Envisioning Permanent River Protection Strategies for China

Project Team: Matthew Freiberg, Hanna Jacobsen, Lydia Leclair, and Carly Wilburton Faculty Advisor: Robert Wilkinson

Clients: Kristen McDonald China Rivers Project; Michael Gheleta Browstein Hyatt Farber Schreck

Background

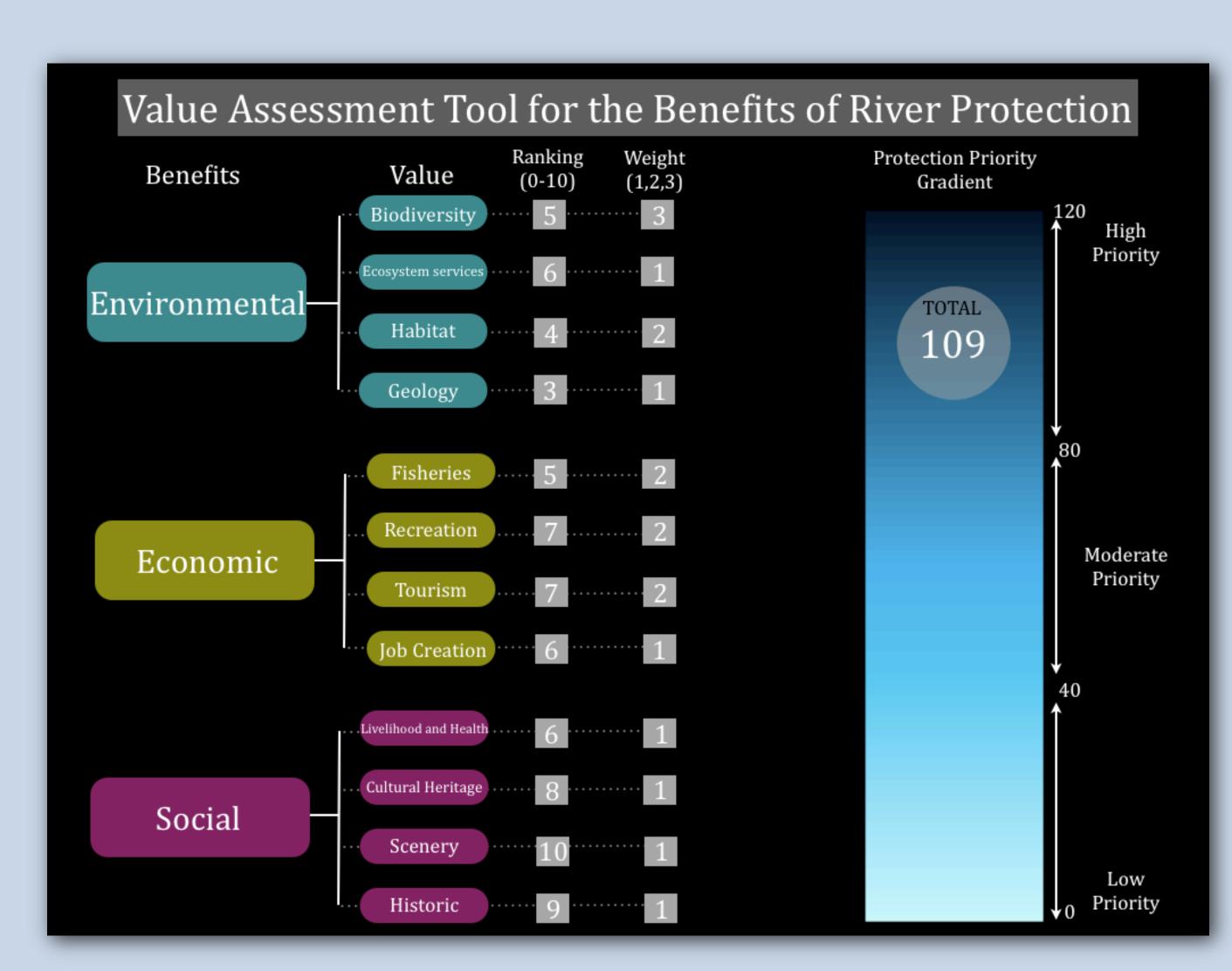
For over 4,000 years rivers have contributed to a deep cultural history in China and played an integral role in sustaining China's livelihood and expanding its economy. Today the country faces the challenge of balancing goals for natural resource utilization, such dam construction, and environmental protection. River development has many positive impacts on society; however, rivers preserved in a free-flowing state also offer significant benefits. Few rivers remain in their natural, or free-flowing, state today. Protection of free-flowing rivers and river segments can provide numerous environmental, social, and economic benefits to society, and in particular, to riverside communities.



There are over 22,000 large dams in China. This map indicates the locations of proposed and existing dams.

