WHO WE ARE

SPDA | CONSERVAMOS POR NATURALEZA

Sociedad Peruana de Derecho Ambiental

- Leading Peruvian environmental NGO with over 35 years of experience;
- Promoting conservation and sustainability through policies and laws;
- Supported the creation of most environmental legal frameworks and institutions in Peru;
  - Protected Area System, System for Environmental Impact Assessments;
  - National Forestry Service, National Protected Area Service, Environmental and Evaluation and Enforcement Office.
- Active MOUs with Ministry of Production, Ministry of Environment, Judiciary, Public Ministry.
- Member of the IUCN.

Conservamos por Naturaleza: SPDA initiative to promote citizen-led conservation and environmental campaigns.

In alliance with the Waterkeeper Alliance (international NGO), Conservamos por Naturaleza is campaigning to protect the free-flowing nature of the Marañón River via the Marañón Waterkeeper platform.

#MarañónSinRepresas

Reasons to protect the Marañón River from dams (Perú)

SPDA | CONSERVAMOS POR NATURALEZA

INTRO

The Marañón River passes through diverse ecosystems. It originates in the central Andes of Peru and flows first north, then eastwards, into the lowland rainforests, where it joins the Ucayali River to create the Amazon River. These waters continue east until they meet the Atlantic Ocean.

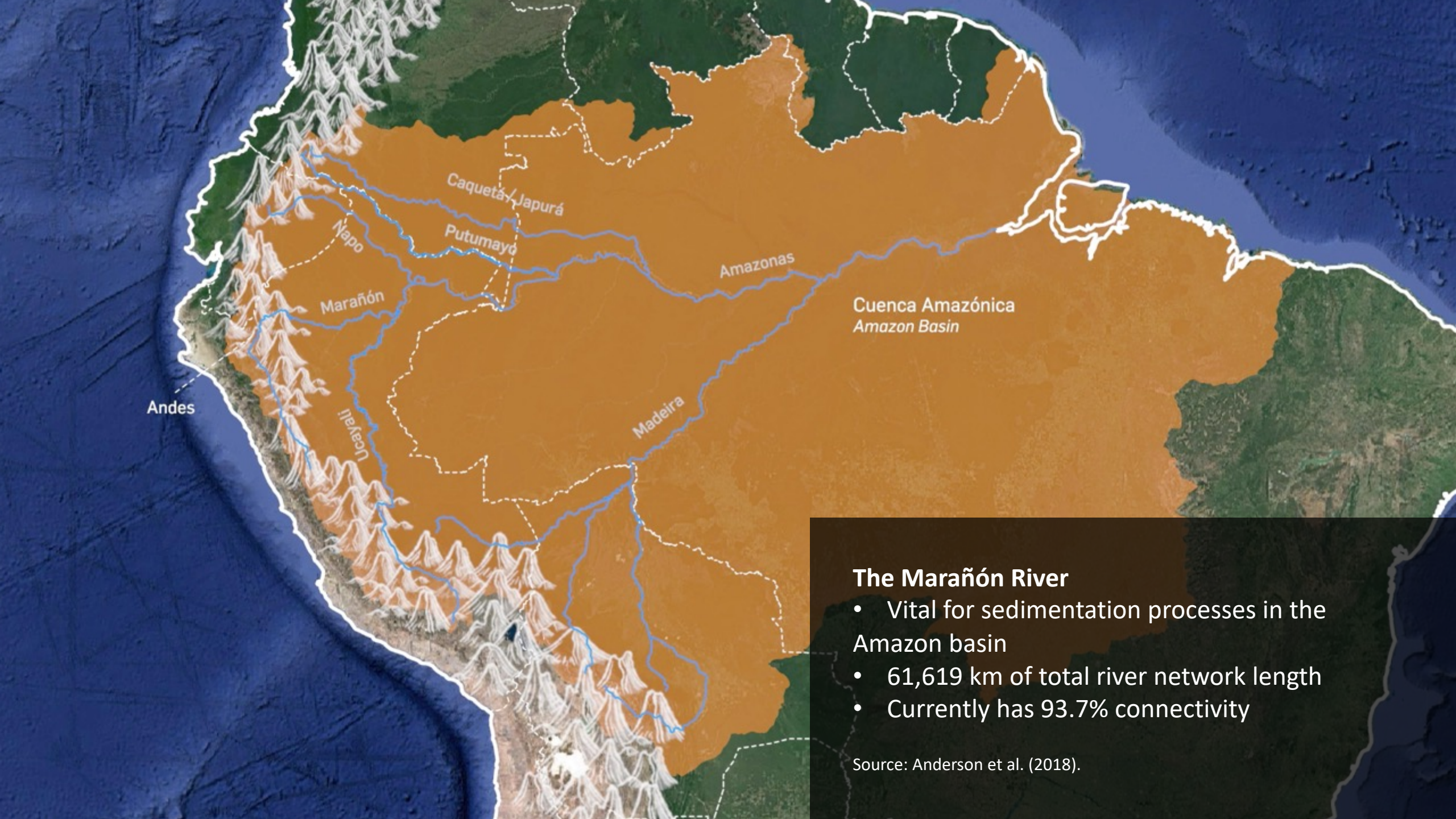
The Marañón River has connected the Andes with the Amazon for millions of years.

