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CONSERVING THE WORLD'S FRESHWATERS

for generations to come

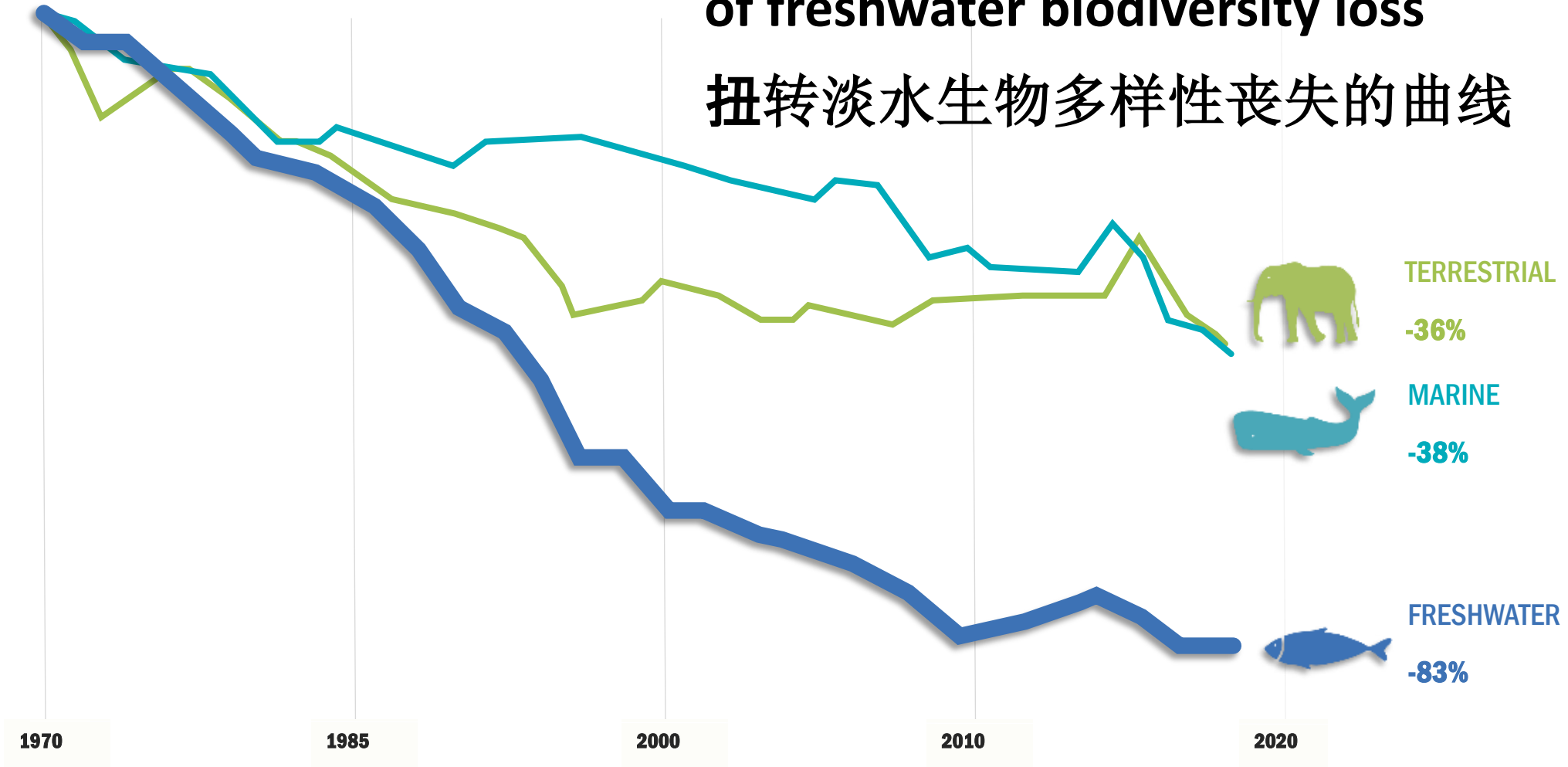
为人类的未来保护世界淡水资源



BENDING THE CURVE

of freshwater biodiversity loss

扭转淡水生物多样性丧失的曲线



Half of all people on the planet now
live in water-stressed areas.

地球上一半的人口生活在缺水地区。

Drought will affect 75% of the
world's population by 2025.

到2025年，干旱将影响世界75%的人口。

DURABLE FRESHWATER PROTECTION

secures freshwater ecosystem integrity and associated biodiversity and social values over the long-term through legal or non-legal mechanisms, sustainable funding, and social support.

