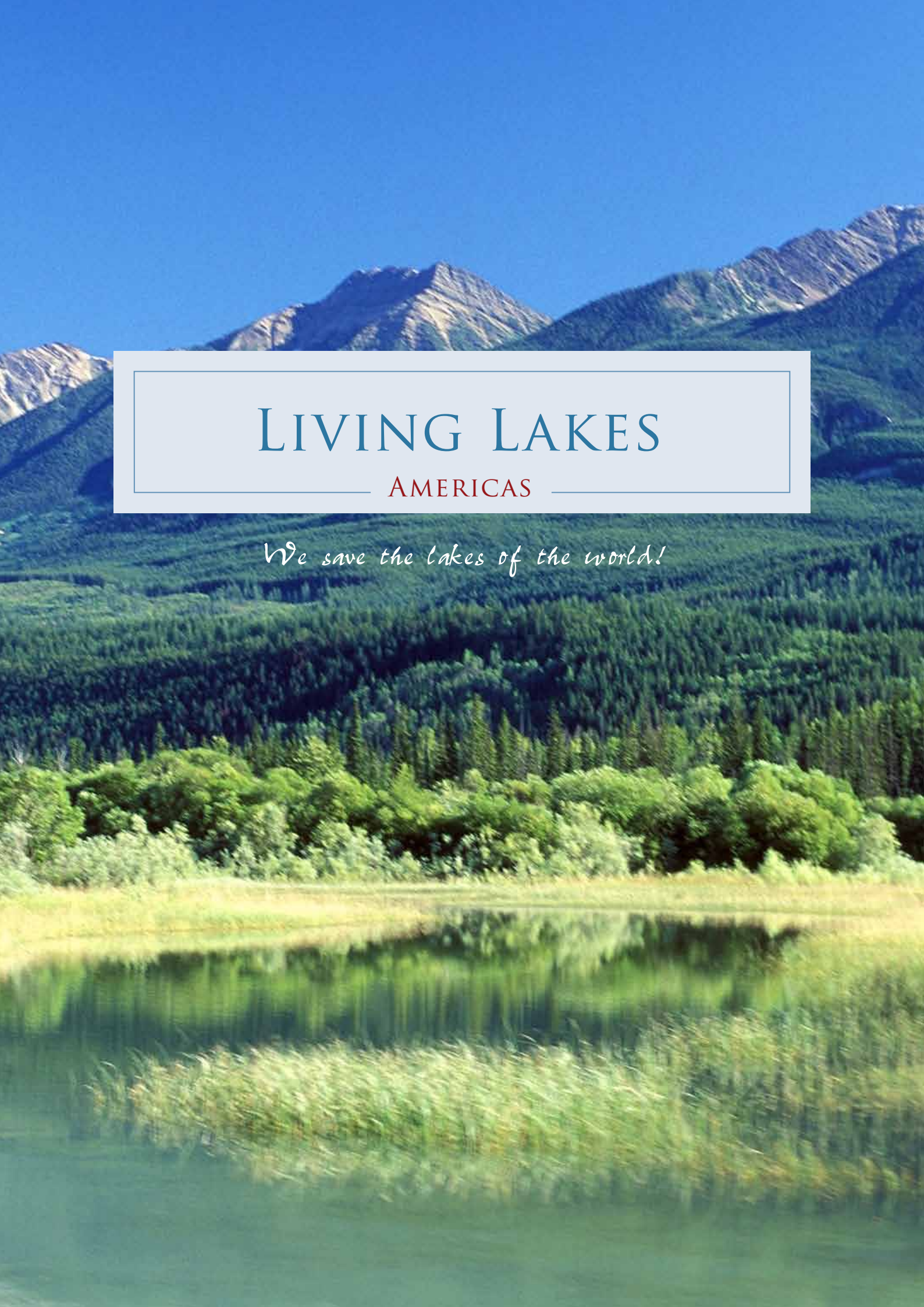
We save the lakes of the world!

The Living Lakes network community cordially invites to join Living Lakes and move towards healthy wetland eco-systems and the sustainable use for future generations. This invitation encompasses grass rooters and all those who take a stake in wetland management.

The involvement and contribution of stakeholders is essential. Besides actors from agriculture and fisheries, local and regional authorities and national ministries, Living Lakes partners are collaborating more and more with the private sector. Often responsible companies are far ahead of the political decision makers. We need their support on the track towards a sustainable development of lakes and lake regions.







Living Lakes

Americas

We save the lakes of the world!

North America

LIVING LAKES CANADA | CANADA

Living Lakes Canada works to enhance the protection, the restoration, the rehabilitation, and the health of watersheds in B.C. and across Canada. We build capacity through community-based water monitoring to help address climate impacts. We promote and facilitate cross-sector collaboration and research to increase water literacy, and support progressive decision-making for improved water stewardship. Our successful leadership and stewardship templates have supported the creation of many other grassroots water stewardship groups. Living Lakes Canada has received multiple water stewardship awards, and has been recognized by the federal government as a "best practices" example in community-based ecological monitoring in Canada.

Achievements 2012 – 2019

- In 2019, Living Lakes Canada facilitated the development of the Columbia Basin Water Monitoring Collaborative, with an advisory committee of 50 cross-sector members from government, industry, academic, and community groups. The aim of the Collaborative is to strategically coordinate data collection among the 31 water monitoring groups in the Columbia Basin, plus monitoring by Crown and First Nations governments, to facilitate improved watershed decision-making.
- In 2018, Living Lakes Canada co-convened a national roundtable discussion on Community Based Water Monitoring in Canada with WWF-Canada, The Gordon Foundation, Indigenous and Northern Affairs Canada, Environment and Climate Change Canada to identify actionable steps the Federal Government can take to advance community-based monitoring of Canadian freshwater ecosystems.
- In 2019, Living Lakes Canada collaborated with WWF-Canada, Environment and Climate Change Canada and the University of Guelph to launch STREAM (Sequencing the Rivers for Environmental Assessment and Monitoring), a national community-based water monitoring initiative that involves the collection of benthic macroinvertebrates from rivers across Canada for stream health assessments using the new technology of eDNA metabarcoding.
- Living Lakes Canada developed and is continuing to expand the Upper Columbia Basin Groundwater Monitoring Program, which has the goal to help effectively manage and protect groundwater resources in the Canadian Columbia Basin by filling important knowledge gaps, informing decision-makers, and engaging citizen scientists.
- In 2018, Living Lakes Canada helped develop the BC Lake Monitoring Program that incorporates a volunteer monitoring framework with the provincial government lake monitoring network to support collection for lake stewardship.

Goals 2020 – 2025

- Build a national community-based freshwater monitoring program using the Federal protocol through our work with environmental DNA and benthic invertebrate sampling.
- Support the Federal Government to elevate community-based water monitoring (CBWM).
- Support CBWM on an international level with developing nations.
- Continue to pilot programs in the Canadian Columbia Basin as national case studies for watershed initiatives and holistic water management.

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North America

COLUMBIA RIVER WETLANDS | Canada

The Columbia River Wetlands are a biologically rich 180 km ecosystem extending from Canal Flats to Donald in the last remaining undammed stretch of the 2.000 km long Columbia River. The wetlands reside within the Rocky Mountain Trench of the Canadian Rockies in the south-east corner of British Columbia. The wetlands are protected under a Provincial Wildlife Management Plan and in 2005 were designated as a Ramsar Site due to its global ecological significance. Residence to many large mammals, such as Grizzly Bear, Elk, Mt. Sheep, Wolf, Cougar, a major bird migration spring & fall stop over and home to several Species at Risk and of concern, the wetlands are one of British Columbia's most diverse regions.

Achievements 2012 – 2018

- Reintroduction of Northern Leopard Frog (Rana pipiens) to Columbia Wetlands.
- Creation of a river guide including maps and explanations for boaters travelling along Columbia River through the wetlands. Accessible on website.
- Annual waterbird survey conducted in spring and fall using citizen science volunteers.
- Carried out a 2 day Wetlands Keepers Course and a 5 day Wetlands Institute Course under the guidance of BC Wildlife Federation.
- Replaced 15 year old waterfowl nesting boxes with 100 new boxes designed for Wood Duck and Goldeneye.
- Carried out a scientific literature survey for research papers, projects and management plans for the Columbia Wetlands and placed on website for public awareness and use.
- Placed fully contained portable outhouse structures at main entry and exit places along Columbia River within the wetlands to gauge use and need.

Goals 2019 – 2024

- Create a Strategy Plan for Columbia Wetlands encompassing 5 strategic directions – partnership, awareness, research, stewardship and management.
- Assist Provincial Government with update of management plan for Columbia Wetlands Wildlife Management Area.
- Investigate and document fishery barriers and habitat loss that are human caused with a goal to remove/repair or mitigate.
- Carry out a Hydrological Study of Upper Columbia Wetlands to determine major and minor streams/rivers contributing to hydrology of Columbia Wetlands and their watershed size and location.
- Monitor human use of wetlands to determine high use areas, impacts and ways to mitigate.
- Monitor affects of Climate Change on wetlands and how it is affecting hydrologic functions, species at risk and introduction of invasive species with the intent to implement mitigation measures.
- Continue to engage local communities and government in wetlands education.
- Continue to partnership with Kootenay Conservation Program, Living Lakes and other organizations that work to promote and conserve wetlands.

The Columbia Wetlands Stewardship Partners

Columbia Wetlands Stewardship Partners
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LAGO DE CHAPALA | Mexico

The lake is located in the western part of Mexico, 90% of its surface belongs to the state of Jalisco whereas the 10% on the northwestern side, to Michoacan. It originated from a fault in the earth's crust, forming a tectonic pit, capturing the waters of the Lerma-Santiago hydrological system. Inside the lake there are several important islands like the Alacranes and the Mezcala islands. Around the lake there are deep thermal springs located in Ajijic, San Juan Cosalá and Ocotlán. Fishing is one of the most important activities and is an important wintering area for migratory waterfowl.

Achievements 2012 – 2018

- Cancellation of the construction of the second aqueduct, which was intended to extract more water from the lake and privatize it.
- The Decree that declared the Lerma Chapala Santiago Pacifico Basin as an Ecological Restoration Zone and Hydraulic Reserve (on going).
- "Factual Record" report done by NAFTA Commission for Environmental Cooperation, in which the problems of the Basin and the lake itself are mentioned.
- National Water Commission is monitoring the quality of the lake water more frequently; in addition the riverside treatment plants work more efficiently.
- Regulation thought an Agreement of the 240 Mm^3 water given periodically to Guadalajara.

Goals 2019 – 2024

- Final approval of the Decree that declared the Lerma Chapala Santiago Pacifico Basin as an Ecological Restoration Zone and Hydraulic Reserve.
- Authorities comply with the recommendations expressed in the "Factual Record".
- Involve the Basin Universities, together with the local authorities, in the management and the defense of the Basin and on the lake in particular.
- Finally establish the Conservation and Management Program for the lake as a Ramsar site.
- The Special Commission of Basin achievement to defuse the evident war between Jalisco and Guanajuato over the water of the Lerma River.

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IGNACIO ALLENDE RESERVOIR; Mexico

- It´s located in the central region of Mexico. It's one of the most important reservoirs in the state of Guanajuato, which has a long dry season. With a total surface of 22,6 km^2, its water is used for irrigation, domestic consumption, fisheries, aquaculture and recreation (fishing, skiing and camping.).
- The dam was constructed over 50 years ago; it shows naturalized conditions, which makes it important for local and migratory waterfowl. There are four fish species, endemic to this area of Mexico.
- The watershed presents conditions of degradation, caused by decades of deforestation (especially due to the expanding of agricultural land), overgrazing and gravel extraction alongside stream creeks, which increase run-off to the reservoir. Also municipal sewage is often discharged without treatment into the inflowing rivers.

Achievements 2012 – 2018

- Promotion of the watershed approach with local stakeholders, in order to address the causes of problems.
- A series of discussion forums and workshops has been organized, to open participation of universities, civil society organizations and citizens in the decision-making process.
- A diagnosis of the basin environmental governance was done through a participative process, which was used to create an improvement plan, based on the strengthening of stakeholders' skills.
- A series of forest restoration projects has been done for several years, to protect the higher and most fragile areas. This includes reforestation, soil conservation works, fire prevention and others.
- Several low cost eco-technologies for rainwater collection and sewage treatment have been implemented in rural villages, among other aspects.
- Environmental education activities have been provided to basic school students and farmers, with involvement of government and civil institutions.
- A series of bonding activities have been done with Lake Chapala institutions, in order to exchange experiences and improve abilities.

Goals 2019 – 2024

- Increasing of sustainable forest management using microbasin focus.
- Implementation of better ranching and cultivation practices, to reduce phosphorus and nitrogen run-off to the reservoir.
- Improvement of technical collaboration with the municipalities.
- Structuring of an environmental management plan for a bird nesting area.
- Environmental education workshops (goal to reach 2500 children and youth per year).
- Strengthening of links with Lake Chapala and other rivers and lakes of Central-Western Mexico, to promote an integrated basin management in the whole region.
- Participation in national and international congresses, forums and symposiums.

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North America

LAKE ZAPOTLÁN | Mexico

Lake Zapotlán, RAMSAR site since 2005, is part of a neovolcanic axis in which the 26 most important national lakes belong. It is a priority wetland and important corridor for migratory birds throughout America; being registered 127 bird species. Some migratory birds with special protection are the Wood Stork (Mycteria americana) and the Least Grebe (Tachybaptus dominicus).

It is highly threatened by being in a closed basin, strong change in land use, contamination of gray water, agrochemical residues and volcanic events. There is manual, mechanical and biological control by the invasion of lily and cattail. Diverse productive, recreational, touristic, educational and preservation activities are developed.

Achievements 2012 – 2018

- Establishment of a legally constituted instance: the Basin Commission of Lake Zapotlan, dependent on the National Water Commission.
- Being home for national and international aquatic sports games: Subsection of the Pan-American Games, Guadalajara, 2011.
- Being awarded of two distinctions by Ramsar Convention as: sustainable Lake Management in 2010 and tourism on wetlands in 2012.
- Creation of "Lago Viviente Zapotlán", environmental education group which supports activities of Living Lakes Network, local goals in the axis of a Sustainable City and goes hand in hand to meet the city prosperity index of ONU HABITAT.
- Creation of a common Environmental Education Agenda for the municipality of Zapotlán.
- Being part of Living Lakes Network of Global Nature Fund (2018).
- Creation of the APP" Aquatic birds of Zapotlan Lagoon".
- Creation of the first national guide with braille language of "Common Birds of Zapotlan Lagoon".

Goals 2019 – 2024

- Continuing the implementation of the Ramsar Management Plan for Conservation and Management of Zapotlan Basin.
- Permanent lake weed control program.
- Rehabilitation of Zapotlán lake floating pier that will prevent floods. It will have spaces with accessible conditions.
- Establishment of paths for environmental education and connections of the Vía Verde with the Lake (exclusive program of areas for cyclists and pedestrians).
- Establishment of an interactive environmental education museum.
- Establishment of a permanent environmental education program and training of nature guides with disabilities.
- Incorporation and active participation of local firms in Lago Viviente Zapotlán group (with reforestation, ecotechnologies, conservation, among other activities).
- Achieve the treatment of 100% of wastewater which is poured into the Lake.

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South America

LAGUNA DE FÚQUENE | Colombia

It is the second largest high altitude (2.540 m.a.s.l) lake in Colombia and the Northern Andes. Crucial for the survival and prosperity of the 200.000 inhabitants of its catchment area, this wetland supports fish stocks, provides water for human consumption, irrigation for agriculture, flow regulation and materials for handcrafts. The lake and its surroundings harbour 307 different species from which 125 are birds (43 migratory, 39 aquatic, 3 endemic, and 5 threatened) and 5 are fish (2 endangered). After 5 centuries of unsustainable practices in its basin and inappropriate management policies, climate change and anthropic pressures will compromise lake's ability to provide environmental services within the next 10 years.