Value Assessment Tool

This tool assists Chinese decision-makers during the study process when nominated rivers are considered for protection. The benefits of river protection and the values that rivers possess are highlighted by this tool, since these are often overlooked or discounted in traditional decision-making tools and may qualify a river for permanent protection under the national system.



The time is ripe for China to consider a river protection system

A dialogue regarding approaches to river protection has begun between Chinese governmental officials, environmental experts, and the Chinese environmental NGO community. Officials have expressed interest in looking at river protection strategies that are employed by other nations as they consider developing one that will meet the needs of China's environment. Therefore, it is a propitious time for researchers and organizations to demonstrate to these officials the benefits of permanent river protection, provide examples of successful programs around the world, and offer recommendations for an applicable system.

Recommendations

China can maintain the benefits that free-flowing rivers offer by establishing a legally enforced river protection system that safeguards some rivers from harmful development.

For a permanent river protection system in China, we recommend that a river can be nominated for inclusion into the system by various stakeholders. A study process to determine if a river can be protected should be carried out by a team of experts. A river may qualify for protection if it exhibits a listed value including: scenery, culture, history, geology, wildlife, fisheries, habitat, recreation, and tourism.

For final approval into the system, a river must have the following

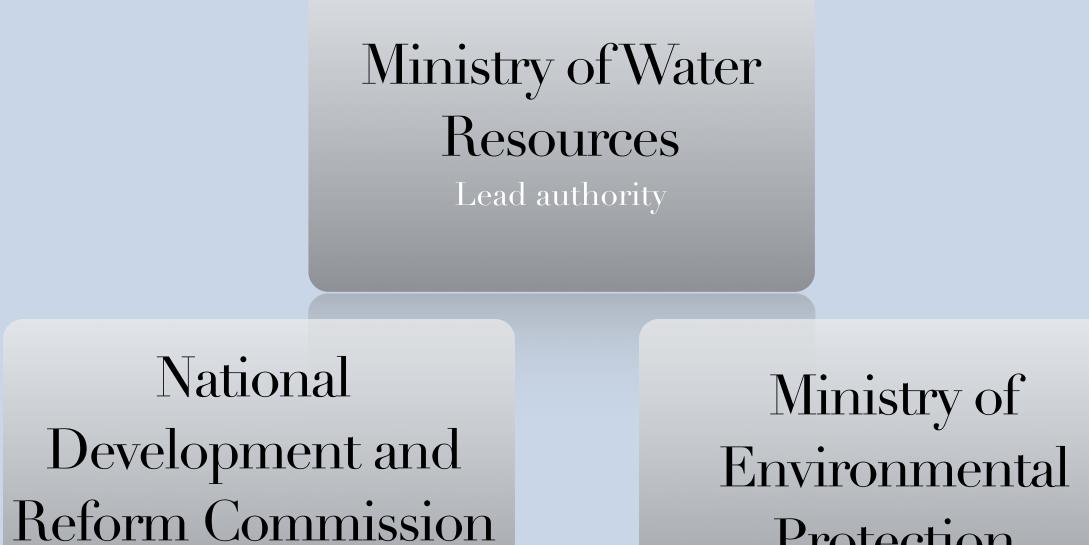
- (1) be in a free-flowing state
- (2) possesses a listed value(s)
- (3) demonstrates sufficient measures for long-term protection

Once approved, a river will be designated a level of protection and a management plan will be developed. The nomination process and development of management plans should be informed by public comment and hearings.

Administering Authorities

Coordination between

evelopment and river protection



Protection

The river protection system will have legal and institutional authority, be administered by existing government authorities, and ensure the continued protection of entire free-flowing rivers or river segments.

Methods

Our methodology consisted of two components:

- (1) river protection framework analysis
- (2) an examination of Chinese environmental laws and institutions

River Protection Framework Analysis

We examined established river protection systems- the U.S. Wild and Scenic Rivers System, the Canadian Heritage System, the EU Water Framework Directive, and Norway's river protection system- to understand drivers of initiation, how the systems are planned and initiated, and to identify the factors that are most important to their sustained operation. The following factors from these systems were incorporated into our recommendations for the design of a framework:



Laws and Institutions

Extensive research on the current environmental laws and institutions in China offered a lens through which our team could envision a river protection scheme that would be suitable and adaptable to the Chinese legal and political context.

We researched a number of Chinese environmental laws which address water quality, pollution prevention, and water supply and management. We also investigated laws that pertain to social organizations and public participation in decision-making.

We investigated the roles and interactions between the major institutions in China in order to understand the context into which a river protection system might be applied. We also explored the functions and responsibilities of key agencies to identify their potential roles in the development and management of a river protection system.

Environmental Laws:

- Environmental Protection La
- Water Pollution Prevention an

Water Law

- Regulations on Nature Reserves
- Renewable Energy Law
- Regulations for Registration and Management of Social
- Provisional Measures on Publi Participation in the Environmental Impact
- Measures on OpenEnvironmental Information
- * 11th Five-year Plan