长效淡水保护

通过法律或非法律机制、可持续资金和社会支持，确保淡水生态系统的完整性以及相关的生物多样性和社会价值。

Durable Freshwater Protection Checklist 长效淡水保护清单



- Freshwater objectives and plan 淡水目标和计划**
 - Measurable freshwater ecosystem and/or biodiversity objectives are articulated
 - An assessment of key ecological attributes, with identification of threats to them, is conducted
 - Spatially explicit protection plan is developed based on best available knowledge
- Stakeholder engagement & human-centered approach 利益相关者参与和以人为本的方法** – prioritizes stakeholder values, recognizes the human right to safe drinking water and sanitation, and incorporates gender diversity, equity and inclusion as critical to project success and durability
- Designation mechanism(s) 指定机制** – an official means to demarcate and declare protection for a freshwater feature, or a portion of a freshwater feature, is identified and applied
- Institutional accountability 机构问责制** – administrative, planning, stewardship and enforcement responsibilities are clear and assigned to parties with authority for implementation
- Sustainable financing 可持续资金** – initial funding for management is secured, and sources for long-term, sustainable financial support are identified and ideally established

KEY ECOLOGICAL ATTRIBUTE 关键生态属性	THREAT 威胁	SOURCES OF THREAT 威胁来源
Hydrologic regime 水文情势	Flow and lake level regime alteration, water withdraws, inter-basin transfers	Dams, irrigation, energy or water resource development
Connectivity 连通性	Dams, levees, road/stream crossings	Dams, energy or water resource development, flood-risk infrastructure development, road development/poor culvert designs
Water quality 水质	Watershed runoff or point sources of excess sediments and/or nutrients, bacteria, toxic chemicals	Agriculture, deforestation, animal management, sewage, industry, mining
Habitat 栖息地	In-stream and lake shoreline gravel mining, channelization, floodplain and/or riparian and other wetland destruction/conversion	Development, agriculture
Biotic composition 生物组成	Over harvesting, invasive species	Poorly managed fisheries, aquaculture, pet and landscaping trades

DFP mechanisms
 长效淡水保护机制
 (adapted from
[Higgins et al. 2021](#))

MECHANISM CATEGORY 机制类别	MECHANISM EXAMPLES 机制案例
Legislation 立法	Protection acts
	Fisheries policy
	Interjurisdictional freshwater
	Basin compacts
	Public finance
Administrative designations 行政指定	Executive orders requiring best management practices
	Protected area designations
	Other effective area-based conservation mechanisms (OECMs)
Regulation 法规	Environmental flow regulations
	Dam licensing
	Water rights allocations
	Riparian zoning
Acquisition 收购	Transfer of development rights programs
	Conservation easements
	Flowage easements
	Riparian land acquisition
	Water rights
Judicial action 司法诉讼	Public Trust doctrine
	Rights of Nature initiatives
Non-legal mechanisms 非法律机制	Community-based management (e.g., fisheries, forests)
	Community irrigation systems
	Areas protected by religious/cultural institutions

SETTING OUR SIGHTS

on durably protecting at least 30% of the world's rivers, lakes, and wetlands by 2030