This connection is at risk from the potential construction of hydroelectric power plants with megadams, mainly the Chadín 2 and Veracruz dams.

Andes Mountains

Seasonally dry forest

Amazon jungle



The Marañón River

- Vital for sedimentation processes in the Amazon basin
- 61,619 km of total river network length
- Currently has 93.7% connectivity

Source: Anderson et al. (2018).

Plans exist to dam 5 of the 6 main rivers that connect the Andes and the Amazon

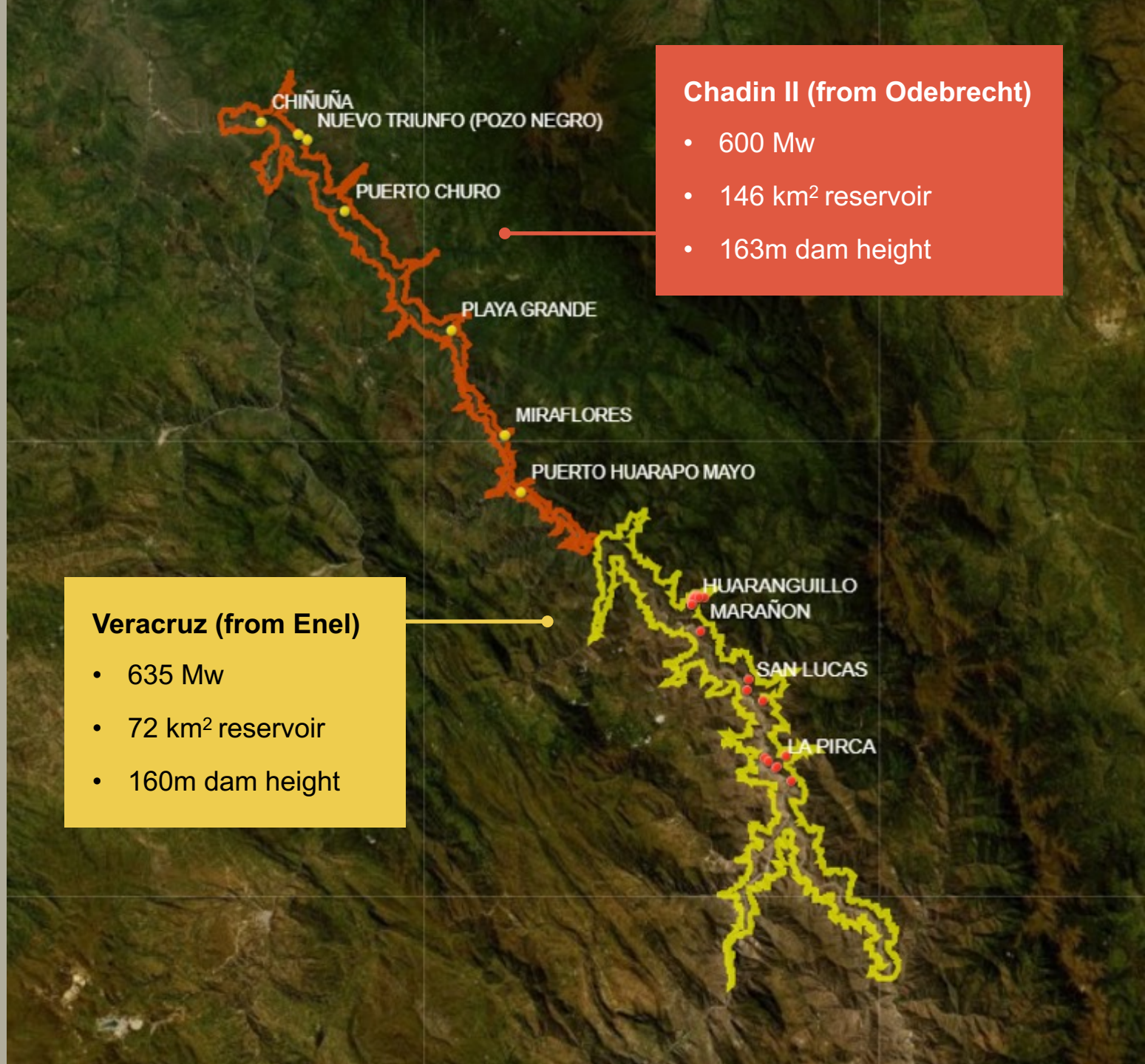
Source: Finner et al. (2012).