Achievements 2012 – 2018

- Construction of an information centre from which scientific research and environmental education programs are launched.
- Description of available ecosystemic services and biodiversity in Fúquene while showing their vulnerability due to climate change and anthropic pressures.
- Strengthening territory governance by supporting the creation of community based organizations that together with FH implement a biodiversity participatory monitoring system and belong to Fúquene's Fishing and Environmental Management Committee.
- Development of local productive projects, realization of pilot activities of restoration of native forest and implementation of WASH measures and productive projects
- Promote the legal conservation status of the lake: Integral Management District; and support the formulation of an Environmental Management Plan. Both approved in 2017 and 2018 respectively.

Goals 2019 – 2024

- Contribute to the implementation of the Integrated Management District of Fúquene, support the natural resources management through the sustainable development of fisheries and reed harvest, establish bird conservation priorities and communicate recommendations to improve the control of alien and invasive plant species.
- Promote lake's shore restoration by implementing a native forest restoration program and the creation of an educational native plants nursery.
- Continuing with the research and educational programs, and all the other territory governance activities implemented during the past 10 years.
- Disseminate the results of the Lake's vulnerability to climate change study developed by FH and finding new opportunities for implementation of WASH measures like green filters and SODIS methodology.
- Continuation of activities for poverty alleviation in local communities.

Fundación Humedales
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South America

LAKE TOTA | Colombia

Lake Tota is a tropical high-Andean lake at 3.015 m NN. With 55 km², the lake holds 44% of Colombian natural-lakes water storage and provides water for 350.000 people. The lake feeds from the páramos, a very exceptional ecosystem. 170 bird species were reported here, 30% migratory, 12 endemic, three on the IUCN red list. Main economic sectors are onion farming, trout fishery, and tourism. Main issues are the lack of protection, bad balance between economy and environmental services, weak governance, poor education, and a fragile inclusion of value chains in water management. Opportunities for sustainable development rely on science and tourism.

Achievements 2012 – 2018

- Designation as Important Bird Area in 2008.
- Causa Tota program for projects related to biodiversity, tourism, education & culture, and artisanship, aiming to foster local sustainability by providing concrete examples of a better and more responsible relation with our lake.
- Project examples such as artisanship wooden canoe manufacturing initiative (Zine Canoas) to stimulate non-motorized navigation and wetland tourism.
- Tochua Tota as a small bee yard with 10 beehives to support pollination but also environmental education and ecological restoration in our region.
- Building the first Green Filter next to Lake Tota. It serves 50 families of the Cuítiva Township, in the neighborhood of Llano de Alarcón at an altitude of 3.030 m over sea level.
- New regulations to enforce responsible in trout aquaculture management in cages to prevent pollution of lake and environment.

Goals 2019 – 2024

- Foster Causa Tota by obtaining the designation as a Ramsar site for Lake Tota and its watershed.
- Positioning our ABC Tota wetland & education center as a reference point for locals and visitors linked to the Ramsar goals for this site, as well as to the SDG for that territory in general.
- Fostering ecotourism is in the core of our goals, both for our own means of activity and sustainability but also for others in the region to catalyze & stimulate good practices.
- In the field of education & culture associated to water, the lake and its ancestral heritage, we aim to positioning a yearly cultural festival in the region, by having our 'monster' and legendary Muyso figure in its founding spirit.
- Sustain and enhance volunteering opportunities not only in topics related to our projects, but also by offering internship opportunities and our local support for students and researchers worldwide aiming to improve the scientific development of our lake.

Fundación Montecito

Fundación Montecito
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LAKE TITICACA | Bolivia and Peru

Titicaca Lake is a body of water located between the territories of Peru and Bolivia in the Meseta del Collao between the eastern and western ranges of the Andes, at an average altitude of 3.810 m above sea level. It has an area of 8.562 km² of which 56% correspond to Peru and 44% to Bolivia. The maximum depth is at 283 m and its average depth is 107 m. It is formed by two bodies of water separated by the Strait of Tiquina; the largest located north is called Lake Mayor the other smaller body called Lago Menor. Lake Titicaca the highest navigable freshwater lake in the world and occupies the 19th place with the greatest surface area among the lakes in the world.

Achievements 2012 – 2018

- The use of the natural resource called Totora (Schoenoplectus californicus) is used to manufacture handicraft. With the agreement of mutual support between the Catholic University of Ecuador, the OAS and the NGO Center for Environmental and Social Development CEDAS, a training campaign was undertaken to 65 totora craftsmen from the Los Uros Islands, located in the bay of Puno.
- The totora is an aquatic plant that is used by the ribereños of Lake Titicaca for feeding their animals, building houses, boats and crafts. With this plant they build the floating islands in the Los Uros community, therefore the use of the Totora is very important in the economy and social activity of the communities.
- Pollution continues to ravage the waters of the lake and no tactical government plans and interest to solve this problematic have been established yet.

Goals 2019 – 2024

- In order to reduce the pollution of the waters of Lake Titicaca that occur in the main cities near the riverbank, management should start through the Central Government with the construction of 10 water and waste treatment plants to reduce actual sewage of the city coming into the lake.
- It is also planned to reduce heavy metal pollution from the landslides of mines that extract gold in the northern area of the Titicaca basin, by ordering, training and formalization of artisanal and illegal miners who are polluting the waters from the tributaries to Lake Titicaca.
- Another important project proposed in the coming years is the sustained management of the existing hydrobiological resource in the lake, whose native species are declining, including some in danger of extinction. Natural resource of the lake that serves as food to all the populations bordering the lake.

CEDAS - Centro de Desarrollo Ambiental y Social, Peru
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LAGUNITA COMPLEX | Paraguay

The complex comprises 29 lagoons and is situated in the Mbaracayu Forest Biosphere Reserve (MFBR) in the east of Paraguay. In the year 2000, the area was declared a UNESCO Biosphere Reserve. The MFBR is one of the places in Paraguay with a big range of biodiversity threatened by soil erosion, improper use of agrochemicals, poaching, as well as hunting. Tapir (Tapirus terrestris), Marsh Seedeater (Sporophila palustris), Dark-throated Seedeater (Sporophila rufi-collis), Chestnut Seedeater (Sporophila cinnamomea), Broad-snouted Caiman (Caiman latirostris), and South-ern Toad-headed Turtle (Mesoclemys vanderhaegei) are threatened and rare species living in the region. The area is privately owned by the non-governmental organisation Fundación Moisés Bertoni (FMB) and is one of the largest remaining tracts of privately owned dense humid sub-tropical forests in South America.

Achievements 2012 – 2018

- Scientific studies focusing on the ecology of the La-gunita Complex, biodiversity surveys, and long-term water quality monitoring.
- Protection of the Lagunita Complex through an-tipoaching patrols.
- Development and implementation of small-scale ecotourism activities consisting of guided tours of the Lagunita Complex and adjacent forest trails.
- Study to identify markets for traditional and organic agricultural products such as wild mate tea and sesame.
- Extension of the training programme on sustainable agriculture and forest management.

Goals 2019 – 2024

- Elaboration of a long-term management plan for Lagunita Complex comprising studies on tourism carrying capacity, water level maintenance, aggres-sive aquatic plant removal, and prescribed burnings.
- Development of a sustainable eco-tourism pro-gramme focusing on local participation, training for local guides, and training for guide-guest-relation.
- Monitoring programme based on climate change and regional changes in natural coverage.
- Commercialization of traditional and organic agricul-tural products from the Biosphere Reserve.
- Associate research to young scientist training, tak-ing advantage of the diversity of landscapes.

Fundación Moisés Bertoni (FMB)

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South America

FUNDACIÓN LAGUNAS COSTERAS | Uruguay

Our civil society organization was founded in 2008 by a group of neighbours, scientists and friends, concerned about the challenges that Laguna de Rocha, its flora and fauna were facing. Through the years the scope of our work brought us to other lagoons, mainly Laguna Garzón in the neighbouring district of Maldonado, and the adjacent protected marine areas. In 2018 we decided to change our name to "Fundación Lagunas Costeras" (Foundation Coastal Lagoons), to better reflect our additional areas of influence. Furthermore, we began focusing on plastic pollution, both as an area of concern for the ocean and the resulting pollution of our lagoons.

LAGUNA DE ROCHA; Uruguay

Laguna de Rocha is a shallow lagoon separated by a sand bar from the Atlantic Ocean. It is part of the Biosphere Reserves designated by UNESCO's Man and Biosphere Programme (MAB). Laguna de Rocha is known for its wide variety of fish, crab, shrimp and mollusks, attractive both for fishermen and numerous species of birds.

Depending on the weather conditions at given times, the sand bar opens naturally by waves, strong winds and/or abundant rainfall, but is also opened artificially to prevent flooding of the nearby fishing village of fishermen and adjacent cattle fields.

As a result, the level of salinity of its waters changes and influences the biological conditions as well as the physical and chemical parameters of the lagoon.

Achievements 2008 – 2018

- 2012 - 2016 Draft of the management plan for the National Protected Area Laguna de Rocha
- 2016 Approval of the Management Plan of Laguna de Rocha by the local and national Governments
- 2016 Designation of Laguna de Garzón as National Protected Area and integration into the National Protected Area System (SNAP, for its acronym in Spanish)
- 2016 - 2018 Preparation to set up a Round Table of Stakeholders at Laguna de Garzón (Lagoon adjacent to Laguna de Rocha)
- 2018 Publication of the book "Aves del Este". [Birds of Eastern Uruguay]

Goals 2019 – 2024

- Active participation in the drafting and implementation of a management plan for the newly created Protected Area Laguna de Garzón.
- Intensify cooperation with the local branch of the University of the Republic (CURE) to improve the monitoring system of Laguna de Rocha, and conduct research of existing populations of birds, mammals and marine invertebrates to recommend and implement corrective measures where necessary;
- Research into plastic pollution to recommend updates to official policies and new legislation.
- Pursue and strengthen our current environmental education and awareness-raising activities.
- Networking with other NGOs and Protected Areas at the national and international levels.

Fundación Lagunas Costeras
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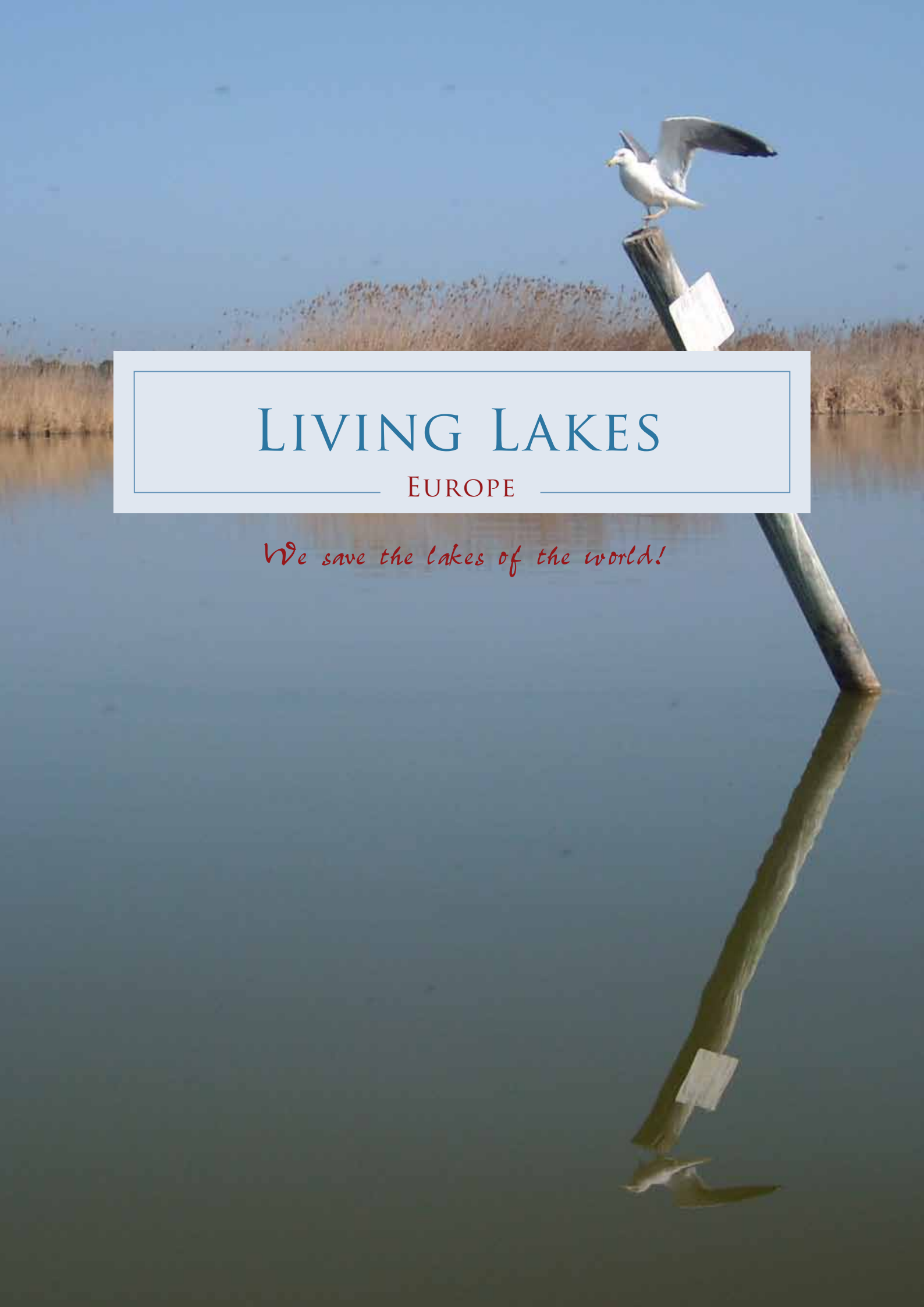

Living Lakes

Europe

We save the lakes of the world!

EUROPE

NORFOLK & SUFFOLK BROADS | Great Britain

The Broads National Park is the UK's premier wetland and an important inland waterway. It is a low-lying, mostly open and undeveloped mosaic of interconnected habitats including 7 rivers, around 63 shallow lakes ('broads'), fen, reed bed, drained marshland, wet woodland, saltmarsh, intertidal mudflats and sand dunes, and is home to more than 11.000 recorded species. Recreation and tourism, the marine industry, farming and land management play an important role in maintaining and enhancing the landscape. Major challenges to this predominantly freshwater wetland include the impacts of sea level rise and climate change, declining water quality, and habitat loss and fragmentation.

Achievements 2012 – 2018

- Major habitat restoration projects ongoing at Hoveton Great Broad and Hickling Broad.
- 20-year Broadland Flood Alleviation Project construction phase completed.
- Catchment-wide partnership projects underway to reduce run-off into watercourses and improve sustainable rural drainage.
- Partnership initiative developing longer-term integrated approach to flood and coastal risk management for Broadland.
- Multiple 'green tourism' initiatives created through EU Sustainable Tourism in Estuary Parks funding.
- 'Water, Mills and Marshes' Landscape Partnership Scheme started, with 55 projects and 38 partners.
- Listed Buildings at Risk reduced by 50% (2011-2015); Local heritage assets surveyed and action plans produced for drainage mills and riverside chalets.
- £700K EU-funded sediment management project delivered including new sustainable dredging techniques and reuse of dredged material in habitat recreation.
- Broads Curriculum developed for schools.

