# Sacred River Sacred Landscapes

Save the Karnali
Nepal's Last
and Most Pristine
Free-flowing River



The Nepal River Conservation Trust (NRCT) is a non-profit organization that was established in 1995 by a group of concerned river rafting guides. NRCT aims to conserve and protect the rivers of Nepal. They focus on advocacy, education, and research concerning the environmental impacts of damming in the region.

NRCT initiated the practice of river conservation in Nepal and developed the first "Environmental and Cultural Code of Conduct" for river conservation. Due to their initiative, most rafting companies have switched to gas and kerosene instead of firewood, which has helped to preserve forests. They host various campaigns that make people aware of the fact that the river is not only a source of energy, it is also a vital natural resource in itself and should be preserved. NRCT has hosted two National River Summits (2014, 2017) aimed at moving river conservation forward.

#### Who Are We?





Waterkeeper Alliance is the fastest growing nonprofit solely focused on clean water. The international organization strengthens and grows a global network of grassroots leaders. Their goal is swimmable, drinkable and fishable water everywhere.

Today, Waterkeeper Alliance is made up of over 300 Waterkeeper organizations and affiliates, including the Karnali River Waterkeeper, that are protecting rivers, lakes and coastal waterways on six continents. They pride themselves in the depth and breadth of their member organizations and the unity of their vision for clean water and strong communities. The Karnali River Waterkeeper hosted the "Save the Karnali River Rafting Expedition" March 2017 with international participants.

#### The Karnali Expedition Spring 2018

Nepal's last and most pristine free-flowing river, the Karnali, is at great risk of being dammed. We urgently need to prevent damming and the cultural, economic, and environmental devastation it would cause.

NRCT and Waterkeeper Alliance are working in cooperation to coordinate an expedition to document the rich environmental and cultural heritage of the Karnali River Basin and the potential negative impacts of hydropower. We are determined to create a path that protects the river and the people, cultures, economies, and fish and wildlife that depend on it.

We hope you will partner with us and support our efforts to save the Karnali River. Please see the back cover for ideas on how get involved.





### Primary Objectives of the Karnali Expedition:

- Develop a conservation corridor plan linking China, Nepal & India
- Gather scientific support for proposal of Wild and Scenic River Legislation in Nepal
- Raise international awareness of this pressing conservation effort to prevent hydropower dams in the Karnali River.
- Protect the migration routes of aquatic species especially the endangered Golden Mahseer and Ganges River Freshwater Dolphin in the Karnali River

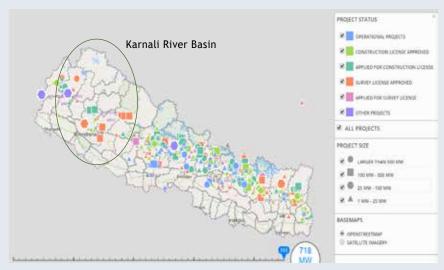
#### Setting the Karnali River in Context

The Karnali, along with three other sacred rivers, the Ganges, the Indus (Sutlej), and the Brahmaputra (Yarlung Tsangpo) all initiate from within 100 km (66 miles) of the slopes of Mt. Kailash on the Tibetan Plateau and supply food and water to billions of people in China, Nepal and India.

#### Some statistics:

- Length of Karnali River Headwaters to Ganges: 1080 km (671 miles)
- Karnali is the longest river in Nepal: 507 km (315 miles)
- Length of Karnali (K'ung-ch'iao Ho) in China: 113 km (70 miles)
- Length of Karnali (Ghaghara) in India: 460 km (286 miles)
- Karnali is the largest tributary to the Ganges by volume of water delivered





Nepal hydropower development project status as of March 16, 2015. Source: Niti Foundation.

Mapped by Kathmandu Living Labs, Kathmandu Nepal.

Data from the Department of Electricity, Government of Nepal.

Nepal lacks a national hydropower development strategy. In total, over 350 hydropower dams are slated for development nation-wide. Currently, 43 hydropower dams producing over 1MW are in operation, and another 83 dams are currently under construction. Thirty-one hydropower dams are slated for the Karnali River basin. In no uncertain terms, hydropower development at this scale will affect every river basin in Nepal with significant yet highly uncertain impacts. Most of these dams (especially large dams) will not provide electricity to Nepal—while Nepal bears the social and environmental costs, the majority of power will be exported to India, Bangladesh, and (potentially) other South Asian neighbors.

## Threats and Impacts Hydropower Dams



"We are completely mad when we talk about water resources, we see dams, we see dollars, but on the ground we don't have any initiatives to conserve water for drinking purposes or effective plans to increase agricultural productivity. We still want to get rich by selling electricity" says Dipak Gyawali, former Minister of Water Resources of Nepal.