Peru: 20 dams declared as of national interest in the Marañón in 2011

Source: Decreto Supremo 020-2011-EM.

INTRO

Two dam proposals were granted concessions: the Veracruz and Chadin II megadams, located between Cajamarca and Amazonas.



INTRO

If built, the dams would flood the Great Canyon of the Marañón and sever a vital connection between the Andes and the Amazon.

9 REASONS

9 REASONS NOT TO DAM THE MARAÑÓN RIVER

1 Displacement of communities

At least 1,700 people would have to relocate their homes due to flooding.

2 Oversupply of electricity

Peru generates more electricity than is currently consumed, hence the construction of these mega-dams is no longer justified.

3 Loss of connectivity: Amazon in danger

The dams would retain more than 10 million tons of sediment, with profound negative impacts on ecosystems and populations hundreds of kilometers downstream.

4 Barriers for migratory fish

Thousands of people and animals depend on migratory fish for food. The dams would hinder these fish from completing important life cycle stages.

5 Flooding of forests and habitat fragmentation

68 km of Marañón dry forests, habitat of unique animals and plants that only exist here, would be flooded.

6 Source of greenhouse gases

Mega-dams in tropical areas are not clean energy generators - they emit millions of tons of greenhouse gases.

7 Increase in hazardous diseases

The construction of mega-dams and the accompanying social changes could increase local risk of serious diseases such as dengue, zika, leishmaniasis and HIV.

8 Attack on cultural heritage

There are archaeological remains of ancient cultures that have been neither studied nor registered by the Ministry of Culture.

9 Lost tourism potential

The flooding of the Marañón Canyon would devastate the nascent local economy driven by adventure tourism, ecotourism and cultural tourism.

Download the information booklet at this link or browse our website.

1. COMMUNITIES

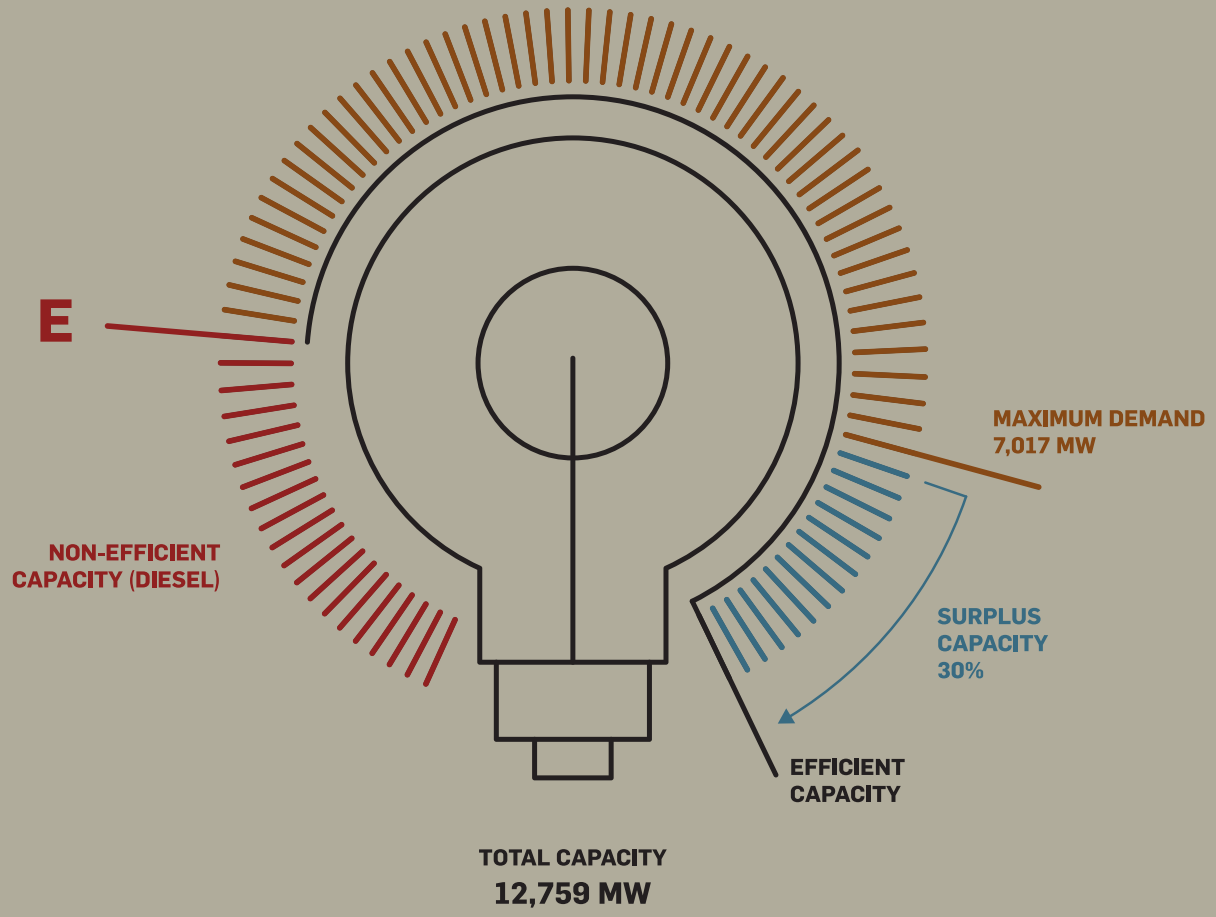
The dams will displace over 1000 people and flood their lands