Goals 2019 – 2024

- Improve water capture and efficient water use across the Broadland Rivers Catchment, and develop a longer-term integrated flood risk management strategy for the Broads and related coastal frontage.
- Protect, conserve and enhance water quality and land and habitat condition to benefit priority species, recognising natural environmental change and retaining a thriving and sustainable agricultural industry.
- Apply a catchment-scale approach to reduce sediment input and the sediment backlog, and sustainably reuse or dispose of dredged material.
- Improve understanding, protection, conservation and enhancement of the Broads landscape character and distinctive built, cultural, archaeological and geological assets.
- Strengthen connections between a wide audience, particularly local communities and young people, and the Broads environment.

The Broads Authority
www.broads-authority.gov.uk
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LA NAVA, LA MANCHA AND ALBUFERA | Spain

La Nava is a steppe wetland in the middle of "Tierra de Campos" in the province of Valencia. Thousands of geese spend the winter being a tourist resource for birdwatchers around the world.

La Mancha wetlands are steppe wetlands and unique habitats that host many fauna and flora species and that provide shelter and food for hundreds of migrant birds.

L'ALbufera is one of the most representative and valuable coastal wetlands in the Valencia Region. Covering an area of 21.120 ha, it is located just 10 km from Valencia.

Achievements 2012 – 2018

- Implementation of a programme for improving water quality, natural vegetation and reforestation activities increasing the flood and restoration of wetlands where FGN works in more than 5.600 ha.
- Creation of land stewardship network with more than 300 owners with 25.000 ha in protected areas improving the role of wetlands as breeding sites for rare and endangered species, mainly waterfowls; passerines birds and amphibians.
- Implementation of management and agro-environmental plans as well as models of sustainable supply for large food companies, implementation of activities related to socio-economic and rural development.
- Continuous monitoring of migratory bird species by a bird monitoring stations and LIFE projects.
- Implementation of the results of the LIFE-projects "Canal de Castilla" in Tierra de Campos; "Humedales de la Mancha" in Castilla la Mancha and LIFE "Albufera" and "Paludicola" in Valencia.
- Promotion and dissemination of natural and cultural values associated with wetlands through historical infrastructure and public use activities.
- Ramsar Award for Wetland Wise Use, rewarding a contribution to the long-term sustainable use of wetlands.

Goals 2019 – 2024

- To increase the number of hectares restored and conserved in the wetlands areas.
- To improve the protection status of habitats, and endangered species.
- To promote new technologies for water monitoring and treatment as Short Term Monitoring System and green filters.
- To promote sustainable agricultural practices and biodiversity protection strategies around wetlands areas through land stewardship agreements and other measures.
- To combat climate change with mitigation and adaptation measures.
- To monitor biodiversity and ecosystem services to achieve the restoration aims.
- To improve the management of restored wetlands thought partnerships with scientific institutions, public administration and stakeholders.
- And to network at regional, national and international level to face common challenges.

FUNDACIÓN GLOBAL NATURE

Fundación Global Nature España
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SALOBRAR DE CAMPOS, MAJORCA | Spain

Salobrar de Capmos is situated in the south of Majorca, in the municipality of Campos. It includes several ponds used for the extraction of salt from the sea. They are connected to the Mediterranean Sea via a channel at Es Trenc beach. Many migrating birds can be observed there. The whole natural area is surrounded by agricultural land. Salobrar de Capmos was declared Special Protection Area (SPA) and Site of Community Importance (SCI).

Achievements 2012 – 2018

- Declaration of the „Natural Park Es Trenc-Salobrar de Campos" in July 2017.This natural area is one of the most important ecosystems in Mallorca and it needed 26 years to be decleared a protected area since the regional law of nature conservation was established. The park has a terrestrial area of 1.441 ha and a marine area of 2.327 ha (important Posidonia meadows). The beach of "Es Trenc" with the dunes is one of the most important natural beaches left in Mallorca. The terrestrial zone includes the wetland "Salobrar de Campos", which is a Living lakes member. The salinas are very important for water birds and migrating birds. The declaration of this site is one of the oldest campaigns of GOB and was successful in declaring the site as a "Natural Park". The GOB itself has now established close relations with the owner of the Salinas and is improving the habitat with measures for breeding birds.
- Declaration of the wetland Maristany in Alcudia as an European Bird Area (ZEPA) in February 2019. Maristany is a wetland of 44 ha near the town of Alcudia. There are breeding rare birds and it is one of the hotspots for migrating birds. Since 2011 the GOB tried to protect this area. In 2018 there was an agreement to stop hunting in the area and one year later the regional government declared the area as a ZEPA.
- Starting of the enlargement of the "Natural Park Albufera de Mallorca" in February 2018, which is the most important wetland on the Balearic islands. The park was already declared in 1998, but some important areas of the wetland were not protected. Since then and especially in 2008 the GOB was campaigning for the extension of the park because there was planned to build a golf course in the ecologically sensitive area of "Son Bosc". Fortunately the regional government has now taken measures to include this area in the Natural Park.

Goals 2019 – 2024

- Designing and implementing of a management plan for the "Natural Park of Es Trenc – Salobrar de Campos" called PORN.
- Designing and implementing of a management plan (PORN) for the "Natural Park of Albufera de Mallorca.
- Elaborating a management plan for the wetland of Maristany as a ZEPA.
- It is a big problem of the Balearic islands that there are still missing management plans for these three wetlands and other protected areas. The GOB will now start a campaign on political level that most of the management plans will be elaborated and implemented in the next few years.

GOB

Grup Balear d'Ornitologia
i Defensa de la Naturalesa

Grup Balear d'Ornitologia i Defensa de la Naturalesa (GOB)
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EUROPE

LAKE CONSTANCE | Germany, Switzerland and Austria

Lake Constance is the third largest freshwater lake in Central Europe. 2,2 million people live and work in the Lake Constance region, covering an area of about 12.500 km². It is an important drinking water reserve for 4,5 million people. In spite of a wide variety of human activities, Lake Constance has preserved a natural landscape with rich biological diversity. The Lake Constance Foundation focusses mainly in sustainable tourism, organic farming and renewable energies.

Achievements 2012 – 2018

- Restoration and protection of 60 ha riparian forest.
- Implementation of a regional Business and Biodiversity Initiative with active participation in B&B activities on national level.
- Ensuring biodiversity and pollination by bees and insect and/with friendly measures on a minimum of 400 ha.
- Implementation of measures for the protection of biodiversity on at least 100 fruit farms.
- Implementation of 15 bio-energy villages using 100 % energy from renewable sources.
- Keeping the international Lake Constance region GMO free.
- Development of a tool to asses GHG-emissions and energy consumption on farm level.
- Climate action plans for more than 100 farms in Germany, Switzerland and Austria.
- Restoration and installation of 60 small water bodies in the Lake Constance region.

Goals 2019 – 2024

- Pesticide reduction in agriculture by 40 %.
- Increase the biodiversity performance of agriculture by 30 %.
- Reduce CO_2 emissions from agriculture by 40%.
- Regional quality standard for food production in Baden-Württemberg will request effective measures to protect biodiversity from certified farmers.
- County of Ravensburg implements a sound biodiversity strategy with measures to reduce negative impacts from agricultures and settlements.
- Support local initiatives for biodiversity-oriented design of business-premises and ecological real-estate management.
- Initiating at least four bee-deals in which public and private stakeholders develop and implement tangible measures to support pollinators.
- Training at least 80 “flowering-ambassadors” to sensitize the general public for the needs of pollinators.

Bodensee Stiftung 25 JAHRE
Internationale Stiftung für Natur und Kultur

Lake Constance Foundation
www.bodensee-stiftung.org
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Europe

CHIEMSEE | Germany

Lake Chiemsee is the third largest lake in Germany with an area of almost 80 km². It was formed about 10.000 years ago during the last ice age. At that time, the largest lake in Bavaria covered three times this area. In the south there is the estuary delta of the Tiroler Achen, the only naturally developing inland delta in Central Europe. Lake Chiemsee, with its valuable shore habitats, is a hotspot for biodiversity. As the "hub of bird migration", it is of outstanding importance throughout Europe as a resting and wintering area. At the same time, Lake Chiemsee is one of the largest tourist destinations in Germany. Around 2.5 million overnight stays are counted annually. In addition, there are excursionists from the surrounding region.

Achievements 2012 – 2018

- Designation of quiet zones for birds, fish and reeds; an outstanding example of cooperative nature conservation.
- Construction of eight observation stations (incl. information boards) in the shore area around the lake, according to the motto "steering and guiding".
- Offer barrier-free nature tours for people with reduced mobility in connection with an information card in Braille (first time in Germany) and excursions with tactile elements.
- Development of the brochure series "Nature.Experience.Chiemsee" under the umbrella of the Chiemsee Agenda and its sponsor, the Wastewater and Environment Association Chiemsee with its ten member municipalities. So far, there are ten issues that focus on experiencing nature and nature tourism in connection with public transport.
- Foundation of the bus line "Citizens Bus Chiemsee" with volunteer drivers. It serves communities on Lake Chiemsee and in the surrounding region that are not otherwise served by public transport.

Goals 2019 – 2024

- Training of further certified Chiemsee nature guides in cooperation with the nature conservation authorities, tourism associations and water management offices.
- Optimisation of the existing quiet zone concept.
- Extension and development of the Chiemsee cycle path and circular route.
- Extensification of areas near water to reduce nutrient input into the Chiemsee, thus promoting the unique flora and fauna of the Chiemsee.
- Further development of visitor guidance in conjunction with the promotion of acceptance of nature conservation and the communication of the Natura2000 objectives.

Verein der Natur- und LandschaftsführerInnen, Inn - Salzach e.V.
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EUROPE

LAKE PLÖN | Germany

The Great Lake of Plön covers 3.038 ha, surrounded by a huge number of smaller lakes and is one of the most important tourist destinations in northern Germany. Large parts of this lake area are NATURA-2000-reserve. The area is of international importance for roosting and breeding water bird species. The lake monitoring programme comprises 46 still waters of the district area and includes 60 stations for monitoring characteristic parameters like the visible depth, the oxygen distribution during summer stratification and the nutrient supply in late autumn during full circulation. Main issues are the extensive use for tourism and influx of pesticides and nutrients from surrounding agricultural landscape.

Achievements 2012 – 2018

- White-tailed eagles have recolonized the whole area with 5 pairs; European kingfisher is rather common.
- Over the past 20 years, submerse vegetation has developed positively in many shallow areas of the Great Lake of Plön including many rare Potamogeton and Characeae species.
- So far, two printed result reports as well as an evaluation "20 years lake monitoring programme in the district of Plön" were published.
- In 2018 the results of 30 years of water bird monitoring were published.

Goals 2019 – 2024

- Implementation of the NATURA 2000 management plan.
- Improve protection for moulting and resting areas for waterbirds, temporal closures and marking of particularly important parts of water bodies are due.
- Reduce introduction of pesticides from agricultural land into the most sensitive and botanically valuable lake, Lake Suhrer.
- Further development of sustainable nature-compatible tourism and regulations for water sport activities.
- Individual description of the lakes, including specific characteristics and mentioning temporal changes of the water bodies.
- Identify trends in the development of lakes (stable/improving/deteriorating) and separate random influences from general trends.
- Identify specific pollution inputs from the catchment area.

seen transparent
Seen-Monitoring in der Holsteinischen Schweiz rund um Plön seit 1991

Seen-Beobachtungsprogramm Kreis Plön
www.seen-transparent.de

EUROPE

LAKES OF HOLSTEIN SWITZERLAND | Germany

Formed during the Ice Ages, the landscape of Holstein Switzerland today is characterized by around 200 lakes. Schwentine river connects the lakes between Bungsberg and Ostseeförde and lines them up like a string of pearls. The Great Lake of Plön, Schleswig-Holstein's largest inland lake, forms the core of this area. The lakes of Holstein Switzerland are home for the last white-tailed eagles, cranes, kingfishers and European otter, which is recovering from prosecution in earlier times. In spring and autumn, thousands of migratory birds visit the lakes. Most of the lakes belong to the Europe-wide Natura 2000 network of protected areas.

Achievements 2012 – 2018

- Area-wide repopulation of Holstein Switzerland by the European otter, construction of crossing aids.
- Restoration of the continuity of the Schwentine river and creation of riparian strips to reduce nutrient inputs within the framework of measures under the EU Water Framework Directive.
- Implementation of the EU Habitats directive and formation Natura 2000 network.
- Restoration of former breeding islands.
- Raising of awareness and acceptance of nature conservation through extensive public relations work.

Goals 2019 – 2024

- Further implementation of nature conservation measures to achieve a favourable conservation status of the protected areas and improvement of the biotope network.
- Working trade-offs between protection and use.
- Reduction of the nutrient load in the waterbodies.
- Positive nature conservation events.
- Promoting nature-friendly tourism.

Wasser Otter Mensch

Integrierte Station Holsteinische Schweiz.

Wasser Otter Mensch e.V.
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In cooperation with LLUR - Integrated Station Holsteinische Schweiz

LUSATIAN LAKELAND | Germany

Lake Bergen forms the core of the Lusatian Lakeland in eastern Germany, a Lakeland of more than 50 lakes. As Lake Bergen, most lakes used to be open cut coalmines, and were flooded after exploitation as a measure of post mining management by stopping the artificial lowering the groundwater levels. Due to this particular formation, these lakes are very acid, with a pH of 3.5, and very low in nutrients. Nutrient poverty, on the other hand, is desirable from a nature conservation point of view, thus the water body of Lake Bergen was declared a Special Area of Conservation. In and around the lake, you can observe typical habitats and species of young, acidic post-mining watercourses.

Achievements 2012 – 2018

- Absolute prohibition of access and traffic due to danger of shear failure.
- Almost no remediation activities as initial for a process protection area.
- Establishment as Special Areas of Conservation and Special Protection Area post-mining landscape near Hoyerswerda.
- Establishment of an observation point on the western shore of Lake Bergen.

Goals 2019 – 2024

- Keep Lake Bergen free from motorized vessels in the future.
- Establish the area around Lake Bergan as a wilderness area by protecting natural processes.
- Create a post mining, man-made landscape, poor in nutrients with a mosaic of open water bodies and open-land areas, unique in Germany.
- Establish and protect populations of charismatic species like wolf, but also rare birds species like little ringed plover, lapwing, redshank, tawny pipit.

Naturschutzgroßprojekt Lausitzer Seenland
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UPPER SWABIAN LAKES | Germany

The 2.300 lakes and ponds with their natural diversity characterise the Upper Swabian cultural landscape north of Lake Constance. In addition to the natural ice-age lakes, these also include ponds created by man in the High and Late Middle Ages, as well as peat and dredging lakes. The Upper Swabian lakes and ponds are relatively small with an area between 0,5 ha and 70 ha, but are of great importance for nature and people. As diverse as the still waters are, so rich is their ecological equipment, which offers an adapted habitat to many animal and plant species. The Upper Swabian lakes and ponds also make an important contribution to local recreation, leisure activities, tourism, flood protection, climate compensation and energy generation.

Achievements 2012 – 2018

Over the past 30 years, the "Action Programme for the Rehabilitation of Upper Swabian Lakes" has succeeded in sustainably improving the ecological condition of many lakes and ponds through the development and implementation of rehabilitation concepts. Measures in the wastewater sector have reduced the point nutrient inputs into the Upper Swabian lakes and ponds. Sedimentation basins protect the waters from eroded soil material and thus prevent sedimentation. The construction of monks enables regular drainage of the ponds. Fishery management can thus be adapted to ecological needs. Temporary drainage during winter months promotes sludge degradation through the mineralisation of the soil. The temporary drainage in summer offers a habitat for rare plants of the pond bottom vegetation.