我们的目标是

到2030年持久保护世界上至少30%的河流、湖泊和湿地





GOING BIG with durable freshwater protection in priority places

在需要优先采取行动的区域提供持久的淡水保护

30x30x3 in Gabon 在加蓬



UNITED FOR RIVERS in the Western Balkans and Southeast Europe

巴尔干半岛西部和东南欧的河流联合

360 KMs
of rivers protected by 2025

3,000 KMs
of rivers preserved by 2030



Freshwater Protection



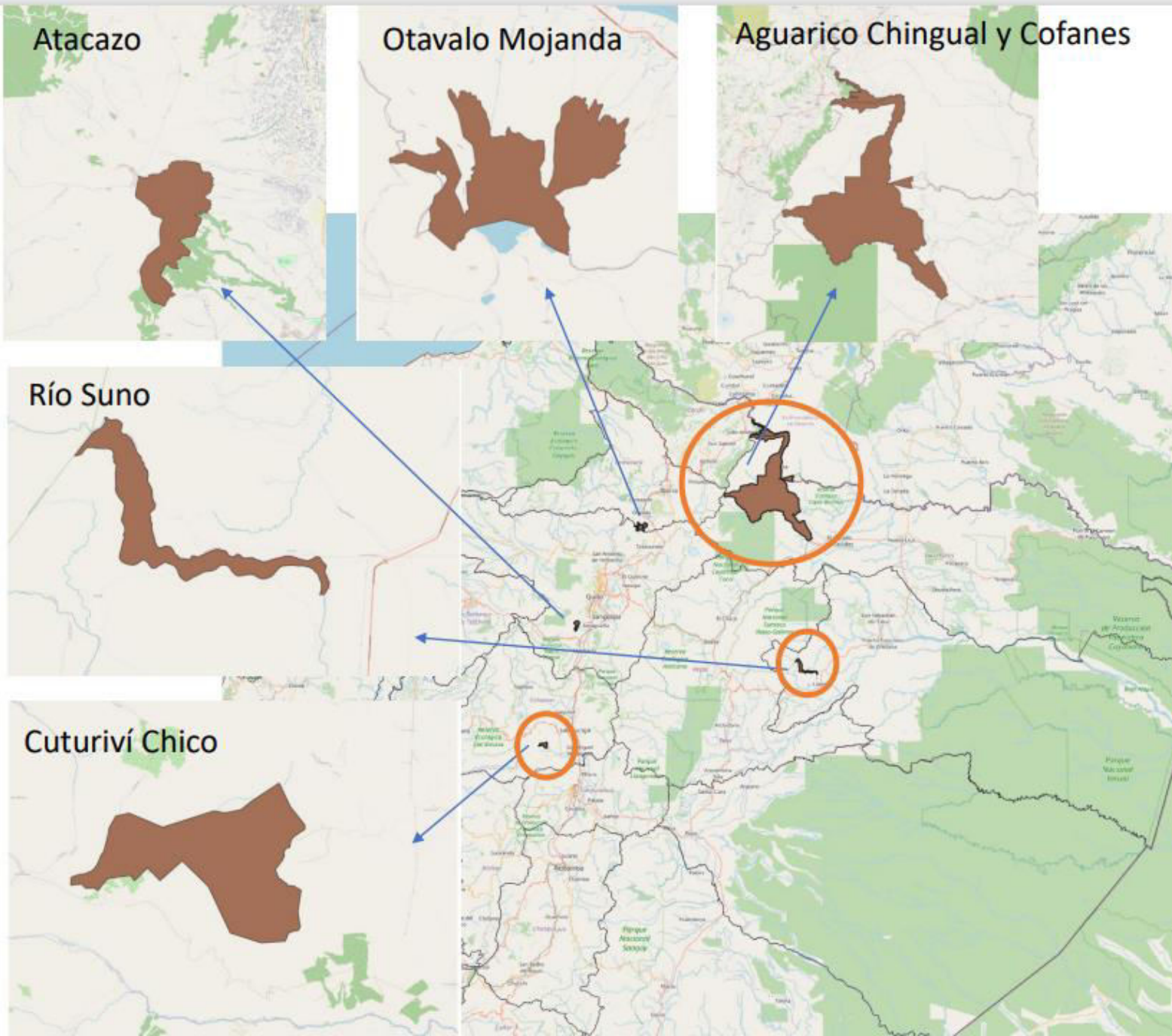
Renewable Energy Planning



Freshwater Restoration

***(P)** **Public Policy**
(National-Level Engagement)





WATER PROTECTION AREAS

in the Ecuadoran Amazon

厄瓜多尔亚马逊地区的水保护区

SPECIAL POLICY STUDY on river basins management

流域管理的专题政策研究报告

- Lead organizations: CAUPD, TNC, PBL
- River basins as important, perpetual, complex and uncertain systems.
流域是重要、永恒、复杂、且不确定的系统
- 5 key principles
5个关键原则
- Yangtze, Rhine and Mississippi Rivers as main comparative study basins (others added for complementary context)
以长江、莱茵河和密西西比河为主要的比较研究流域
- Targeted recommendations for high-quality development and climate adaptation in China's and global river basins.
针对中国河全球河流流域的高质量发展和气候适应提出有针对性的建议

Research year 研究年份	Principal/Theme of annual research 年度研究原则/主题	Research focus# 研究重点
2022-2023	Make good on your responsibility stretching from the headwaters to the coastal seas 从源头到沿海履行责任	The mechanism for regional collaboration 区域合作机制
2023-2024	Adopt a 100-year perspective and plan your steps 根据百年愿景规划步骤	A proactive approach to adapt to projected climate change and increase resilience 积极主动适应气候变化并提高韧性
2024-2025	Engage everybody who can contribute and develop a shared vision 人人参与，形成共同愿景	The organization of collaboration in multi-subjects' interests 基于多学科利益的协作组织
2025-2026	Adapt to climate change and other principal river stressors in every aspect of the management of river areas 在流域管理各方面考虑气候变化和其他主要压力源	Dealing with the uncertainty of climate change and other stressors, and of disasters 应对气候变化、其他压力源和灾害的不确定性
2026-2027	Continue to strengthen and innovate 持续加强和创新	Management approaches, knowledge programs, policy tools and forward-looking financing mechanisms, etc.; international exchanges 管理方法、知识计划、政策工具和前瞻性融资机制等；国际交流