#### Natural Hazards:

#### Earthquakes:

- · trigger landslides and rockfall
- directly damage dam infrastructure The Gorkha earthquake of 2015 put 42 mega and small hydropower plants out of operation, one tenth of Nepal's total energy generating capacity was damaged

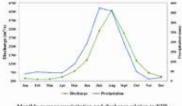
#### Landslides:

- · directly damage dam infrastructure (i.e falling boulders causing cracks)
- · block rivers creating dam-break flood events
- · deliver high sediment loads to the stream channel
- · damage electrical transmission lines

#### Environmentally & Socially Risky Endeavors:

- · Poor quality environmental assessments often disregard environmental risks especially to native fishery resources
- Dams prevent migratory fish from reaching spawning grounds
- · Road blasting for dams and road access in general exacerbates landslide risk
- Acquisition of high value agricultural lands disrupts livelihood of locals
- Loss of native flora and fauna impacts biodiversity and the human communities that depend on it
- False promises to locals of the benefits they will receive from construction and operation of dams.
- Corruption in large infrastructure projects resulting in low quality construction practices

Nepal has abundant water resources for four months of the year. The rest of the year, low flow electricity production severely dewaters streams. Although 10% of low flow is required by law, its adequacy for aquatic life is questionable and in practice, environmental flows are seldom bypassed by dam operators.

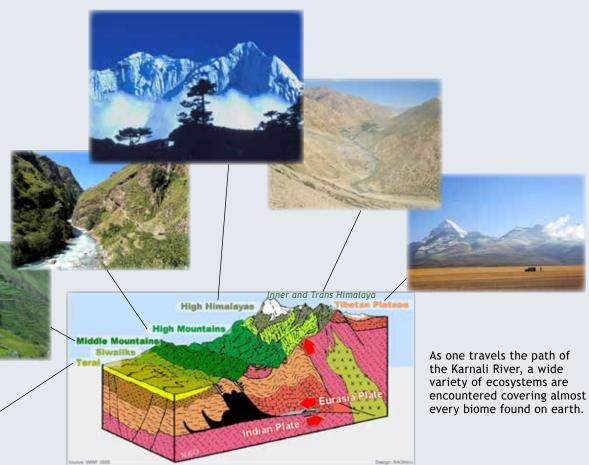


Monthly average precipitation and discharge relation in KRB.



#### The Karnali is an ancient stream. It existed before the rise of the Himalaya and carved its path as the mountains rose during collision of the Indian and Eurasian tectonic plates. The Karnali River carves its way from the headwater glaciers of Mapchachungo near the Tibetan Plateau through the peaks, mountains and hills of the Himalayan mountains. As it emerges from the Siwalik Hills, the river drops its sediment load in a vast, complex delta system in the Terai before continuing across deep alluvial plains toward the Ganges River in India.

#### The Physical Resources - Born of Tectonic Processes



#### The Biological Resources





Fish and wildlife that are adapted to the various aquatic and terrestrial environments are encountered in the stream and along the banks of the Karnali River. Although the least explored of all rivers in Nepal, the Karnali is known to provide habitat for 179 fish species 95% of those are native species with three endemic species discovered to date. Nepali fisheries biologist Dr. Tej Kumar Shrestha believes there are many more fish species to be discovered in the Karnali system. Multiple wetland-dependent mammals found in the jungles of the Terai depend on the flooding and sedimentation processes of the Karnali River to create and maintain their habitat.







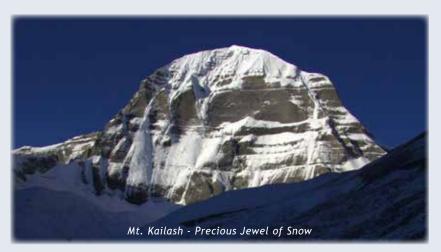




Lord Shiva Restorer of a better universe

#### Spiritual Inspiration

The physical beauty of Mt. Kailash is not only fascinating, it is also the ultimate pilgrimage destination for Hindu, Buddhist, Jain and Bon religions from around the world. For all four religions, Mount Kailash is the spiritual epicenter. Every year, thousands of devotees make the pilgrimage to the holy Mt. Kailash for spiritual purification.







Dwelling of Milrepa The Wise One Teacher of non-violence





# The People & Their Culture



Many ethnic groups live within the Karnali River basin. The Tharu, who naturally resist malaria, live in the lowlands of the Terai. The Bautes, also in the lowlands, depend on the river for fishing as a source of livelihood. The Chhetri and Thakuri, both Hindus, live in the middle hills and the Bhotia, who practice Buddhism and Animism, live in the high mountains near Tibet. The Raute, the only remaining nomadic tribe in Nepal, travel the length of the Karnali River with the seasons.







The Karnali River valley hosts a historic trade route with Tibet. Salt from Tibet was traded for rice grown in the lowlands. Animal husbandry and trade along this route continues today and supports the people of the high Himalayan Mountains as they trade yak and sheep meat, milk, cheese and fiber. Crops for subsistence and for sale are grown below 10,000 feet. Firewood is the main source of heating and cooking throughout the river valley.