Goals 2019 – 2024

The further increase in intensive agricultural production will in future require targeted water protection advice for farmers in the hydrological catchment areas. The diffuse nutrient inputs into the water bodies can be significantly reduced by additional extensification of areas at risk of yield loss. This is also important in view of increasing heavy rainfall events. The renaturation of watercourses in catchment areas and the maintenance of the shores of lakes and ponds in Upper Swabia increase the ecological quality of habitats and make a significant contribution to biotope networking and species protection.

Aktionsprogramm zur Sanierung oberschwäbischer Seen (SOS)
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LAKE STEINHUDE | Germany

Lake Steinhude and the surrounding areas cover a region area of about 71 km², of which about 30 km² are water areas. The lake has an average water depth of 1,3 m and a maximum water depth of 3,0 m. It is mainly fed by groundwater and rainwater. Lake Steinhude is part of a 420 km² nature park and one of only five wetlands of international importance in Lower Saxony. At the same time, the lake and its surrounding areas are part of the European protected area system NATURA 2000. Conflicts of interest exist with tourism, water sports, peat extraction and agriculture. Comprehensive nature conservation measures serve the renaturation of moors, the protection of endangered bird species such as the osprey, the creation and maintenance of small water bodies and the renaturation of raised bogs.

Achievements 2012 – 2018

- Maintain the winter driving ban. To protect birds resting or overwintering on the water surface, the lake may not be navigated during the period from 1 November to 20 March.
- Return of the osprey, tern, crane and otter to Lake Steinhude as a result of protective measures.
- Successful reintroduction of the tree frog and crucian carp.
- Significant raised bog areas designated as Dead Moor Nature Reserve in 2016.
- Successes in rewetting raised bog areas.

Goals 2019 – 2024

- Extension of the nature reserve scenery - so far only 10% of the lake area is protected.
- Improvement of protection measures for otters and other species endangered by traps and nets, possibly by restricting fishing.
- Reduction of nutrient inputs (e.g. phosphates) into the Lake Steinhude through surface water discharges to prevent progressive eutrophication and to protect the reed belt.
- Safeguarding and expanding biodiversity through further biotope protection measures.
- Improvement and stabilisation of the groundwater conditions in the raised bogs and grassland of the sea-break meadows for climate and species protection.

ÖSSM
Ökologische Schutzstation Steinhuder Meer e.V.

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EUROPE

LIVING LAKES | Italy

About 400 water basins, most of which are located in the inner area of our national territory, contribute to make Italy particularly rich in biodiversity of landscapes and species. The Legambiente strategy for the environmental protection and development of inland waters puts together several issues, such as the conservation of EU protected freshwater species, implementation of sustainable tourism, monitoring of micro plastic and support of organic farming to prevent water pollution. In this context Legambiente has always implemented projects and campaigns for the conservation and enhancement of Italian lakes.

Achievements 2012 – 2018

- The campaign of Goletta dei Laghi, which has been monitoring and preserving lake ecosystems for over ten years.
- From 2016 our scientists also started to monitor 20 main lakes shore, revealing the presence of plastic micro-particles, with an average of 2,5 items of trash in every square meter of beach, 75,5 % of them made of plastic.

Goals 2019 – 2024

- Legambiente will contine to work to prevent plastic pollution by implementing awareness campaigns and working on process and product innovation and starting a virtuous recycling chain.
- Furthermore, our association will be committed in improving the effectiveness of governance, management and decision-making processes regarding in lakes management and conservation, encouraging local administrations to take action and raising awareness among citizens and tourists about the importance of safeguarding wetlands and conserving biodiversity and water resources.

Living Lakes Italia

LEGAMBIENTE UMBRIA

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LAKE BALATON | Hungary

With a surface area of 594 km², Lake Balaton is the largest freshwater lake in Central Europe and represents one of Hungary's most important natural treasures. For its large surface area, Lake Balaton is an extremely shallow lake - its average depth is 3,2 m. Its main tributary, the Zala River, drains the western half of the watershed of 5,770 km² and discharges into the lake from the southwest. Its popularity results from a favourable climate, warm water in summer, beautiful landscape surrounding the lake and its cultural-historical values.

Achievements 2012 – 2018

- An Integrated Lake Development Program was created in 2014 and the central government decided about the financial resources needed to implement it.
- Wastewater treatment of small villages solved by on-site household units. Around 400 household units have been installed in 8 small villages.
- Habitat restoration was carried out in Natura 2000 site. 700 students took part in educational excursions in the frame of Be-Nature project 2011-2014.
- "EUROSCAPES" Green management plans for European urban and peri-urban Landscapes project aimed to develop and implement innovative landscape management plans of parks, coastal areas and forests.
- In the frame of EULAKES - cooperation concerning the climate change and taking into account their vulnerability.
- Regional on-line monitoring system was launched in 2006 including environmental, traffic and visitor counting sub-systems.
- Kis-Balaton Water Protection System Phase II. 2007-2015 (increasing the natural and ecological values, protection of water quality of Lake Balaton, decreasing of the risk of floods).

Goals 2019 – 2024

- Establishment of Lake Development Fund – financial resources for the implementation of Integrated Territorial Investment.
- Creation of a practical guide for territorial development on current issues such as climate protection, development of green infrastructure / green area, protection against invasive species.
- Preservation of the naturalness of lakes (biodiversity, ecosystem services).
- Shoreline rehabilitation.
- Reduction of contamination beyond the nutrient load (hormone preparation, micro plastic, agricultural pollution).

BALATONI CIVIL SZERVEZETEK SZÖVETSÉGE

LAKE BALATON DEVELOPMENT COUNCIL

Association of Civil Organizations of Lake Balaton, Hungary
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LAKE PEIPSI | Estonia and Russia

Lake Peipsi is the largest transboundary water body and lies on the border between Estonia and Russia. In Europe it is the fourth largest lake, with an area of 3.555 km^2 of which 44 % belongs to Estonia and 56 % to Russian. The shoreline is 520 km long. Peipsi is a shallow lake, its average depth is 7,1 m and maximum depth 15,3 m. Ice cover on Peipsi usually forms at the end of November. It will be thickest, up to 50-60 cm, in the second half of March. There are 30 islands in the lake, the biggest - Kolpino - belongs to Russia. Lake Peipsi is a eutrophic and biologically highly productive lake. Eutrophication, which is caused by the high nutrient load, is a major threat to water quality in the lake; fortunately, the recent years have shown a tendency for the better. 37 fish and lamprey species inhabit here.

Achievements 2012 – 2018

- Important work has been done by the Estonia-Russia Joint Water Commission (established in 1997) to ensure protection and sustainable use of transboundary water bodies. Annual intergovernmental Commission meetings take place to discuss about environmental monitoring data, harmonization of measurement methods between the parties etc.
- Numerous projects have been implemented in the field of construction of wastewater treatment plants, reconstruction of fishing ports, restoration of fish spawning areas and also awareness raising of farmers, fishermen and other stakeholders.
- Various awareness and investment projects have helped reduction of pollution load in Lake Peipsi (however, not sufficient to attain significant changes).
- Regular cooperation takes place between scientists (including joint water expeditions), NGOs, also educational sector – between two parts of lake Peipsi.
- Lake Peipsi Fisheries Network has been launched (with the help of European Maritime and Fisheries Fund).

Goals 2019 – 2024

- More efforts are needed to reduce the pollution load and nutrient concentration of the Lake to gain significant changes in its ecosystem and attain a definite recover of the lake.
- More support is needed for the socio-economic development of the lake communities and economic diversification of fisheries areas as declining profitability and employment in the fisheries sector is evident everywhere in Europe.
- Further elaboration of Climate change adaptation and mitigation action plans.
- Improved cooperation between various sectors and organizations between two sides of Lake Peipsi is needed for coordinated actions in water and fisheries management and also in tourism, (water) transport, environmental education etc.

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LAKE VÕRTSJÄRV | Estonia and Russia

Lake Võrtsjarv is the largest lake within the boundaries of Estonia with a surface area of 270 km². Despite its great surface area, Lake Võrtsjärv is a shallow lake having an average depth of 2,8 m. On average, the lake is covered with ice 130 days a year (from December until April). The Suur Emajõgi river is the only outlet. The lake is Natura 2000 site and is an important habitat for nesting and migratory bird species. There are 35 different fish species, including fish having commercial value. Lake Võrtsjärv is threatened by eutrophication. The main causes for eutrophication come from agricultural activities within the lake basin boundaries. The fast expansion of reed thickets and the deterioration of biological diversity are a clear evidence of the eutrophication of the lake during the last decades.

Achievements 2012 – 2018

- During the last decade, some improvement of the ecological status can be drawn out for Võrtsjärv according to long-term monitoring data. The considerable decreasing trend of total phosphorus and biochemical oxygen demand, but also slight decreasing trend of total nitrogen in water indicate on decreasing point source load (better waste water purification systems) but may also refer the decreasing internal load.
- First analysis of ecosystem services of Lake Võrtsjärv has been done, "Ecosystem services of Lake Võrtsjärv under multiple stress: a case study" (2016) published in "Hydrobiologia".
- In 2016 and 2017, first state monitoring on hazardous substances was performed.
- A Fisheries Network has been launched in the region (know-how and support for fishermen communities with the help of European Maritime and Fisheries Fund).

Goals 2019 – 2024

- Further improvement of the knowledge about climate change influence on the lake's ecological status and ecosystem services provided, planning the mitigation measures.
- Continuing efforts to increase the nutrient loads to lake(s), especially agricultural input.
- Better organization of the fisheries sector, in particular the development of methods for the exploitation of small (non-commercial) species.
- Better exploiting the scientific potential of lake management (a critical reduction in state funding).
- Continuation of the eel restocking as a contribution to the recovery of threatened species through natural regeneration.

Võrtsjärv
Sustainable perspective

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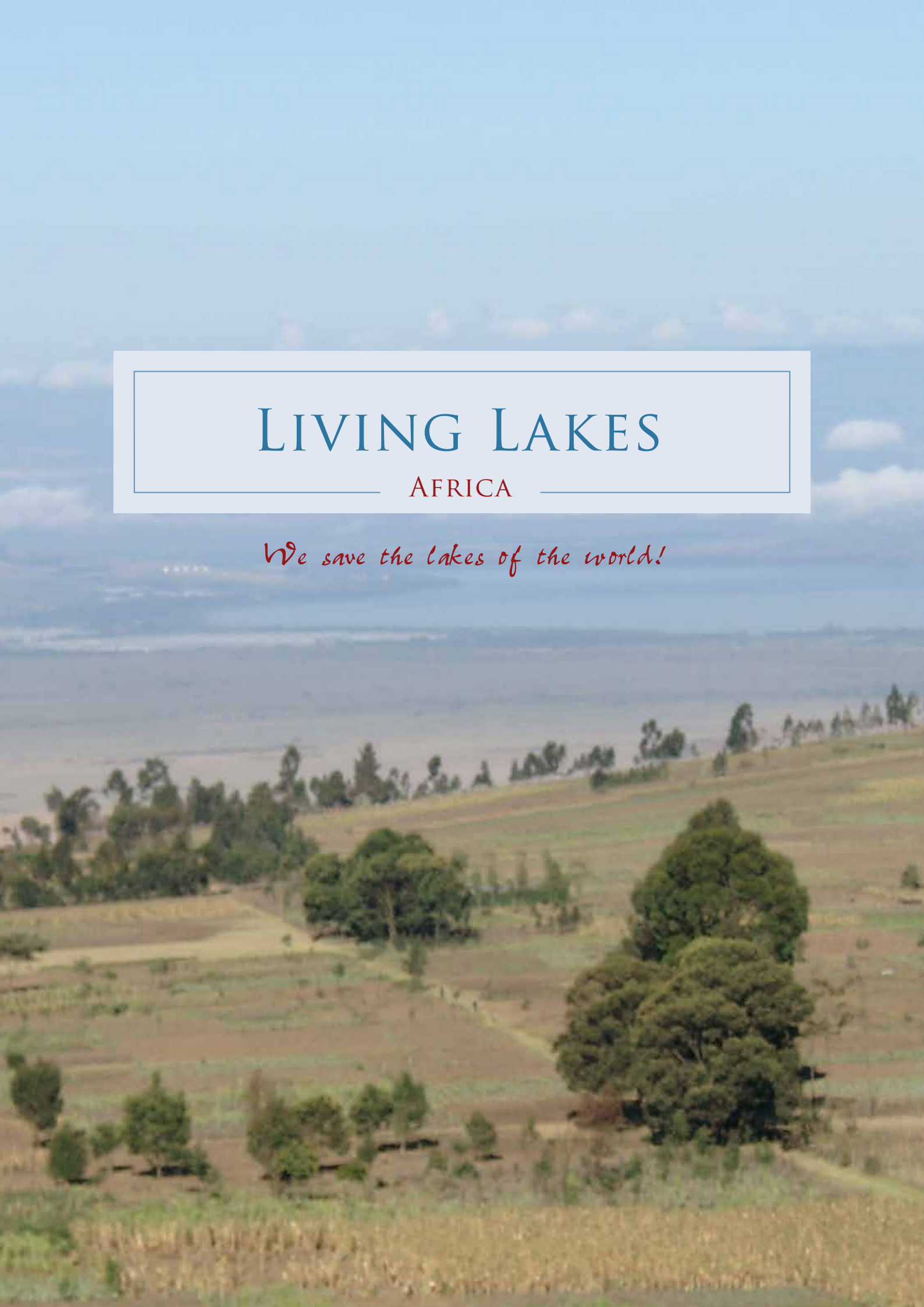
Living Lakes

Africa

We save the lakes of the world!



LAKE NOKOUÉ | Benin

Lake Nokoué with an area of 150 km² is located in southern Benin between (6 ° 25 'N, 2 ° 36 E). It is Benin's largest and most productive waterbody and the largest continental body of water in terms of its extent, productivity (about 16.200 to 21.985 tons of fish per year) and its exploitation (about 17.000 fishermen). Its production represents between 65 and 70% of Benin's inland water production. In 2000, Lake Nokoué is classified as a RAMSAR site under No. 1018. It contributes 75 to 80% of total fish landings, 40% of national animal protein consumption and supports more than 600.000 people.

Achievements 2012 – 2018

- Education project on the conservation of mangroves and migratory waterbirds on the Ramsar 1018 site, implemented in 2016 and 2017, which contributed to the promotion of the economic, cultural and ecological functions of Lake Nokoué and the improvement of living conditions of the communities of Sô-Ava.
- Benin Clean-Up Project: These are two pilot activities of the World Clean-Up project, implemented in 2012 and 2017, which have contributed to the remediation of the banks of Lake Nokoué, located in the Municipality of Cotonou and of Sô-Ava.
- Education and awareness project on the conservation of otter species in Sô-Ava and Aguégués, implemented in 2017 and which raised the awareness of the Aguégués and Sô-Ava communities to the conservation of otter species and wet ecosystems which constitute their habitats.

Goals 2019 – 2024

- Set up micro-projects for the management and conservation of aquatic ecosystems and biodiversity in coastal and marine areas, including lagoons, lakes, swamps and island ecosystems;
- Set up a project to contribute to the creation and sustainable management of the Greater Nokoué Intercommunity Reserve through training and equipment support for the development of the value chain of agricultural and apicultural sectors, the reorganization of fisheries and the development of fish farming and eco-tourism;
- Set up an innovative management project for Persistent Organic Pollutants (POPs) and measures to strengthen resilience to climate change, based on a community-based approach;
- Set up a specific water and sanitation management program by strengthening flood resilience through the integrated watershed management of Ramsar Site 1018, including Lake Nokoué, spatial strategies, EWS and recovery and improvement of water quality;
- Set up a specific communication program on the Lakes and Coasts of Benin for environmental education (quarterly newsletter on ecosystems and aquatic and marine biodiversity), radio and television broadcasts.