- High levels of **social resistance** from local communities in the case of Chadin II.
- Evidence of **faked signatures** and irregularities at the public hearing of the Chadin II Project.

2. ELECTRICITY

Peru has more sustainable and cost-efficient alternatives to generate electricity

- Peru has an **energy surplus** until 2028 (at least).
- The mega-dams in the Marañón **are not commercially viable**, according to energy specialists.
- To supply a future increase in energy demand, specialists recommend sustainable options such as solar and wind energy.



"Mega-dams are no longer an option. ***Wind, solar and natural gas are far more competitive in Peru****. Large hydrodams are no longer an option"*

Cesar Butrón, head of COES*

*Committee for the Economic Operation of the Interconnected Energy System, Peru.

The dams would impact sediment flows

- Changing **sediment flows** would affect downriver agricultural land and riparian ecosystems (each dam would retain around 10 million tons of sediment).
- **Sediments are key for the complex lowland rainforest ecosystems** of the Amazon basin:
  - **90% of nutrients and sediments** in the Amazon basin come from the Andes.
  - River sediments replenish soils and build riverbanks.
- **The Peruvian government does not oblige companies to adecuately study sediment flows** and how these would be impacted by large infrastructure projects.

Recommended video:
Hydroelectric plants in the Amazon, clean energy? (CSA – UPCH)
https://youtu.be/AAGvtpfB39U

Erosion in Codos river threats C.H Codos Sinclair, in Ecuador
Source: Mongabay (2020)

Source: Conservation Strategy Fund (2017), UTEC (2020)