### Expedition Leaders

"Building a new nation will require foresight and emphasis on sustainable development, and so does river management. Just as the mountains, the rivers deserve protection and honor". **Megh Ale** 



Megh Ale is one of Nepal's leading figures in rafting and river conservation. Elected to the Ashoka Fellowship in 2007, he is known as "River Man" in Nepal. Having spent several years working and exploring the rivers and jungles of Nepal, including four years at the Royal Bardiya National Park as a naturalist, Megh is always ready to share his deep understanding of Nepal and its myriad of cultures, plants and animals. He is the founder and president of the Nepal River Conservation Trust, Executive Director of Waterkeeper - Nepal and the Managing Director of Ultimate Descents Nepal. Megh Ale is saving the rivers of Nepal through ecotourism, conservation, cleanup, and education. He is transforming the way people understand the value and economic potential of Nepal's rivers. Megh is creating new opportunities for people in Nepal and all over the world to experience and benefit from Nepal's rivers and waterways.



Ramesh Bhushal is the Project Manager for the Third Pole project in Nepal and an environment journalist based in Kathmandu. He has contributed to BBC Nepali Service and worked as a correspondent for The Himalayan Times, Republica and Ujaaylo FM radio network. He sits on the Nepal Forum of Environmental Journalists' Executive Board. Previously he was an Environmental Consultant with the South Asia Wildlife Enforcement Network and a Principal Environment Correspondent with the International Media Network Pvt. Ltd where he won a WWF Media in Conservation Award in 2010. Ramesh is the Trisuli River Waterkeeper.



Karen Bennett has spent her professional career with the US Forest Service, most recently as the Soil Program Leader for the Pacific Northwest Region. Her ability to assess and understand landscapes in order to apply appropriate protection and restoration strategies has earned her a reputation in both the private and public sectors at national and international levels. She currently works as a consultant through the US Forest Service International Programs Office. Her projects include work in Vietnam and India on forest and stream restoration and ecosystem service issues, and with USAID and the Government of Nepal on water resource management. Her love and commitment to the people and natural resources of Nepal began when she served there as a US Peace Corps Volunteer (1983-86).

#### A Nepali DREAM

Without a dream there is no hope and without a hope there will be no change so DREAM.....

Dream - Nepal as a model country on earth for sustainable hydro energy development.

Dream - Nepal as a role model country for managing our rivers the best way possible.

Dream - Nepal as a freshwater lifeline of over 1.4 billion population.

Dream - Nepal among the world's best destinations for Eco - Adventure and Sustainable Tourism

Dream Humanism - dream Nepalism, dream for our future generations and dream till it turns in to reality.....

Nepal is still rough like clay; we still have time to give the right shape before it is too late. Once we all will DREAM in harmony, gradually it will turn it in to reality. Let's DREAM together..... A Nepali DREAM...... Megh Ale

#### The Future of the Karnali River is in our Hands!



Together we can make the vision of a protected cultural, historic, and wild river corridor following the historic salt trade route from the Tibetan Plateau along the Karnali River through Nepal to the Ganges River in India a reality.











#### How You Can Help

#### • Donate to help finance the expedition:

We are currently preparing grant applications and seeking private funding for the Karnali Expedition 2018. Your tax deductible contribution will help us provide matching funds to these grants. Donate through Waterkeeper Alliance (waterkeeper.org); select amount, select "other," and designate to Karnali River Waterkeeper.

- Host a fund raising event
- Join the expedition

For a gift of \$25,000 you can join the science team on a portion of the expedition (limited opportunities available)

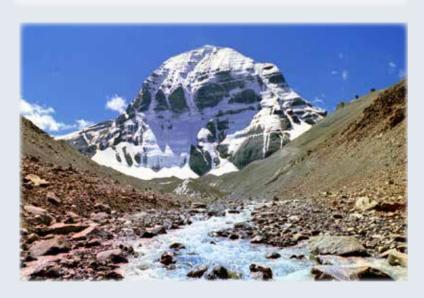
- Learn more at Nepal River Conservation Trust nrct.org.np
- Spread the word

We encourage you to share this prospectus with your networks or any interested parties

#### **Banking Information for the Contribution**

Beneficiary Name: Nepal River Conservation Trust Beneficiary Account No: 01400105200404 Name of the Bank: Everest Bank Limited Address of the Bank: Lazimpat, Kathmandu Swift Code of Bank: EVBLNPKA "Healthy rivers are the blood veins of the planet. Protecting rivers protects human life as well as the lives of all the non-human creatures that depend on rivers for their survival".

**Robert F Kennedy Jr.** in a letter to the Prime Minister of Nepal urging protection of the Karnali River on behalf of Waterkeeper Alliance



For more information and to get involved, please contact:

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