AMAF-BENIN
Amis de l'Afrique Francophone

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Africa

LAKE OSSA | Cameroon

Lake Ossa Wildlife Reserve, Cameroon, is home for the threatened African manatee, African nil softshell turtle, many species of fish and migratory birds. Its aquatic surface extends to about 40 km². The ecological balance of the lake is challenged by the growing anthropic pressure mainly dominated by the agro-industrial farming on the lake watershed and the intense fishing activities. The lake encompasses multi-ethnic communities dominated by fishers (about 300). Women are mostly involved with selling the fish and crop farming. The education and economy levels are very low. The state conservation office in Lake Ossa possesses only limited logistics and skills to conduct water patrols.

Achievements 2012 – 2018

- AMMCO have worked in collaboration with the Zoological Society of London and the Conservation office of the Lake Ossa Wildlife Reserve over the past years to establish no-fishing zones in Lake Ossa. We have collected and provided valuable spatial data on the habitat use by fishers and manatees and determined areas that should be set as no-fishing zones to reduce accidental manatee capture.
- AMMCO have raised awareness and implemented environmental education in two high schools, reaching 1500 students yearly.
- AMMCO has been monitoring manatee presence and habitat in the lake for the past five years – before our work here, there was no monitoring data on manatees in Cameroon.
- In 2016, we developed the first bathymetric map of Lake Ossa and updated information on its eutrophication status, which will be useful to guide decision-making for the conservation and sustainable use of the lake.
- We developed two mobile applications (SIREN and SIREN-Turtles) to help in marine mammal and sea turtle sighting report.

Goals 2019 – 2024

- Promote alternative livelihood in Lake Ossa through building capacity of the local communities on practices such as bee-farming, ecotourism, crafting and more.
- Establish an ecotourism circuits in and around Lake Ossa and attract more than 2000 visitors yearly.
- Continue monitoring African manatee habitat and their habitat health through our research program and reducing the spread of proliferating species like water moss (Salvinia sp).
- Continue raising awareness for the protection of the African manatee and its habitat through sensitization campaigns and environmental education programs.
- Construct a semi-natural manatee rehabilitation facility in Lake Ossa. There is no manatee rehab facility in their entire distribution range in Africa. There is a spring flow from one of the main islands of the lake that will naturally provide continuous water for the manatee pools that we plan construct.

African Marine Mammal Conservation Organization (AMMCO)
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AFRICA

LAKE VICTORIA | Kenya, Tanzania, and Uganda

Lake Victoria, with an area of 68.800 km², is the second largest freshwater lake in the world after Lake Superior in America. The lake is shared between Kenya, Uganda and Tanzania and stretches 412 km from north to south between 0°30'N and 3°12'S and 355 km from west to east between 31°37' and 34°53'E. The lake is shallow, with a recorded maximum depth of about 80 m and an average one of 40 m. Lake Victoria has several inlets namely Kagera, Mara, Simiyu, Gurumeti, Yala, Nyando, Migori, and Sondu-Miriu rivers and only one outlet namely the Nile River.

Achievements 2012 – 2018

- Enactment of the relevant policies, laws and legislations by the riparian states within the Lake Victoria Basin namely Kenya, Uganda, Tanzania, Rwanda and Burundi.
- Establishment of the Lake Victoria Basin commission (LVBC) as a secretariat of the East African Community to harmonize policies of the five riparian state within the Lake Victoria basin to foster regional cooperation.
- Donor funding and private sector investments made in industrial and urban waste management, sustainable agriculture and the sustainable use of natural resources through campaigns by Non-Governmental Organizations.
- Acknowledge the right of ordinary citizens and civil society organizations to take part in and influence the decision-making process and the promotion.
- Revision of the two colonial agreements signed by Great Britain and Egypt which restricted the East African countries on the use of the water from the Nile river.

Goals 2019 – 2024

- The overall goal for the next 10 years is to contribute to poverty reduction in a sustainable development framework.
- Capacity building for sustainable development mainly focusing on sustainable watershed management.
- Private sector development for economic growth including agriculture, is needed to provide work for the ever increasing numbers of unemployed young people.
- Socio-Economic and Governance Issues in relation to Natural Resource management including poverty reduction and Combating HIV/AIDS.
- Water resource management, pollution control and prevention to basically address the degradation of the environment.
- Fisheries resource management and aquaculture development opportunities as well as the future of sustainable development in the Lake Victoria Basin under climate change.

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AFRICA

BUJAGALI FALLS | Uganda

The Bujagali Falls in Uganda was one of the outstanding natural beauty by anyone's standards. The waterfalls, now inundated, was situated a few kilometers from where the Nile River flows out of Lake Victoria, Africa's largest and the 2nd world's largest freshwater lake. Lake Victoria is located in the heart of East Africa, and bordered to the east by the Indian Ocean. The Falls that was famous for white-water rafting, kayaking, water-boarding, quad-biking and bungee jump was submerged by the construction of Bujagali hydroelectric dam in 2012.

Achievements 2012 – 2018

- Although our efforts did not realize the main campaign objective – saving Bujagali falls, we are proud to have registered tremendous achievements that gives hope for future projects.
- Project-affected persons received compensated for the loss of their properties, and had damaged houses rehabilitated after a protracted fight.
- Government realized that the high capital cost of Bujagali dam was responsible for distorting electricity price in the country leading to high electricity tariffs paid by end users.
- Efforts by government to refinancing Bujagali dam with a view of lowering electricity tariffs.
- Recognition of civil society actors as partners by government.
- Government put in place a framework to promote renewable energy options.

Goals 2019 – 2024

- Empower communities through trainings, research, and knowledge exchange to promote development models that upholds human rights and dignity.
- Organize and strengthen Grassroot Women Movement in Uganda to campaign for community-owned and controlled energy systems that share energy wealth to many.
- Form alliances and collaborations to galvanize mobilization of critical masses to resist and transform unsustainable development models.
- To conduct research and publish impacts of dirty energy options and campaign for climate justice.
- Empower and strengthen grassroot communities to promote indigenous food varieties, and revive indigenous farming systems.
- Conduct campaign to demand a designated place to host the Bujagali spirits/cultural institution which have been further disrupted by construction of Isimba dam at the Kalagala offset that was agreed to be left untouched for cultural purposes.

National Association of Professional Environmentalists - NAPE
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LAKE KIVU | Democratic Republic of the Congo, Rwanda

Partner I

Lake Kivu lies on the border between the Democratic Republic of the Congo and Rwanda, and is in the Albertine Rift, the western branch of the East African Rift. Lake Kivu empties into the Rusizi River, which flows southwards into Lake Tanganyika. Lake Kivu is 90 km long and 50 km wide. It cover a total surface of about 2.700 km². The height of the lake is 1.460 m above sea level. The lake has a maximum depth of 475 m and an average depth of 220 m. Lake Kivu has recently been found to contain approximately 55 billion m³ of dissolved biogas at a depth of 300 m. The fish fauna in Lake Kivu has 28 species and it is the home of four species of freshwater crabs.

Achievements 2012 – 2018

- Since 2004 the extraction of gas was done on a small scale. As far as large-scale exploitation of this resource is concerned, the Rwandan government has negotiated with a number of parties to produce methane from the lake.
- Since 2008, methane has been extracted, one 1.5-2MW and two 3.5 MW pilot stations and 25 MW are under construction.
- To assure a safe and environmental friendly exploitation, the Lake Kivu Monitoring Program has been set up under the Ministry of Infrastructure. The team is monitoring the main risks associated with the methane gas extraction: the alteration of the lake stability and the deterioration of the lake ecosystem due to an increase of nutrients inputs.
- To minimize these risks, international experts elaborated rules and guidelines for the extraction in the document "Management Prescriptions for the Development of the Lake Kivu Gas Resource".

Goals 2019 – 2024

- We will do the joint research and advocacy which aim to developing sustainable strategies and interventions in conservation of Lake Kivu. Set up different innovation technologies to bring renewable energies that will help the communities in their activities.
- We work on improving the water conservation, tree plantation around Lake Kivu to protect the land from sliding, and setting up the water public pipes in the communities.
- We will work with farmers associations in the area in order to protect land from erosion around the Lake Kivu.
- We are planning to conduct more workshop and forums in the field of climate change adaptation and environment management and we will mostly focus on the youth.

Global Initiative for the Environment and Reconciliation (GER), Rwanda

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LAKE KIVU | Democratic Republic of the Congo, Rwanda

Partner II

The Lake Kivu is one of the Great Lakes of Africa, located between the DR Congo and Rwanda. It is one of the largest lakes of DR Congo, located in the eastern, in South Kivu and North Kivu provinces. It has an average depth of 240 m, an area of 2.700 km², and an altitude: 1.460 m, coordinates: 2 ° 03 '44 "south, 29 ° 07' 24" east. The biodiversity of the Lake Kivu is threatened on large scale by the deforestation of the lake`s bank, by human activities, in particular urban waste, soil erosion, improper use of agrochemicals, finishing, household waste and insufficient sewage water treatment. Lake Kivu is a natural drinking water reservoir for people in Goma town and some surrounding villages in kabare and kalehe territories.

Achievements 2012 – 2018

- Environmental education activities for students and pupils for making them aware of the necessity to preserve the nature and ecosystems.
- Sensitization of Lake Kivu fishermen on the protection of Lake.
- Popularization of environmental texts in force in DR Congo and alert on the degradation of Lake Kivu.
- sensitization of women in the Miti, Bugorhe, katana district on global warming.
- Advocacy activities with local authorities to prohibit the practice of agriculture on the banks of Lake and hills overlooking Lake Kivu.

Goals 2019 – 2024

- Fight against the destruction of protected areas and / or species,
- Extension of the training programme on sustainable agriculture and forest management in kabare and kalehe territories.
- Networking with other NGOs and protected areas at national and international levels.
- Environmental education programs for local fishing communities.
- Conducting awareness raising campaigns and establishment of a dialogue with decision makers from different territories and other entities around the lake.
- Environmental education for local citizens in villages surrounds the lake, especially children, women etc.
- Promotion of sustainable land use around the lake.
- Planting of seedlings around the shore.
- Awareness raising on sustainable fishing methods and organic farming among farmers.

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AFRICA

LAKE TANGANYIKA | Burundi, Democratic Republic of the Congo, Tanzania, Zambia

Lake Tanganyika is shared between 4 countries: Burundi, DRC, Tanzania and Zambia. It is a great reservoir of fresh water (19.800 km³, about 1/6 of available world's fresh water) and biodiversity (more than 1.500 plant and animal species; among them 40% are endemic). About 10 million people live in the Tanganyika basin and 1 million are directly dependent on fishery resources of the lake. Currently, Lake Tanganyika is threatened by various factors: Over-exploitation and pollution (sedimentation, domestic and industrial waste).

Achievements 2012 – 2018

- Reduction of deforestation by planting trees and introducing improved cooking stoves around the Rusizi Nature Reserve (Ramsar area) located north of the Lake.
- Provision of drinking water in villages and community infrastructure (schools, health centers, market, etc.) in communities north of Lac (Mutimbuzi, Gihanga and Muhuta communes).
- Wastewater treatment using "green filter technology" in a 500 students Boarding school (ETG Mutumba) near the lake (around 2 km).
- Advocacy with the Burundi government for a comprehensive management of waste from Bujumbura city (located at the Lake). Technical and environmental studies were carried out and a comprehensive solid waste management project was developed but has not yet found funding.
- Environmental education in schools and communities around the lake.

Goals 2019 – 2024

- Initiate other projects of drinking water supply and the wastewater treatment by "green filter technology" in other localities around the lake.
- Continue to promote environmental education around the lake, including introducing environmental clubs in schools and communities.
- Initiate other projects to promote reforestation and cooking technologies that consume less wood around Lake Tanganyika.
- Continue advocacy for the financing and implementation of the waste management project of Bujumbura city and for the protection of the Tanganyika shoreline.

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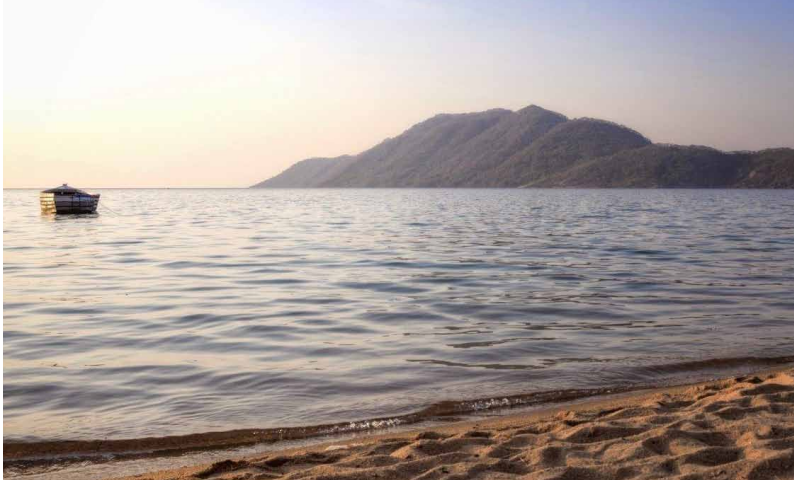

LAKE MALAWI | Tanzania, Malawi, and Mozambique

Partner I

Lake Malawi is a lake of tectonic origin and it is among the largest lakes in the world. The formation of the lake basin dates back 8,6 m years and is connected to divergent movement of African and Somali tectonic plates in the East African Rift System (EARS). Lake Malawi is a typical rift or graben Lake. Lake Malawi reached deep water conditions 3,6-5,5 m years ago during the Pliocene and is thus considered as one of the oldest lakes in the world, a so-called Ancient Lake. The primary inflow of Lake Malawi is Ruhuhu River located in the Northern part of Malawi/Southern part of Tanzania. The outlet of Lake Malawi is Shire River, which is also the largest river in Malawi located in the Southern region of the country. Shire River drains into Zambezi River and further on into the Indian Ocean in Mozambique.

Achievements 2012 – 2018

- Capacity building of the communities in alternative livelihood.
- Capacity building of the lake's dependent communities to promote proper maintenance and management of a critical water source through re-introduction of native plant species to help stabilize the soil along the Lake Malawi including.
- Promoting improved policy and governance and building the capacity of the Lake Malawi dependent communities for sustainable use of the Lake and its biodiversity.

Goals 2019 – 2024

- Raise awareness among the local communities on the need for conservation of the lakes endemic species and other environmental issues affecting Lake Malawi.
- Promote the proper maintenance and management of Lake Malawi watershed through re-introduction of native plant species, capacity building in agroforestry, conservation agriculture, gully reclamation, and composting.
- Improvement of the drinking water supply and personal hygiene education for communities around the lake.
- Build the local communities' capacity for climate change adaptation and resilience.

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AFRICA

LAKE MALAWI | Tanzania, Malawi, and Mozambique

Partner II

Lake Malawi is an African great lake and the southernmost lake in the East African Rift System, located between Malawi, Tanzania and Mozambique. It is the ninth largest lake in the world and third largest and second deepest lake in Malawi. It is home to more species of fish than any other lake including at least 700 species of cichlids. The lake`s water is alkaline (pH 7.7-8.6) and warm with atypical surface temperature between 24 and 29 °C (75–84 °F). Besides being a home to fish, Lake Malawi is also a habitat for wild like such as crocodiles, hippopotamus, monkeys and fish eagles.