4. FISH

The dams would impact fish populations

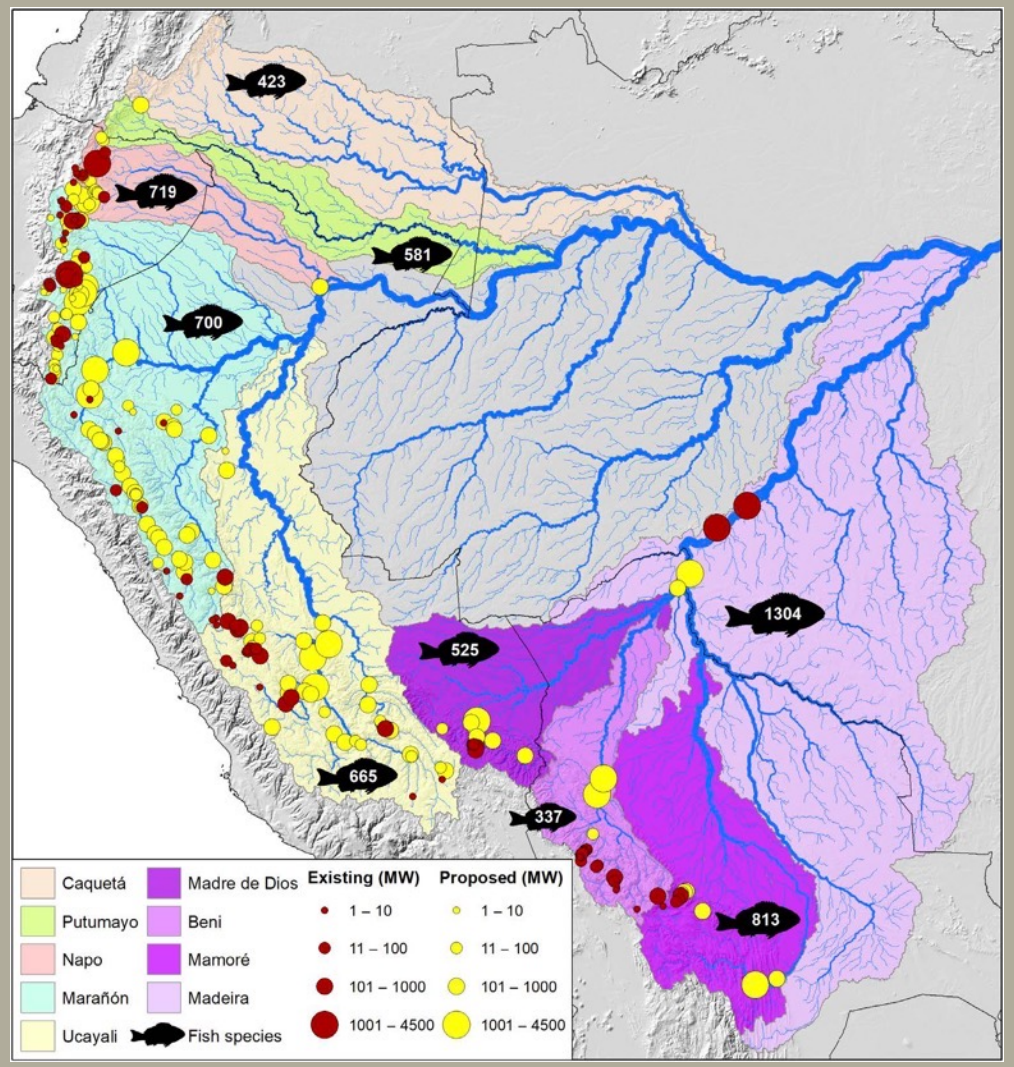
- **Obstruction of fish migration routes,** and no effective mitigation measures are planned.
- Reduction of the **fish migratory route** by 605km.
- Poteontially drastic effects on indigenous peoples that live along the river, such as the Awajún, whose main protein source is river fish.

© Diego Perez / WWF - Peru

***** Based on report **by Conservation Strategy Fund** (2017) *Marañón: Costo social de los impactos acumulativos de cinco proyectos hidroeléctricos*

Fish diversity

+ 700 known fish species in the Marañón River basin.



Source: Anderson et al. 2018)

Brycon hilarii

Leporellus vittatus

Leporinus striatus

Aguarunichthys torosus

Salminus hilarii: ***"Dorado"***

Pimelodus blochi, ***"Bagre cogotúo"***

Source and photos: Nathan Lujan (2018) and American Museum of Natural History (2018)

5. FORESTS

The dams would flood the highly endemic and under-studied Marañón dry forests

- Endemism in the Marañón is comparable to that of island archipelagos like the Galapagos Islands:
  - **23 endemic bird** species
  - **3 endemic amphibian** species
  - **15 endemic mammal** species
- Less than 2% of Marañón dry forests are protected by the national protected area system.

Source: Serfor (2018)

5. FORESTS

The Marañón seasonally dry forest: Understudied global hotspot of rare plants

- Impressive number of legume endemics: 15 species and 5 varieties.
- DNA analysis suggests that the dry forests of the Marañón valley are some of the oldest and most geographically isolated enclaves of seasonally dry forest in the Americas.
- These forests are part of the **Tropical Andes biodiversity hotspot**.