Policy Recommendations

政策建议

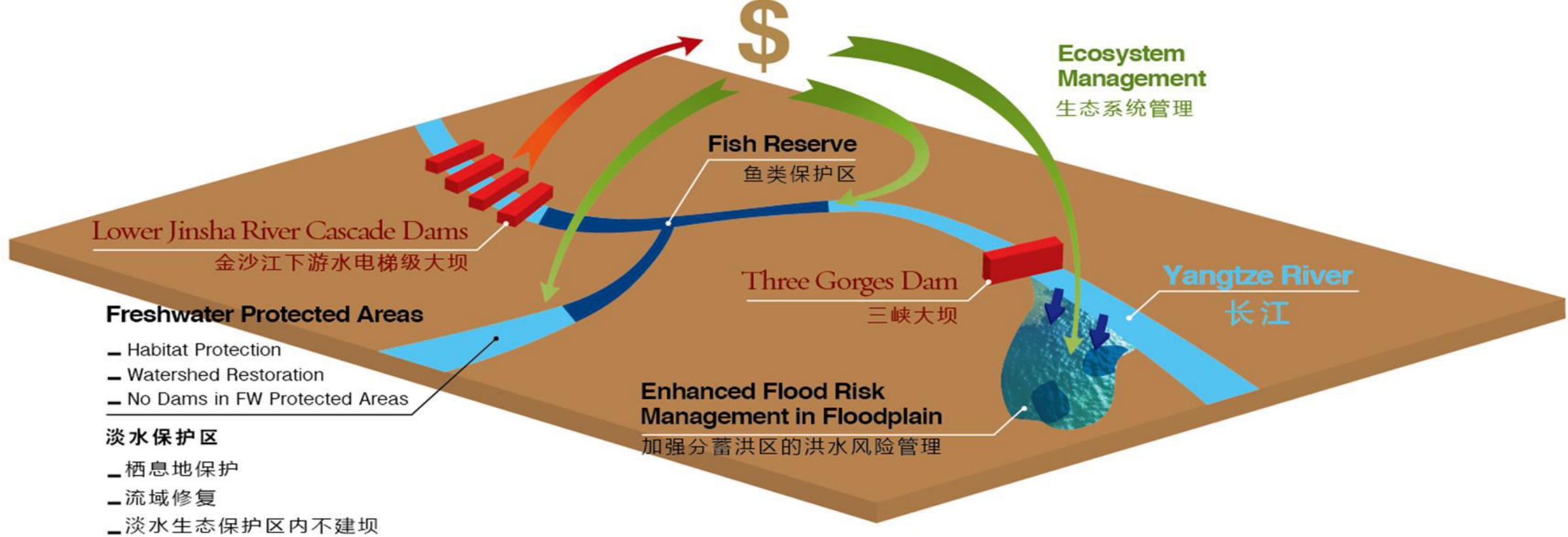
SPECIAL POLICY REPORT

- Resilience = Safety + Security + Economic Investment + Low-Carbon Development + Ecological Protection
韧性=安全+保障+经济投资+低碳发展+生态保护
- Adaptation to Climate Change is key = Spatial Synergy + Temporal Synergy + Sectoral Collaborations
适应气候变化是关键=空间协同+时间协同+部门合作
- Synergy = Hydropower + Flood Control + Storage + Fisheries + Aquatic Biodiversity
协同作用=水电+防洪+蓄水+渔业+水生生物多样性
- Assess long-term pressures and short-term impacts of Climate Change at the basin level.
评估流域气候变化的长期压力和短期影响。
- Factor in gender and equity issues and participation of disadvantaged groups in watershed governance.
考虑到性别和公平问题以及弱势群体如何参与流域治理。
- Accelerate the development of the Yangtze River Basin Development Plan and the Territorial Spatial plan, esp. for placement of RE assets.
加快制定长江流域发展规划和国土空间规划，特别关注新能源选址。

High-Quality Development of River Basins and Adaptation to Climate Change



2023



Study on a Hydropower Sustainable Fund 可持续水电基金

- The study suggests an innovative sustainable solution to meet energy demands, guarantee flood safety, and ensure ecological conservation facing the multiple critical challenges.
该研究提出了一种创新的可持续解决方案，以满足能源需求，保障洪水安全，并确保面临多重关键挑战的生态保护
- Partners: China Three Gorges Corporation (CTGC); Changjiang River Scientific Research Institute (CRSRI); China Institute of Water Resources and Hydropower Research (IWHR); Hydrology Bureau of Changjiang Water Resources Committee, MWR; Nanjing Institute of Geography and Limnology, CAS; Nanjing University; Goldman Sachs Group Inc.
合作伙伴：中国三峡集团公司；长江科学研究所；中国水利水电科学研究院；长江水利委员会水文局；CAS南京地理与湖沼研究所；南京大学；高盛集团股份有限公司。



THE WAY FORWARD 共同向前

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