Achievements 2012 – 2018

- Dzalanyama Forest 100,000 trees tree planting project.
- Tilimbikane and Masambuka Schemes Irrigation project.
- Partnership with Salima District Assembly on projects on Lake Malawi.
- Publication of annual reports.
- Establishment of a strong team of project officers.

Goals 2019 – 2024

- REFORESTATION PROJECT - The communities around the lake depend very much on natural forests to dry fish. This practice is leading to deforestation.
- CLIMATE SMART AND IRRIGATION AGRICULTURE - Climate change is leading to extended periods of easterlies (strong winds) which is affecting fishing capacity hence their livelihoods is affected. As such we want to implement a 3 year water irrigation agriculture with two schemes in Salima district to mitigate effects of climate change.
- ECOBASED TOURISM - Lake Malawi is a huge attraction for tourists due to its natural endowments. We want to establish an Eco- Museum along Lake Malawi.
- ESTABLISHMENT OF COMMUNITYBIRD WATCHERS FOR INCOME GENERATION
- IMPLEMENTATION OF WATER AND SANITATION PROJECT - We want to construct 10 boreholes in the community.

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LAKE WAMALA | Uganda

Lake Wamala is one of the freshwater bodies located in Central Uganda, covering a total area of 250 km² The depth of the lake ranges from 1.5 - 4,5 m. It is surrounded by papyrus beds, Phragmites, Raphia and Phoenix reclinata palms, and there are also Sudd floating islands present. Lake Wamala is under high pressure due to the increasing human population (around one million people). Natural habitats on land in the basin are converted to other land uses, primarily agriculture. The basin holds extensive forested areas but these are subject to ongoing and major deforestation. Water quality is also deteriorating as a result of pollution originating within the basin.

Achievements 2012 – 2018

- The Ministry of Water and Environment has offered technical backstopping & support to district authorities and CSOs, provided compliance assistance on wetlands restoration; provides environment and natural resources conditional grants to wetlands, forests, land and environment subsectors and offered policy guidance and sensitizations campaigns.
- Uganda Coalition for Sustainable Development (UCSD) and Kikandwa Environmental Association (KEA) carried out a rapid assessment of the lake and produced a report in 2007 that showed water quality is deteriorating as a result of human-induced contamination from the landing sites and beyond, poor fishing, deforestation and land degradation.
- KEA is promoting the harvesting of rain water from roads reducing the need to get water from the rivers and lake.
- Public awareness and information by different actors including CSOs, local and central government authorities.

Goals 2019 – 2024

- To carry out a gap analysis gathering information on research activities carried out in the area and use the data produced to inform the Integrated Management Planning, conservation actions and to raise awareness. Likely sources of information and data include: biodiversity, cultural aspects, ecosystem values, ongoing activities, policies (and their impact).
- To develop an integrated management plan to cope with the fast and dramatic changes Lake Wamala is experiencing due to uncoordinated policies, increased population pressure, and climate change.
- To advocate for designation of Lake Wamala as a Ramsar site for Uganda due to its biodiversity and cultural values.
- To scale up awareness raising and knowledge-sharing on the negative impact of biodiversity loss by a number of key stakeholders.
- To initiate and support cultural tourism and other alternative income generating activities as one way of reducing stress on Lake Wamala fisheries and other resources.

Uganda Coalition for Sustainable Development
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Kikandwa Environmental Association

OKAVANGO DELTA | Botswana

The Okavango Delta in northern Botswana is sutained as the 1.500 km long Okavango River flows into the Kalahari sandmantle, and slowing water depositing sediments over millenia creates a fan-shaped delta comprising permanent marsh and seasonally flooded plains. It has no outlet to the sea (an endorheic delta) and is Africa's third largest alluvial fan and largest endorheic delta. A unique event is the Delta's annual flooding from rain in upstream Angola, which arrives in Botswana's dry season. An exceptional example of interaction between climatic, hydrological and biological processes, the plants and animals have adapted to this annual cycle of flooding. It is species rich with 1061 plants, 89 fish, 64 reptiles, 482 birds and 130 species of mammals - and home to endangered mammals as cheetah, white and black rhinoceros and African wild dog.

Achievements 2012 – 2018

- In 2009 the Okavango Delta was placed on the Botswana Tentative List for the UNESCO World Heritage Center.
- In 2010 the Okavango Delta was chosen by the State Party to be their first candidate for working on towards World Heritage Listing.
- In 2011 the government of Botswana appointed a multi-sectoral Site Selection Committee of 22 experts, to participate in consultative meetings between government and stakeholders, and to develop of the UNESCO Nomination Dossier.
- The completed Dossier was submitted to the UNESCO World Heritage Center in 2013, showing that the proposed World Heritage property would encompasses an area of 20.236 km², with a buffer zone of 22.866 km².
- In 2014 the Okavango Delta was inscribed as a Natural UNESCO World Heritage Site and given a special designation as the 1,000th World Heritage Site. You can find the Dossier here: https://whc.unesco.org/en/documents/129548.

Goals 2019 – 2024

- Ensure traditional subsistence access rights for indigenous peoples living in the property and that their views are respected and integrated into management planning and implementation, and they have access to benefits from tourism.
- Collaboration with the AHEAD program (Animal and Human Health for the Environment and Development) in re-instating the Botswana Fences Committee so that wildlife migration routes are free from disease control fences.
- Develop a program to extend the Delta World Heritage listing into a transboundary site that includes key parts of the Okavango River Basin in Namibia and Angola.
- To that end create a network of stakeholders including NGOs, communities, concessionaires and relevant governments departments in all three riparian States.
- Collaborate with KAZA Secretariat of the Kavango-Zambezi Transboundary Conservation Area and OKACOM (Okavango Commission) in the development of the Okavango River Basin World Transboundary Heritage Site.

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AFRICA

LAKE ST. LUCIA | South Africa

Lake St. Lucia lies in the centre of the iSimangaliso Wetland Park, the oldest protected area in Africa. It is surrounded by massive vegetated dunes on the eastern shores. About 530 bird species are recorded at Lake St. Lucia. The range of other animals is equally diverse, among them the Leatherback Turtle, the Nile Crocodile, the African Python, and the Hippopotamus. In 1999, UNESCO recognised the Greater St. Lucia Wetland Park as a World Heritage Site thus acknowledging the universal value of this unique landscape.

Achievements 2012 – 2018

- Strategic focus on the KwaJobe, Dukuduku and KwaSokhulu communities, given their impact on 3 of the primary river systems flowing into Lake St Lucia and its estuary, namely, the Msunduzi, Imfolozi and uMkhuze Rivers. Key interventions include the establishment of long-term alien plant control and forest restoration projects, and the introduction of Food for Life, Khuthaza enterprise development and environmental Ambassador interventions.
- Ongoing strategic support for the iSimangaliso World Heritage Area Management Authority, with emphasis on promoting the achievements of the Authority and the natural beauty and splendor of Lake St Lucia and the greater iSimangaliso World Heritage Area.

Goals 2019 – 2024

- Provide ongoing support for the community based alien plant control, forest restoration, Food for Life, Khuthaza enterprise and Ambassador interventions.
- Develop and implement locally appropriate climate change adaptation strategies in the Dukuduku and St Lucia community, centred around improved local governance, adaptive climate smart agro-ecology and the stimulation of local businesses.
- Establish a Green and/or Oceans' Schools network through the communities neighbouring on Lake St Lucia and the iSimangaliso World Heritage area.
- Establish a strategic partnership framework with the iSimangaliso World Heritage Area Management Authority, to embed the Living Lakes focused activities into their management activities.

WILDLANDS™

WILDTRUST
http://wildtrust.co.za/
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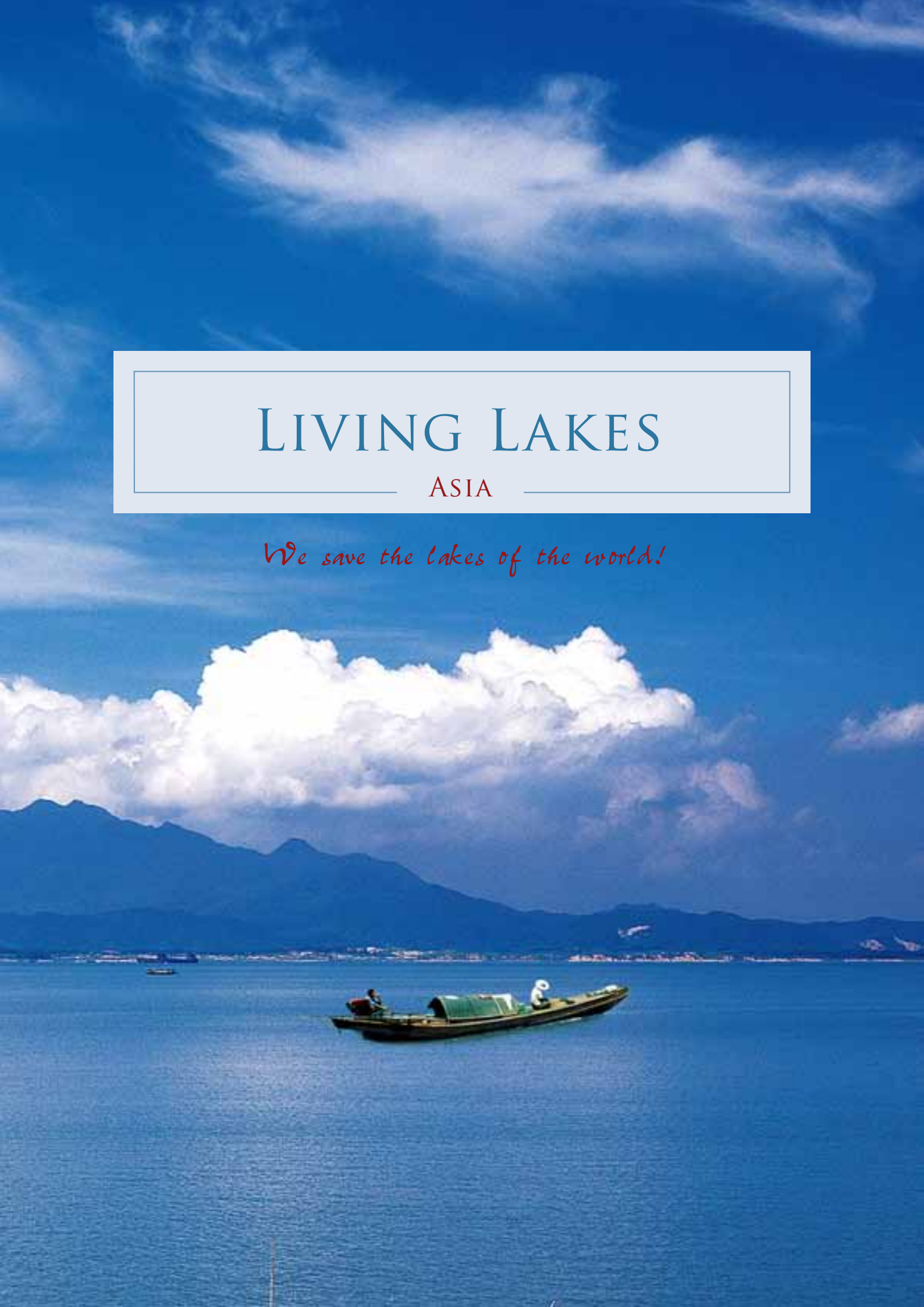
Living Lakes

Asia

We save the lakes of the world!



ASIA

DEAD SEA | Israel, Jordan, and Palestine

The Dead Sea is located 433 m below sea level. Its shores are the lowest lying natural spot on the earth's surface. Apart from algae and bacteria occurring in some estuaries aside the Dead Sea, (that can occasionally bloom also into the Dead Sea over a several days period), the Dead Sea is biologically dead. Its salt content is ten times higher than that of sea water. Its "over-salinity" is attributed to the salt-laden inflow rivers, to the absence of an out-flow, and to the huge amounts of water evaporating under a fierce sun. The Dead Sea is in fact the terminal lake of the Jordan River. The lake is extremely endangered by the extensive water extraction from the Jordan in the north and the mineral extraction by the industry, which dries the lake from the south. Diversion of the Jordan River is as high as 95 % of the historical flow: half of the flow is taken by Israel and the other half by Syria and Jordan together. Since 1967, Palestinians have been denied access to the Jordan River and the Dead Sea.

Achievements 2012 – 2018

- In 2013 an important precedent was achieved when the Israeli Government agreed to release 30MCM of fresh water into the Lower Jordan River for the first time in the past 49 years.
- Wastewater treatment plants have been completed along the Jordan Valley by Israel, Jordan, and Palestine, by removing some of the sewage from the river.
- A master plan for the rehabilitation of the Lower Jordan River, based on 3 years of joint Israeli-Palestinian-Jordanian EU-funded research, was prepared by EcoPeace Middle East. This multi-purpose strategy includes water use for economic / tourism and ecological purposes, and water transfer for various uses, which if implemented would significantly increase the amount of water flowing into the Dead Sea by 2050.
- In 2016, 28 swimmers from around the world embarked on the first ever swim across the Dead Sea, for the purpose of calling for concerted action on the part of governments to deal with the root causes of the Dead Sea's demise. The swim achieved media attention across the globe.
- A draft concession document that is designed to allow mineral extraction on the Israeli side after 2030 has replaced the prior term 'exploitation' to 'sustainable development' of the Dead Sea and has for the first time identified the need to charge industry for the water they withdraw out of the Dead Sea.

Goals 2019 – 2024

- Advocate that the new concession, being negotiated by the government of Israel and industry, will reduce to a minimum the amount of Dead Sea water withdrew by the industry. This goal will be reached by placing a sufficient charge on that water so that industry has an incentive to invest in technology that can abstract minerals without drying up the Dead Sea. Advocate that the same terms be included in any new concession on the Jordan side too.
- Raise funds and complete a study that would look into the possibility of treated wastewater contributing to the rehabilitation of the lower Jordan and its inflow into the Dead Sea.
- Advance Palestinian access to the Jordan River and Dead Sea in a manner that move forward the two-state solution and promotes economic prosperity for the Palestinian economy based on a fair share of sustainable tourism and mineral extraction around the Dead Sea.
- Promote the tri-lateral registration of the Dead Sea as a World Heritage site.
- Promote the creation of a tri-lateral Dead Sea Commission that would help sustainably manage the Dead Sea with the needs of future generations at the forefront.

EcoPeace Middle East

EcoPeace Middle East
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LAKES ULAAN, AIRAG, KHYARGAS, AND ANGIR-NUDEN MONDOOHEI | Mongolia

Red lake (Lake Ulaan) is a saltwater lake of the southern Mongolian Lakes Valley located 1008 m above the sea level in Mandal-Ovoo soum of Umnugobi province. The total area is 175 km^2 according to E.M. Murzaev measurement. The absolute altitude of the lake is 1032 m, ground total area is 142 km^2, maximum depth is 4,2 km^2 and volume of the lake water is 0,3 km^3 according to the measurement that has been done in 1988. In 1998, the Red Lake has dried up because of Onggi River flow that stopped to reach the Red Lake due to the numerous wrong actions of the state that began in 1960. As a result of the dried Red Lake, which has significant impact on environment of Mongolian gobi region, has caused a drought, water scarcity and leaving the people unable to stay.