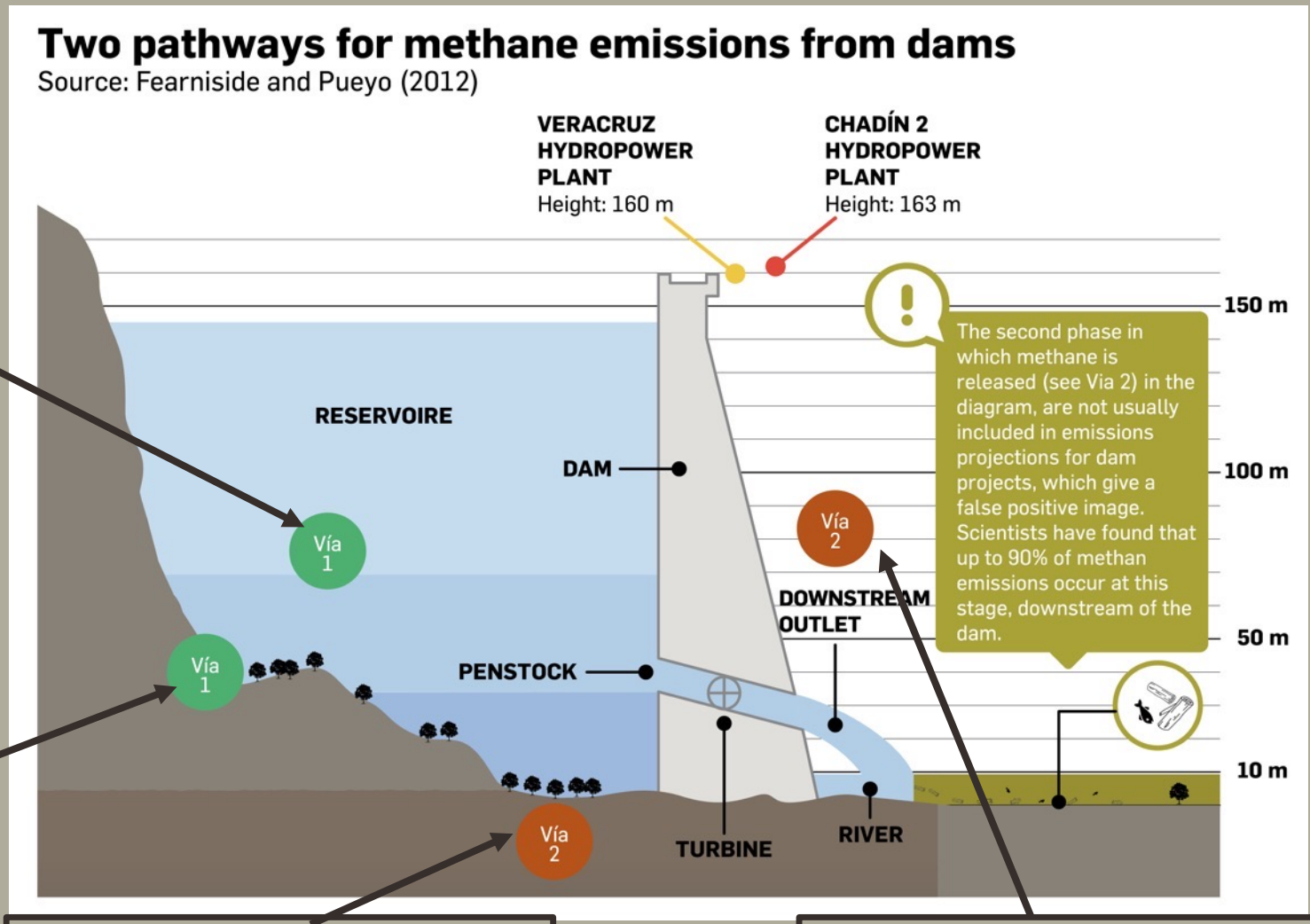
Source: Zoe Goodwin et al., in prep.; pers. comms with O. Whaley, T. Pennington, G. Lewis, C. Hughes.

6. CLIMATE CRISIS

Mega-dams in tropical areas like the Marañón emit millions of tons of greenhouse gases

Vegetation grows along the banks of the reservoir when water levels are low. When the water level rises, the vegetation is flooded and dies, drifting to the bottom of the reservoire. In the absence of oxygen, as this organic matter decomposes, **methane is produced**, instead of CO2. Methane a greenhouse gas 86 times for potent for global warming.

During the initial flooding of the reservoir area, trees and other vegetation die, which releases carbon, mainly CO2.



The methane produced in the reservoir is released into the air through the movement of the dam turbines.

When the water flows through the spillway, more stored methane is released.

