

Australia China Environment Development Partnership River Health and Environmental Flow

The River Health and Environmental Flow in China Project (the Project) is a two-year, AUD\$3.4 million project and the largest of the projects under the Australia China Environment Development Partnership (ACEDP). The project is managed by the Brisbane-based International WaterCentre (IWC).

The Australia China Environment Development Partnership (ACEDP)

The ACEDP is a five-year Australian Government AusAID and People's Republic of China initiative which aims to provide practical assistance that complements some of China's immediate water management challenges with Australia's world recognised knowledge and expertise. More information: www.acedp-partnership.org

The River Health and Environmental Flow in China

The River Health and Environmental Flow Project aims to develop frameworks and methodologies for measuring river health and calculating environmental flow requirements.

The Chinese partner organisations include:

- Ministry of Water Resources, PR China, including:
 - Yellow River Conservancy Commission,
 - Pearl River Water Resources Commission
 - General Institute for Water Resources and Hydropower Planning
- Ministry of Environmental Protection, China, including the Chinese Research Academy of Environmental Science.

River health assessments provide valuable scientific understanding of the problems and threats to sustainable river function and importantly can support the design of targeted management actions. River health is commonly measured by monitoring and assessing specifically identified indicators that are linked to the river's values and assets such as fish and bird habitat.

Environmental flows are also essential for building and maintaining a healthy river. Environmental flows are the amount of water that is kept in a river to maintain or reach a particular environmental condition. An environmental flow regime needs to support all of the different flows – wet season, dry season, flood and drought – to ensure the river and the systems dependent on them continue to function in the best possible condition. Environmental flow assessments involve both a social and a scientific process. There is no one correct environmental flow regime for rivers. The most appropriate flow regime for Chinese rivers will depend on the individual values and assets that people want to maintain in each river.

The International WaterCentre

The IWC is drawing on multi-disciplinary water experts from its four world-class member universities – The University of Queensland, Monash University, The University of Western Australia and Griffith University – and partners the South East Queensland (SEQ) Healthy Waterways Partnership, the Queensland Government, and various independent experts to undertake the Project and to build long term partnerships and ongoing sustainable water policy dialogue between China and Australia.

This project will use a range of tools and frameworks used in Australia and internationally for assessing and reporting river health, and determining environmental flow requirements. This will include the Environmental Health Monitoring and Report Card Program developed by the Australian award winning SEQ Healthy Waterways Partnership, a founding IWC partner, along with work recently completed in China with technical expertise from the Queensland Government on water entitlements and trading.

Key activities:

Over the project's two-year time frame, key project activities will:

- trial international approaches to river health monitoring and environmental flow determination in the Pearl, Yellow and Liao Rivers to determine wider application in China;
- develop a draft national framework for Environmental Flows and Ecological Restoration which includes policy mechanisms;
- build the capacity of a group of technicians in China who could independently conduct and further develop river health and environmental flow assessments and train further technicians.

The IWC undertakes education, training, research and consulting activities to promote whole-of-water cycle approaches to water management.

IWC: Water leadership for the future

www.watercentre.org

中澳环境发展伙伴项目 中国河流健康与流量项目

中国河流健康与生态流量项目为中澳生态与环境发展伙伴项目旗下最大的子项目，该项目为期两年，耗资340万欧元。项目由位于布里斯本市的国际水资源中心负责开展。

中澳环境发展伙伴项目

为期五年的中澳环境发展伙伴项目由澳大利亚国际发展支援署与中国商务部发起，旨在应用澳大利亚国际领先知识技术帮助中国解决当前水资源问题面临的挑战。

更多信息请参见中澳生态环境发展伙伴官方网站：

www.acedp-partnership.org

中国河流健康和环境流量项目

中国河流健康和环境流量项目旨在建立计算河流健康与环境流量所需生态水量的框架及研究方法。

中方合作机构包括：

- 中华人民共和国水利部：
 - 黄河水利委员会，
 - 珠江水利委员会
 - 水利水电规划设计总局
- 中华人民共和国环境部，包括中国环境科学研究院

河流健康评估为人们关于威胁河流生态健康的问题及河流治理提供科学的解释与依据。河流健康评估一般根据某些与河流价值相关联的特定指标，这类指标包括河流中的鱼类以及栖息于河岸的鸟类。

河流生态流量对改善并保持河流健康尤为重要。河流生态流量指的是河流保持某一环境条件所需的水量。环境流量总量必须保证河流无论在雨季，旱季，洪水和干旱时节均可保证河流及其生态系统尽可能维持最佳状态。环境流量评估涉及社会因素及科学因素。中国河流环境流量并没有绝对准确的数值，人们的价值观及希望河流所处的状态决定了河流环境流量的具体数值。

国际水资源中心

国际水资源中心为该项目提供国际顶尖的河流环境专家。各专家分别来自中心四所全球知名大学-昆士兰大学、莫纳什大学、西澳大学和格里菲斯大学；东南昆士兰流域健康合作组织；昆士兰政府。其他众多经验丰富的业内知名专家学者也积极参与该项目的开展。该项目同时为中澳两国在水资源可持续发展政策对话问题上建立了长期友好合作伙伴关系。

该项目将运用澳洲及国际评估河流健康与环境流量的标准制定评估方法与整体架构。该评估方法包括由东南昆士兰流域健康组织采用的环境健康监控及河流域年度评估卡。作为国际水资源中心合作伙伴的东南昆士兰流域健康组织与昆士兰政府合作在中国开展水权分配及水资源交易项目，该项目最近刚完工。

主要活动

该项目为期两年，项目主要活动包括：

- 以珠江、黄河、辽河为试点采用在国际上试用的河流健康与环境流量监控方法，预期在项目完工之后向在全国其他地方推广；
- 在全国范围内制定环境流量及包括政策机制在内的生态修复框架；
- 培训中国本土技术团队，使其能够独立开展河流环境生态评估并培训其他技术人员开展该评估活动。

国际水资源中心通过开展教育、培训、研究及咨询等活动在水资源管理领域推广整体水循环研究方法。

详情请点击国际水资源中心网站：www.watercentre.org