Achievements 2012 – 2018

- The law on "Prohibition of mineral exploration and mineral operations at headwaters of rivers, protected zones of water reservoirs and forested areas" approved on 16th of July, 2009.
- By decree No.608 of Control stage court of Civil cases of State High Court on 20th of October, 2011, assigned government to implement decree No.55 of State Great Khural on 1th of July, 2009, related to Article No.1 of regulation of "Prohibition of mineral exploration and mineral operations at headwaters of rivers, protected zones of water reservoirs and forested areas" law and other related provisions of the same law.
- The Environmental non-governmental organizations and civilizations got a right to file a claim to the court by the amendments of Environmental Protection Law on 8th of July, 2010.
- On 16th of September, 2014, Munkhbayar.Ts and his colleagues were against the parliament to discuss amendment on regulation of "Prohibition of mineral exploration and mineral operations at headwaters of rivers, protected zones of water reservoirs and forested areas" law, and was sentenced by 7-10 years in prison.
- By 40th decision of First stage Administrative Court on 22th of January, 2018, decided to invalidate environmental impact assessment of UVS oil exploration and research project of Mongolia Gladwill Uvs Petroleum LLC located in Malchin soum of Uvs province. As a claimer Angir Nuden Munduukhei NGO and as a respondent Professional Council of Environmental Impact Assessment Department of Ministry of Environment and Tourism. This case was one of the good example and opened the opportunities to invalidate specific licenses of other exploration companies.

Goals 2019 – 2024

- To provide implementation of "Prohibition of mineral exploration and mineral operations at headwaters of rivers, protected zones of water reservoirs and forested areas" law.
- To file a claim on environmental damage of Onggi River basin.
- To expand "Onggi River-Nomadic tour" program.
- To monitor land ownership and land consumption authorization in Onggi River basin.
- To expand "Increase of precipitation on headwater of the Onggi River" program.

United Movement of Mongolian Rivers and Lakes (UMMRL)
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Öggi River Movement
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LAKE UVS | Mongolia

Lake Uvs, covering 3.423 km², lies in the northern part of the Great Lakes basin in the northeastern region of Uvs province. With 84 km in length and 79 km in width, this lake is the biggest in Mongolia. Lake Uvs is uninterrupted, it has no streams flowing outwards and has a salt content five times higher than that of the sea. 38 rivers join Lake Uvs. Adjoining the lake are salt marshes and all manner of plant life such as reeds, feather grass, various bushes and shrubs, sedge, willows and aspens. There are 362 species of aquatic birds, including swans, snow herons, spoonbills, steppe-hazel grouse, ducks and yellow-hazel geese, and 72 species of mammals.

Uvs Nuur is five times saltier than the ocean, and devoid of edible fish, but this does not mean the lake is dead. The lake's surface is at an altitude of 759 m, making it the lowest point in western Mongolia. It has no outlet, so a lot of the shoreline is swampy, making it difficult to reach.

Except for Mongolia's highest peaks, this is the coldest part of the country: in 1974 a temperature of -57°C was recorded. Summer temperatures typically climb to over 40°C, and these extremes are one reason why the lake was chosen as one of ten locations globally to be studied for climate change by the international Geo-Biosphere Program. The lake is part of the Uvs Nuur Strictly Protected Area.

Achievements 2012 – 2018

- Repaired around area of the stream.
- Sea buckthorns were cultivated in 0.5 hectares for manage forestry.
- Gave education about conservation to 200 people.
- Lawn were cultivated in 0.2 hectares heading for green Ulaangom city.
- Participated in international conference of Uvs lake protection.

Goals 2019 – 2024

- Will expand cooperation of state organizations and non-governmental organizations which work depends on Lake Uvs
- Will establish eco club and do operation.
- Will teach to students of schools about conservation.
- Will organize competition of hand drawing that title is "Lake Uvs protection".
- In the future, tree seedlings will be produced and contribute for more green environment of Lake Uvs.

Uvs Green Movement
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LAKE POYANG | China

Poyang Lake (max. surface area 5.100 km²) is the largest freshwater lake in China, situated in Jiangxi Province. The lake is about 173 km long and 16,9 km wide. The depth of the Poyang Lake is only 8,4 meters. The water volume of the Lake reaches about 30 km³. Poyang Lake is an in-out lake connecting to five major rivers (Gan River, Fu River, Xin River, Rao River, Xiu River). The lake drains directly into the Yangtze River. 600 varieties of wetland vegetables are widely distributed in the lake area. 140 fish and 310 bird species are recorded in Poyang Lake.

Achievements 2012 – 2018

- The second Poyang Lake investigation: During 2012 to 2015, organized by MRLDO/MRLSD, focusing on the four aspects of Poyang Lake: Hydrological situation, pollution sources and environmental pollution, water environment quality, the social and economic development.
- Domestic wastewater treatment: Due to the living quality improvement in rural areas, wastewater from showering, washing and flushing is increasing in Poyang lake area.
- Garbage classification: In cities, MRLSD carried out several awareness rising activities of garbage classification by the way of road show, pupil lessons and community-based wall painting.
- Agricultural non-point pollution control: Jiangxi Province took actions to reduce the fertilizer and pesticide utilization and make restriction area for livestock and poultry farming.
- International cooperation: MRLSD use the platform of Global Living Lakes Network (GLLN) to enforce the international cooperation on sustainable development.

Goals 2019 – 2024

- Prevention/control the industrial pollution: Started from 2018, the government enacts laws and regulations to prohibit that chemical enterprises set up new industries within 1 km.
- Water pollution control: Establishing monitoring mechanism for pollution discharge outlets into rivers and increasing the rate of urban waste water treatment over to 95%.
- Improvement of agricultural: The recycling and utilization/ equipment installation rate of livestock and poultry manure should reach to 85%/ 95% to the amount of pesticide and fertilizer application should be negative growth.
- Improvement of shoreline: The illegal wharf regulation along the rivers and Poyang Lake areas will be completed in an all-round way to standardize the sand excavation.
- Ecological protection/restoration: The wetland protection rate of the whole province should reach to 52%, the geological environment recovery and treatment of abandoned mines should reach to more than 50%.

MRLSD – Promotion Association for Mountain-River-Lake Regional Sustainable Development

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LAKE TONLE SAP | Cambodia

The Tonle Sap Lake is located in north-west of Phnom Penh, capital city of Cambodia. It is the largest freshwater lake in Southeast Asia at the end of the wet season. It provides water for half of Cambodia's crops, and yields of fish and it is also one of the country's most important transportation routes.

During raining season, the lake is filled with water flowing from the northward-flowing Mekong River and becomes 11 to 14 m deep and expands its surface area to around 10.000 to 12.000 km². In dry season in size to 3.000 to 3.500 km², with average depth of 2m as water flows out from the lake when the Mekong changes course and flows south. There are 300 species of fish living in Tonle Sap.

Achievements 2012 – 2018

- FACT continued to build and maintain constructive relationships with government agencies such as Ministry of Environment (MoE), Fisheries Administration (FiA), Ministry of Interior (MoI), and local authorities.
- The work of the Coalition of Cambodian Fishers brought important fisheries issues up. The responses from the FiA and the Ministry of Interior, was positive and this method of reporting major challenges directly to the top government saw impressing results during 2016.
- To become more capable and independent awareness increased of the challenges in the fisheries sector among the general public.
- Involving the community fisheries and stakeholders to protect fishery and national resources in fishing areas, especially to support better livelihoods.
- Created a Forum to engage and inform community members for the work with ensuring the sustainability of the fisheries resource and supporting the gender equality.

Goals 2019 – 2024

- Increased community ownership and confidence in protecting fisheries resources by patrolling, observing and reporting illegal fishing activities.
- Mobilizing local people to seek interventions for their own local development supported by relevant people and CBOs.
- Publicly Government and authorities appreciate FACT's contributions to protecting and conserving fisheries resources in Cambodia.
- Strengthening Coalition of Cambodian Fishers (CCF) role and function in supporting fishing communities.
- A large number of fishers can work together to demand for their rights in fisheries resources.
- Gender sensitization to get involved in the community development and to get a role model or take up a leadership role.

Fisheries Action Coalition Team (FACT)

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LAGUNA DE BAY | Philippines

Laguna de Bay is the Philippines' largest inland water body covering 98.000 ha, and has a total of 24 sub-basins draining directly to the lake. The lake is a major lifeline for most of the countryside townspeople. Fisheries is still the lake's most dominant activity of the present. Croplands in the lakeshore towns, aside from feeding locals, contribute significantly to the food supply of Metropolitan Manila.

Major threats in the Laguna de Bay include:

a) pollution from solid wastes and water discharges,
b) siltation / sedimentation,
c) watershed habitat alteration and urbanization,
d) proliferation alien species, and
e) conflicts between fish pens and cages and open water fisheries.

Achievements 2012 – 2018

- Conducting 10 CLEAR Youth Ecological Camps for 202 students from 46 high schools; printing 1000 copies of "Training Manual for Conducting the SCPW Youth Ecological Camps" funded by UN World Food Program featuring Disaster Risk Reduction Management curriculum; replication of ecocamps in 4 municipalities; implementing about 100 school-based wetland conservation projects; conducting five CLEAR Youth Network Congresses.
- Banning pet bottles, single-use plastics and Styrofoam in school canteens. Collection of plastic sachets from various products and recycling them into pavers and school chairs.
- Conducting training for fisherfolk organizations on organizational capacity to access resources and how to manage them efficiently and effectively.
- Establishing pilot green filters at Green Village to treat domestic waste.
- Conduct of Wetlands BioBlitz to characterize rivers in Laguna de Bay.

Goals 2019 – 2024

- Conduct of CLEAR Youth Ecological Camp in the remaining 10 municipalities and the hold the annual CLEAR Youth Network Congress.
- Full implementation of "Active, Clean and Bountiful Rivers: The Wetlands BioBlitz" that aims to characterize rivers in the Laguna de Bay Region using citizen science; Full implementation of "Towards Ending Plastic Pollution in Rivers" as part of the "Active, Clean, and Bountiful Rivers" program involving retrieval of plastic sachets and single-use plastics and transforming them to school chairs.
- Conduct of a design competition for the Laguna de Bay Education Centre and implementation of the winning design.
- Replicate the green filters project in selected municipalities in the Laguna de Bay Region.
- Conduct capacity-building training for the River Basin Councils of Laguna de Bay.

Conservation of Laguna de Bay's Environment and Resources

CLEAR

a tripartite partnership of -

LLDA LAGUNA LAKE DEVELOPMENT AUTHORITY

scpw society for the conservation of philippine wetlands

Unilever

CLEAR Conservation of Laguna de Bay's Environment and Resources
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LAKE SAMPALOC | Philippines

San Pablo City is in the province of Laguna, 70 km from Metro Manila. Up until the 1960's, these lakes were abundant with fish and shrimp. Sampaloc Lake is the biggest and the most famous of the seven lakes, being in the center of the city, it is the most visible and accessible. The lake is about 104 ha with average depth of 10m. Years of neglect led to the deterioration of this lake in the 1980s and 90s, as illegal structures sprouted along the lakeshore and aquaculture structures mushroomed on the lake covering as much as 70% of the water surface area at its worst. The remaining area was filled with waterlilies.

Achievements 2012 – 2018

- Officially implement the policy regarding the regulation for the floating fish cages through the Aquaculture Zoning Plan. It includes the orderly relocation of the fish cages to a designated area.
- Information spreading under their Ministries of Ecology to promote: "Caring for Our Common Home". The FSLF, the Ministry on Ecology and other stakeholders have joined efforts to adopt, mitigate and provide resiliency of the rivers and lakes from the local to the national level.
- Participation in the drafting of the master development plan with the floating green filter as one of the featured structures.
- We staged a series of fluvial parades in conjunction with the Catholic Church.
- The FSLF and the Diocese of San Pablo are currently the lead organizations for re-organization of the 24 watershed organizations.

Goals 2019 – 2024

- To create a facility for research and learning as FRBC that will focus on the sustainable use of our lakes and rivers.
- To create alternative livelihood programs for fisher folk to reduce their reliance on fishing and/or placing aquaculture structures on lakes.
- To promote the use of the floating green filters on polluted rivers and lakes to decrease and control nutrient load.
- To produce a local cable program hosted and produced by the Youth from San Pablo City. This will include four segments: Health and Wellness, Environment, Food Trip and Mojo (Mobile Journalism).
- To lobby to the Philippine Congress to modify a law that allows the public to utilize the lake waters to a maximum "10% of the suitable water surface area of a lake" for the purpose of putting up floating fish cages/aquaculture structures.

friends OF THE SEVEN LAKES FOUNDATION

Friends of the Seven Lakes Foundation
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LAKE TAAL | Philippines

Taal is a freshwater lake found in the Province of Batangas surrounded by nine municipalities and two cities. It is the third largest and deepest lake in the Philippines with an average depth of 60 m and a maximum depth of 198 m. Lake Taal is home to endemic species such as Tawilis (Sardinella tawilis), the only freshwater sardines and Duhol (Hydrophis semperi). There are 35 major tributaries flowing into it and draining straight to Pansipit River, only outlet to Balayan Bay. The water quality of the lake remains within Class B (recreational) criteria for inland waters with no heavy influx of pollutants in compliance to Phil. Clean Water Act of RA 9275 and DAO 2016-08.

Goals 2019 – 2024

- Established maximum sustainable yields and carrying capacities, decisive law enforcement to ensure the long term sustainability of all livelihood activities of lake stakeholders.
- The waters of Lake Taal to remain within the Class B (recreational) criteria for inland waters, with no heavy influx of pollutants that cannot be integrated into the ecosystem and thereafter livelihoods, heath and economy.
- Prevent the extinction of endemic species to Lake Taal and revitalize and maintain its balanced ecosystem to ensure long term productivity and reduce if not eradicate risks.
- Encourage conduct of research and studies from local and international academic institutions.
- Promote a sustainable eco-tourism programs and activities in the Lake Taal that contributes to the management goals, protect national patrimony, cultural heritage values and the economic well-being of its communities.

Pusod Inc.

Pusod
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LAKE JEMPANG AND MAHAKAM WETLANDS | Indonesia

Mahakam Lakes and Wetlands area is situated between 180km and 350km from the mouth of the Mahakam. This area is one of Kalimantan's largest wetland areas and is a natural floodplain, encompassing 8.100 km², including the three major lakes, Jempang (150 km²), Semayang (130 km²) and Melintang (110 km²) and c. 32 minor lakes as well as extensive peat and freshwater swamps. The area plays an important buffer role for the natural water regulation of the Mahakam River as retarding basin and also for down and upstream human settlements and is a crucial breeding and migration site for 90 waterbird species and home to the critically endangered population of Irrawaddy River dolphins.

Achievements 2012 – 2018

- 80 sustainable fish farmers who have been provided with sustainable aqua-culture aid and have all stopped illegal electrofishing!
- Dolphin rescue network: 39 trained first responders from five villages and 3 sub-districts where dolphins often get entangled or trapped in swamp lakes. 14 dolphins were safely rescued from gillnet entanglement or entrapment in swamps. A decline in annual mortality was observed in the last ten years from 5 to 3 dolphins.
- 120 youth & women have been trained in plastic-recycling handycraft production. Furthermore, 430 women from raft households have committed to no longer trash plastics inside the river or lakes.
- Environmental education is yearly put in practice for 17 high schools along the river using RASI's developed theoretical book and practical courses. Strong outreach through social media networking with over 7.700 members.

Goals 2019 – 2024

- Formal establishment of a 48.000 ha protected area of critical river habitat. For protecting the river dolphins and swamp habitat, fish spawning and other threatened wildlife.
- A major reduction of illegal fishing (electrofishing, bomb and poison) through local community citizen operated monitoring network and increased alternative resources use for direct fishing such as environmental friendly forms of aqua-culture.
- Environmental education on sustainable resources uses and protected wildlife for high and elementary schools in the entire catchment area of the Mahakam and a greater awareness of local community with regards to proper disposal of inorganic waste.
- Further decline of dolphin mortality so that the population can grow. Through placement of acoustic pingers that deter dolphins at short distance from gillnets in the main dolphin distribution areas.