7. DISEASES

The construction of mega-dams could increase the spread of serious diseases

Reservoirs contain large amounts of stagnant water, allowing mosquitoes that transmit tropical diseases to breed, such as:

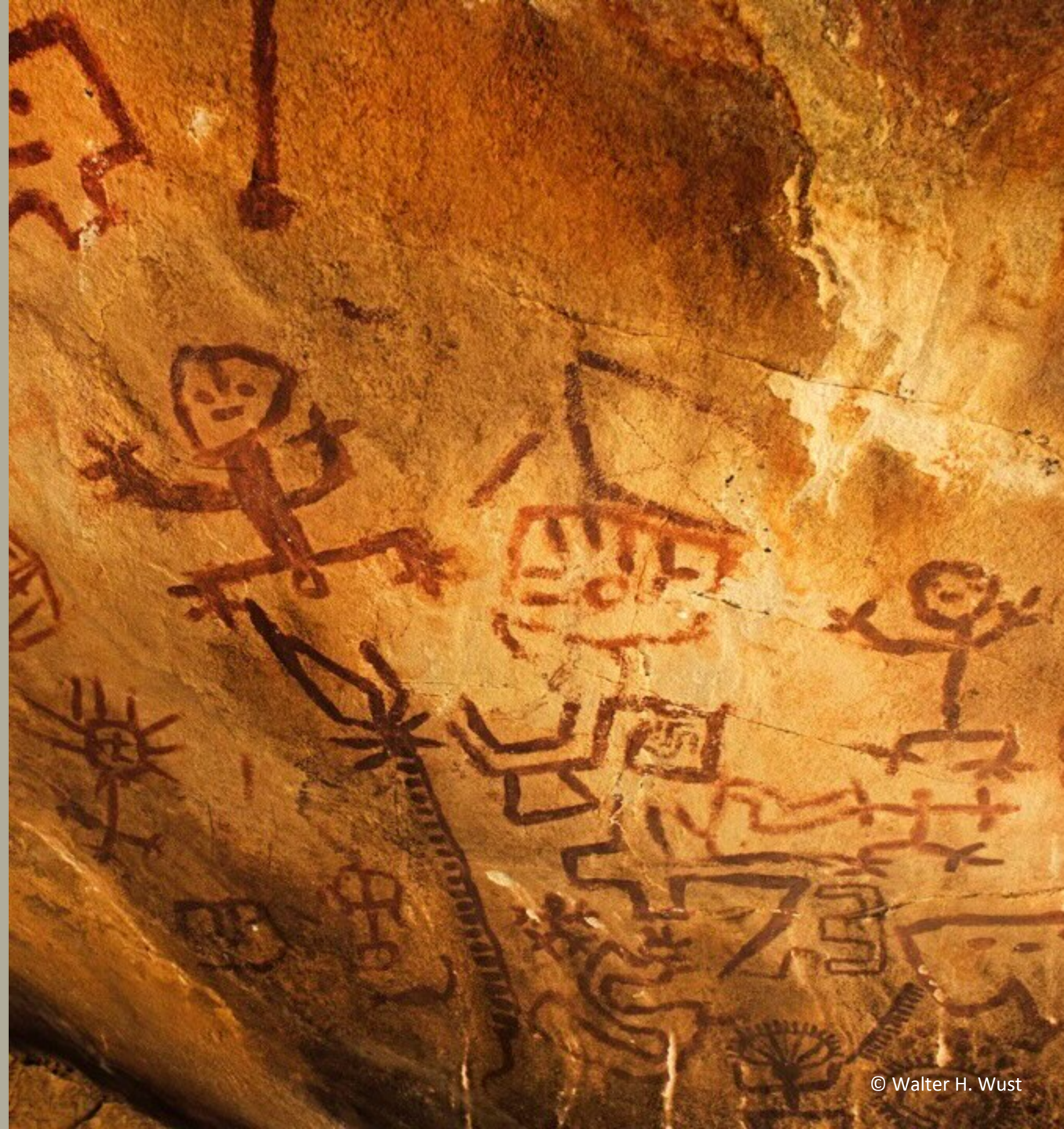
- Dengue
- Malaria
- Zika

8. CULTURE

The dams would flood ancient rock paintings in the Great Archaeological Reserve Zone, which have not yet been studied.

Rock paintings and petroglyphs found in the area are traces of the first civilizations in America, according to preliminary studies by the Universidad Toribio Rodríguez de Mendoza.

Source: Castillo Benites (2019) y Pinzón, A.; Alva, R.; Gómez, D. (2006).



9. TOURISM

The dams will destroy the nascent adventure, cultural, and nature tourism industries.

