

The Great Rivers Partnership: Embracing the Challenges of Large River Conservation Around the World

Abstract

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The Nature Conservancy launched its Great Rivers Partnership (GRP) in January 2005 with a leadership gift from Caterpillar Inc. The GRP was designed to draw attention, knowledge and resources to the important challenge of sustaining the great rivers of the world and the diversity of plants, animals and human communities that depend on them. The GRP has focused on the Mississippi River, the Yangtze River (China) and the Paraguay-Paraná River (Brazil) as models; more recently, the Zambezi River (Africa) was included. GRP staff have worked to exchange and integrate knowledge and resources to advance land and water conservation and shape broader policies and practices needed to preserve the biodiversity of all great rivers and the ecosystem functions and services from which ecological, social and economic values arise. Site-based strategies have ranged from ecoregional conservation planning and influencing dam placement and operations to restoring floodplains and tributary watersheds and protecting riparian areas and natural lands through legal reserve delineation. A virtual Center for Conservation and Learning was created to engage leading ecologists, economists and sociologists in these projects. Originally targeting the valuation and conservation of ecosystem services and the development of a more comprehensive decision support system in large river basins, the Center is now envisioned to become a core component in a broader freshwater knowledge network inside the Conservancy.

The future of the Great Rivers Partnership will entail greater engagement of leading science and river management institutions to better understand and preserve the Mississippi River system from its headwaters and major tributaries to the Gulf of Mexico, with a secondary purpose to share this information with other institutions to encourage the sustainable development and integrated resource management of great rivers around the world. The GRP seeks to help to establish a “center of excellence” in the region by engaging leading thinkers from various disciplines (e.g., engineering, science, policy, sociology, ecology, economics) to collectively advance two goals:

- Increase our understanding of how large-floodplain river ecosystems function and inform the design and implementation of a vital systems approach to effective conservation of the Mississippi River. GRP will develop and provide peer review of an adaptive management strategy for the Mississippi River system, which includes a) identification of policy goals and leverage strategies; b) design and implementation of platform projects that draw upon best science to optimize the existing system and test alternatives to improve ecological function and enhance socio-economic values; and c) identification of progress measures.
- Establish and foster international learning exchanges and communications to provide access to what has been learned on the Mississippi River – or what needs to be learned – pertaining to design and implementation of sustainable development and integrated resource management strategies on great rivers. Initial exchanges and communications will focus on issues of most strategic importance to effective conservation of the Mississippi River and similar systems. Examples include: (a) ecoregional planning and priority setting across large river basins and multiple political jurisdictions; (b) creating “green navigation” principles; (c) designing river-floodplain connectivity; (d) valuing and marketing ecosystem services; (e) targeting land conservation practices in agricultural landscapes; (f) monitoring large rivers. These exchanges will serve to link and integrate capacities and knowledge within and across partner organizations, and may also involve establishing linkages between institutions around the world. Current examples include the establishment of a relationship between the Yangtze Water Resources Commission, TNC, and US Geological Survey on large river monitoring, CORMAGDALENA (Colombia), TNC, and the Corps of Engineers on infrastructure development and management, and the National Water Agency (Brazil), TNC, and US Forest Service on ecosystem services.