Yayasan Konservasi (YK) RASI – Conservation Foundation for Rare Aquatic Species of Indonesia

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LAKE PULICAT | India

Pulicat lake, the second largest brackishwater lagoon in India located between 300 26′ and 130 43′ N latitude and 800 03′ and 800 18′ E longitude almost parallel to Bay of Bengal. The Lake extends to about 60 km in north-south direction with a maximum width of 19 km in east-west direction covering an extent of about 460 km^2. The lake having an average depth of about 1,5 m joins with Bay of Bengal at southern end with a shallow mouth of about 200 m. Three small rivers-Swarnamukhi-at its northern end, Kalangi at mid-western side and Arni at its southern end empties fresh water to the lake during the rainy season.

Achievements 2012 – 2018

- Awareness on mangroves: CReNIEO and the GNF create lot of awareness on the importance of mangroves in relation to fisheries linked with livelihood of coastal people by conducting regular awareness programs for children of various schools and villages.
- Restoration of mangroves: CReNIEO focused restoration of mangroves by using the Rizophora mucronate species. 44.434 mangrove saplings were planted so far.
- Increase of Biodiversity: Pulicat Lake supports excellent biodiversity by having rich and numerous flora and fauna as it have brackishwater which shows high biological productivity than fresh or sea water.
- Income generation: Making people to utilize their scarce resources of land for generation of additional income, 1.280 households benefited with supply of vegetable seeds, distributing goats and distribution of fishing gears.
- Environmental Education: CReNIEO created lot of awareness on environment and its protection through educating children, youth and adults. CReNIEO promoted green vegetation through horticulture by allotting saplings of horticulture trees.

Goals 2019 – 2024

- To promote sustainable fisheries.
- Additional income.
- Protection measures for environment.
- To ensure involvement of local people and communities in the protection of lakes.
- To make the Living Lake Network internationally known.

CReNIEO - Centre for Research on New International Economic Order
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WULAR LAKE | India

Wular Lake is one of the largest freshwater lakes situated in Jammu and Kashmir— highly militarized region, divided since 1947 between sections controlled by Pakistan, India and China. Pakistan and India both claim the entire region as their own. It acts as a huge absorption basin for annual floodwater. The lake is spread over an area of 130 km^2 however, due to massive siltation, encroachment and pollution from past couple of decades is shrinking. Over 32.000 families, including 2.300 fisher households living on the lake's shores, depend on it for livelihood. The fish and chestnuts both have diminished abysmally.

Achievements 2012 – 2018

- Promotion of eco-tourism activities and groups visiting the lake.
- Motivation and support of people in the catchment area of Wular Lake to shift from farming to handicraft sector which has reduced the flow of fertilizer into the lake to a greater extent.
- Organization of an annual cleaning drive in and around the lake with the participation of students and volunteers.
- Establishment of an environmental education Centre and implementation of awareness raising activities.
- Introduction of LED and CFL lamps replacing kerosene lamps for fishermen community.

Goals 2019 – 2024

- Advocacy for prioritizing the conservation of ecology of the Wular Lake.
- Extensive work on the research of ecological economics of the lake.
- Organization of an international workshop on lake protection.
- Expansion of cleaning activities, conducting a research study on species native to the wetland system.
- Introduction of solar lamp systems for fishermen families who are suffering due to the conflict.

South Asian Voluntary Association of Environmentalists
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LAKE CHILIKA | India

Chilika, the largest brackish water lagoon in Asia and the second largest lagoon of the World is situated between latitudes 190 28' and 190 54' "N" and longitude 850 05' and 850 38' "E" along the East-coast of India, spread over Puri, Khurda and Ganjam Districts of Odisha State. Chilika, the precious gift of God is renowned for biological resources, water regime, fishery resources, precious flora, fauna, bird sanctuary, wetland and the largest hotspot wintering ground for the migratory birds.

Achievements 2012 – 2018

- We have formed community organizations, village volunteers are selected and antipoaching squads and strengthened their socio-economic condition to reduce their dependency on Chilika.
- Environmental education and integrated awareness campaigns are done for restoration of the ecosystem of Chilika.
- We have initiated for subsistence agricultural cultivation which is a sustainable crop that needs no fertilizer and no pesticide and is eco-friendly, climate friendly.
- Integrated awareness programmes are done to save the flora, fauna and the environment of Chilika Lagoon.
- The visitors and the boat-owners have been advised not to throw the polythene bags and garbage to the lake to facilitate the fish resources for complimentary movements.

Goals 2019 – 2024

- Creation of educative community organizations and strengthening a viable and dynamic network of the stakeholder community and prioritizing on women sensitization.
- Preparing a master plan in conjunction with the stakeholder community for conservation and restoration of the second-largest wetland site.
- To initiate and encourage the stakeholder community for protecting the bird sanctuary, irrawaddy dolphins, flora and fauna and fish resources and the national heritage.
- Taking protection measures against over-fishing, throwing prawn shells, damaged-nets, polythene and garbage to lake area for a pollution-free Chilika.
- Distribution of solar lamps, awareness campaigns in the catchment area and providing environmental education to school students, village leaders and political leaders.

ARASMIN - Association for Rural Area Social Modification Improvement and Nestling

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ASIA

LAKE BOLGODA | Sri Lanka

Bolgoda Lake is a threatened lake in Sri Lanka covering a vast area of 374 km² body of water and over 400 km² of wetlands. This is the largest flood plain securing 3 districts which has 215.190 inhabitants (Moratuwa, Kalurata, Piliyandala) and a section of the Colombo District (652.000 people). The Lake is home to 7 varieties of Mangrove plants both true and associated as well as 45 diverse varieties of fauna. Due to the destruction of the Mangroves caused by felling, industrial and other developments, the income through the fishing industry has declined drastically to the brink of being lost.

Land encroachment of the Bolgoda wetland by filling waste and sand to convert the area into residential areas has contributed to floods, lake water stagnation, pollution of the drinking water sources and loss of biodiversity. Flooding in the major townships leads to major economic losses to citizens and incurs infrastructural damages. Loss of scenic value has affected the tourism income. Sand mining and destruction to the Mangrove habitats causes more danger from future tsunamis and other natural disasters as it has been scientifically proven that Mangroves reduce the adverse impact of natural disasters.

Achievements 2012 – 2018

- Declaration of the Lake Bolgoda as an environmentally sensitive area. Along with 6 Mangrove species have been gazetted as protect species.
- Surveying the lake boundaries and declaration of 30 feet buffer zone to protect the Mangrove habitats.
- Ending saw dust dumping and encouraging the use of sawdust as energy for industries through incineration.
- Unauthorised fishing gears and methods were banned in the lake.
- Heavily damaged Mangrove areas were rehabilitated and the Mangrove forests have flourished, as a result people are sensitive and are preserving the Mangroves. Due to the awareness created, felling of Mangroves reduced to 80-85%.
- Conventional farmers in the areas have transformed into organic cultivation reducing chemical discharge to the lake.
- Introduction of new regulation for new construction & businesses close to the lake, by making it mandatory to obtain an EPL (Environmental Protection License) and conduct IEE (Initial Environmental Assessment or EIA (Environmental Impact Assessment) prior to gaining approvals.

Goals 2019 – 2024

- Create an alliance between businesses, stakeholders, farmers to protect the lake environment and to promote sustainable businesses/ farming systems with zero discharge of hazardous chemicals of the like of chemical fertilizers to the lake and water systems.
- Ban the use of polythene and plastic in the lake areas while developing and implementing a solid waste removal system and a system/mechanism to transport segregated items to recycling plants.
- Work on reducing domestic waste-water influx / containment of Water Hyacinth and introduce zero energy filtering systems such as green filters where possible.
- Comprehensive survey on ecology/ biodiversity of the lake and a comprehensive study to estimate the impact on biodiversity due to human activities, action plan for minimization of impact and assess the level of carbon sequestration and valuation towards a carbon credit system.
- Lobby government and responsible authorities to recognize the lake and periphery as a RAMSAR site.

EMACE

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SUNDARBANS | Bangladesh

The Sundarbans is the single largest mangrove forest and one of the most productive ecosystems of the world. It is a UNESCO declared Natural Heritage site and also a RAMSAR Wetland site . Sundarbans is a natural safe guard and provides livelihood support to approximately 3.5 millions of climate vulnerable coastal people. The total area of the Sundarbans is 10.000 km^2 where 6.017 km^2 belong to Bangladesh and the rest to India. The Sundarbans is a unique ecosystem for its endemic biodiversity.

Achievements 2012 – 2019

- Bangladesh Environment and Development Society (BEDS) is a non-profit, non-government and community based development organization that has successfully completed more than 50 projects in the last 10 years.
- As a result of its outstanding contribution to nature and the environment, BEDS received the prestigious Energy Globe National Award in 2018.
- The Annual Balipara Foundation Award in 2018,
- the Divisional Environmental Award in 2019, 2018, 2017, 2016, 2015.
- The Top20 District Development Award in 2018.
- One of the BEDS implemented projects "Eco Village in Bangladesh" has been selected to be showcased at Expo 2020 Dubai's Global Best Practice Program.

Goals 2020 – 2025

- To engage local people with conservation activities effectively.
- To promote Sundarbans mangrove ecosystem education among national and international communities.
- To establish a mangrove wetland education center.
- To create a coastal buffer zone through mangrove restoration and protection.
- To ensure the sustainable use of mangrove resources.

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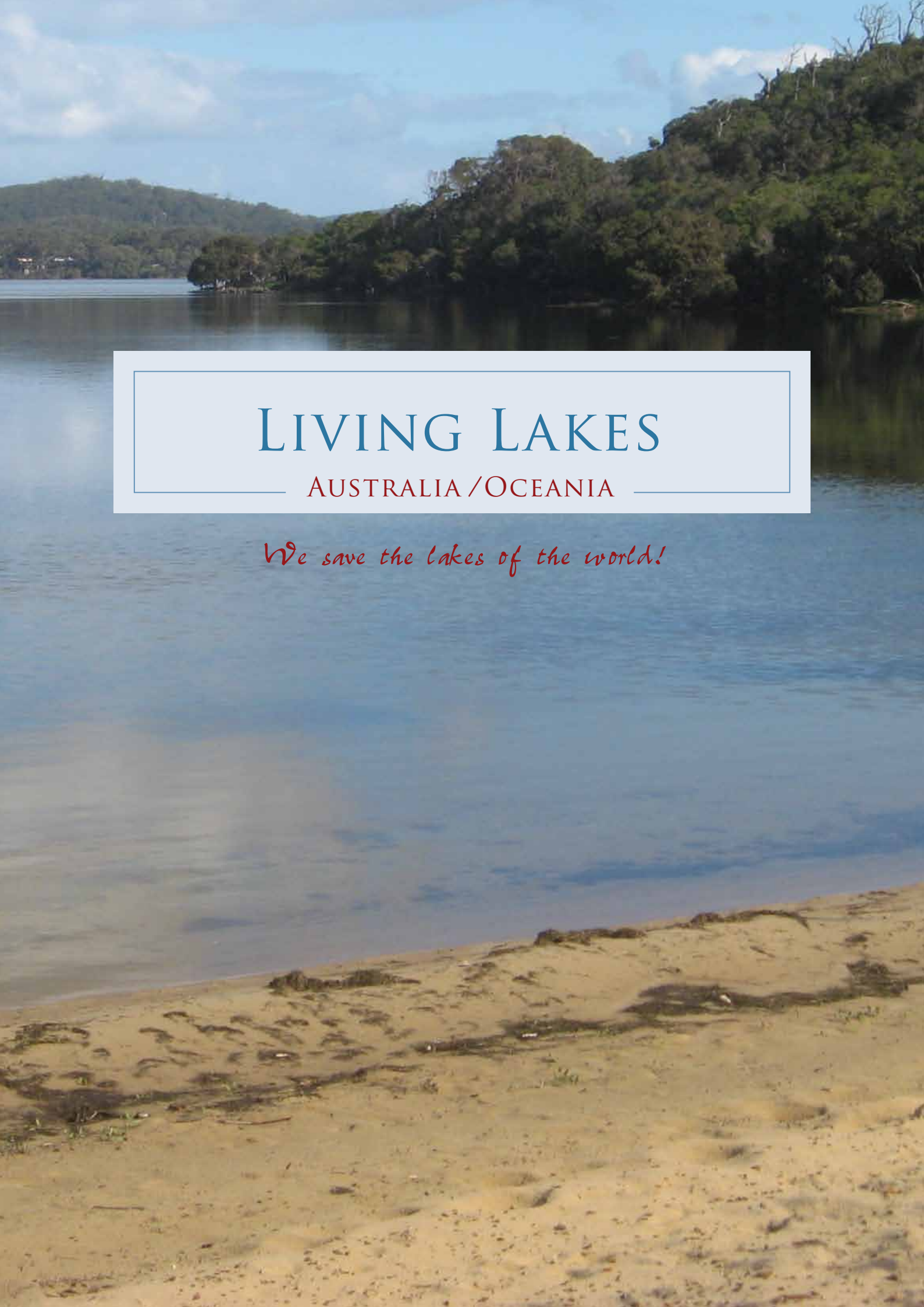

Living Lakes

Australia/Oceania

We save the lakes of the world!

WILSON INLET | Australia

Wilson Inlet is a seasonally closed estuary on the southern coast of Western Australia. A sand bar isolates the estuary from the Southern Ocean for about half of the year. The natural vegetation is diverse and complex due to a range of soil and climatic conditions. Before it was cleared for agriculture, much of the low-rainfall northern half of the catchment was Jarrah forest and a variety of open woodlands and shrubs in sandy, swampy soils. The major threat to Wilson Inlet is eutrophication, with the nutrient enrichment originating from human activities in rural and urban areas.

Achievements 2012 – 2018

- Promotion and demonstration of sustainability in action through catchment action. Living Lakes member, Green Skills, has produced a short documentary outlining the significance of this Inlet and its wetlands for Aboriginal culture, as a hotspot for migratory shorebirds, and as a shining example of community action for the environment. https://www.youtube.com/watch?v=80lyV7LP6hc
- Green Skills collaborated with Birdlife Australia on a five year citizen science program of migratory shorebird research and conservation across 1000km of WA's south coast, centred on Wilson Inlet. See https://greenskills.org.au/download/shorebirds-south-coast-wa-2015/
- Formation of a subregional program called "The Living Lakes of Gondwana Link" and development of an ongoing program of wetland conservation and promotion. This forms part of the landscape conservation program Gondwana Link (http://www.gondwanalink.org/)
- Green Skills has implemented an inspiring program of fencing and restoring degraded wetlands and lakes on farms in the Great Southern region, through providing a range of incentives.
- The town of Denmark, on Wilson Inlet, has continued to showcase inspiring examples of green development including a community owned wind farm, waste minimisation, environmental arts, and ongoing initiatives in catchment action including waterway repair.

Goals 2019 – 2024

- Continued development of the Living Lakes of Gondwana Link sub-regional wetlands program
- Greater involvement and empowerment of local Noongar First Nations leaders in wetland and watercare projects.
- Development of Community based enterprise initiatives as an alternative to NGO dependency on government grants.
- Developing community emergency response capacity to deal with increased wildfire risk arising from accelerating climate change.
- Building innovating and inspiring linkages between the arts and environmental sectors on the south coast of WA.
- Developing more global linkages relating to migratory shore bird conservation along the East Asia Australasian Flyway.

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Working for a sustainable future

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