Visit the Marañón:
A 7-day trip to discover the magnitude of the river. Click here.

CURRENT STATUS

Enel, the company behind Veracruz,

has formally requested the government to cancel their contract

"We stopped investing in large plants, not just coal, but also large hydroelectric plants that take years to be developed. And we have begun to do so since 2014".
Francesco Starace, CEO Enel (2017)

Check the Legal Report
Read our team analysis of the environmental legal status of this projects.
Click here.

enel Green Power

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"We can confirm that we have already submitted the formal request to the Peruvian Government for terminating the concession of Veracruz hydroelectric power plant."

Rome
September 30, 2020
Prot.EGP/302020.RIS

Dear Mr. Kennedy,

We can confirm that we have already submitted the formal request to the Peruvian government for terminating the concession of Veracruz hydroelectric power plant. Nevertheless, considering that this matter is currently under evaluation by the local authorities, we do not consider appropriate to make any statement until the conclusion of the administrative procedure.

Our local Peruvian team will inform you about the progress of the procedure at your request. As informed in our letter of July 28th, for any questions or concerns regarding the Veracruz project please contact our local Peruvian team at César López Rojas N° 201, Maranga, San Miguel, or to the email: claudio.helfmann@enel.com

Yours sincerely,

Sole Director

Antonio Cammisecra

CURRENT STATUS

Legal status of the dam projects

- Both dam projects have **lost their environmental certifications** according to SPDA interpretation.
- **Neither project will be able to fulfill its contractual obligation** to start generating electricity by 2022 – 2023.
- Once this deadline has passed, **the Peruvian government has the obligation to cancel the dam contracts**.
- Although Enel has formally requested to cancel its contract, **the Peruvian government has still not formally replied**.

Hydropower plant / Permits	CHADÍN 2	VERACRUZ
Environmental Certificate (Senace)	No longer valid	No longer valid
Definitive Concession (Ministry of Energy and Mines)	Active	Active
Water availability study (National Water Authority)	Expired	Expired
Authorization to carry out water use works (National Water Authority)	Active	Absent
Certificate of Non-Existence of Archaeological Remaisn (Ministry of Culture)	Absent	Absent
Archaeological Evaluation Project (Ministry of Culture)	Absent	Absent

Source: Grandez et al, 2020.

IUCN MOTION 013

In 2021, the International Union for Conservation of Nature (IUCN) called on the Peruvian government to:

Protection of Andes-Amazon rivers of Peru: the Marañón, Ucayali, Huallaga and Amazonas, from large-scale infrastructure projects

1. Communicate that the environmental licences have expired;
2. Create a framework for protecting Peru's free-flowing rivers;
3. Ensure aquatic and riparian ecosystems and territories of local populations are not significantly affected by large-scale infrastructure projects.

For more details, visit the IUCN website.

ACTION

SPDA has identified 5 priority next-steps

1. Cancel the concession contracts of Veracruz and Chadin II projects for not fulfilling contractual obligations;
2. Create new protected areas and mechanisms to protect the endemic Marañón dry forests and the rock paintings;
3. Strengthen environmental impact assessment requirements, especially in relation to sedimentation processes;
4. Improve strategic planning in the energy sector to fuel Peru's development, without jeopardizing future generations that depend on an intact connection between the Andes and the Amazon;
5. Impose moratoria on dams in the Marañón river and the main rivers that connect the Andes and the Amazon.

ACTION

SPDA's calls for action for authorities

Ministry of Energy and Mining:

- Confirm their decision on Veracruz' claim of force majeure upon discovery of rock paintings, and if not, why the decision has not been made.
- Elaborate on the status of Enel's (Veracruz) request for annulment of concession contract.
- Clarify whether Veracruz and Chadin II received extensions of their contractual deadlines in light of COVID-19 pandemic.
- Confirm they agree with SPDA's legal interpretation that the concessions have expired given breach of contractual obligations.

Ministry for Environment:

- Confirm whether SENACE agrees on SPDA's analysis that the environmental impact assessments have expired, and if so, provide a clear answer.
- Confirm their strategy for protecting a representative sample of the Marañón Dry Forests.

Ministry of Culture:

- Confirm strategy for the effective protection of archaeological remains in the area.

Peruvian Parliament:

- Impose moratoria on dams in the Marañón river and the main rivers that connect the Andes and the Amazon.
- Require the Ministry for Energy and Mining, Culture and Environment the responses to our questions.

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More information at:

www.conservamos.org/rioslibres

www.maranonwaterkeeper.org

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