









MEMORANDUM OF UNDERSTANDING BETWEEN

THE INTERNATIONAL CENTER FOR INTEGRATED WATER RESOURCES MANAGEMENT (ICIWaRM), UNDER THE AUSPICES OF UNESCO OF THE U.S. ARMY CORPS OF ENGINEERS' INSTITUTE FOR WATER RESOURCES'

AND

THE EUROPEAN REGIONAL CENTER FOR ECOHYDROLOGY (ERCE), OF THE POLISH ACADEMY OF SCIENCES (POLSKA AKADEMIA NAUK)

The Institute for Water Resources (IWR), United States Army Corps of Engineers (USACE), primarily working through the International Center for Integrated Water Resources Management (ICIWaRM), and the Polish Academy of Sciences (Polska Akademia Nauk; PAN), primarily working through the European Regional Center for Ecohydrology (ERCE), hereinafter jointly referred to as "the Parties":

Having a common interest in advancing the science and practice of both ecohydrology and integrated water resources management (IWRM), along with informing water resources decisions based on the principles of: ecohydrologic and hydrobiologic sciences; sustainable development; water policies as applied to aquatic ecosystems and natural resources; global climate change; the socio-economic and cultural dimensions of water; national and international partnerships; and capacity building through technology, information sharing, education and training;

Acknowledging ERCE's and ICIWaRM's past mutual interest in the United Nations Educational, Scientific and Cultural Organization's (UNESCO's) International Hydrological Programme (IHP), and their continuing shared desire to advance the scientific and policy foundation associated with IHP's Phase VIII Strategic Plan's Theme 5 on Ecohydrology, engineering harmony for a sustainable world;

Recognizing ERCE's status as a unique center functioning at the interface between science, policy and landscape management and using a transdisciplinarity approach to focus on a wide range of research, education, publications and practical applications to advance the science of ecohydrology and demonstrate best practices as applied to the restoration of aquatic ecosystems by: providing advisory activities; promoting advanced scientific research on ecohydrology, monitoring and modeling systems; promoting social awareness-raising within the scope of ecohydrology applications for integrated management of water resources, with ERCE serving on the forefront of the testing and implementation of ecohydrological measures at sub-catchment level, with a number of demonstration projects having been put in place and lessons learned injected into regional and city policy making, such as the advancement of the concept of a Blue – Green network which is presently considered for implementation within the City of Lodz;

Recognizing ICIWaRM's mission as a global expertise center for IWRM, in particular through ICIWaRM's focus on collaborative planning, environmental and socio-economic impact assessment, risk analysis, water resources systems management, adaptation to climate change, and hydrologic engineering and ecohydrologic science; including a focus on policy development, applied research, education, training, and capacity development; and improving the practice of water resources planning and management in collaboration with other practitioners and scientific/academic institutions, and professional organizations;

Desiring to promote and enhance the use of advancements in ecohydrologic science in conjunction with economic, cultural, and social well-being by fostering trans-disciplinary research, development and integration of ecohydrology into policies and practices, and to promote, encourage and advance sound water resources management through research and cooperation in these fields; and,

Recognizing the benefit of mutual cooperation and joint activities to each party's missions; and further, the parties' mutual interest in participating in international initiatives, including, but not limited to, activities of Phase VIII of UNESCO IHP; when consistent with the policies, goals and laws governing each party;

Do hereby simultaneously declare the following framework for partnership:

Article I

ERCE and ICIWaRM will use their best efforts to continue a long-term cooperation and partnership in the advancement of ecohydrological science and integrated water resources management, related multi-disciplinary scientific research, education and capacity-building for developing countries.

The Parties are especially interested in pursuing cooperative opportunities in the following areas of common interest:

- Advancement of ecohydrologic science as applied to aquatic ecosystem restoration within a framework of integrated water resources and river basin management;
- 2. The assessment of ecosystem services and green infrastructure as a means for informing resource tradeoff interactions among land, water and people, and thus, better decision-making;
- 3. The use of peer-reviewed publications to jointly document the intersection of the ecohydrologic and hydrobiologic sciences with policy development and water management decision-making:
- Promotion of networking and facilitation of trans-disciplinary exchanges among UNESCO Category I and II centers, along with other partnering institutions, in accord with the integrated strategy approved by the 35th session of the General Conference (document 35C/22);
- Consideration of the effects of climate change and variability on ecohydrology and water resources management decision-making;
- Collaborative multi-disciplinary applications and demonstrations in ecohydrology and IWRM planning for aquatic ecosystem restoration and water resources management;

- Cooperative development of knowledge sharing platforms to facilitate access to scientific advancements and lessons learned in ecohydrologic applications;
- 8. Staff exchanges, joint training and workshops on ecohydrology and water management topics;
- Education, capacity building and technology transfer, including through ICIWaRM's core University partners and ERCE's status as an International Institute of the Polish Academy of Sciences;
- 10. Facilitation of UNESCO IHP's mid-term strategy outcomes as related to ecohydrology and IWRM;
- 11. The advancement of Theme 5 on Ecohydrology of the UNESCO IHP Phase VIII Strategic Plan; and
- 12. Cooperation in furthering the activities of UNESCO IHP's Ecohydrology Steering Committee.

Article II

Each party shall designate a Principal Representative to serve as the primary point of contact between the parties on all matters arising under this Partnership Document.

Article III

Any cooperative activity undertaken between the parties shall only be done under the authority of the laws, regulations, and policies governing each party individually.

Article IV

Any issues arising from the interpretation or implementation of this Partnership Document will be settled through consultations between IWR and PAN or such other means as they may mutually decide.

Article V

Notwithstanding any other provision herein, nothing in this Partnership Document shall be construed as binding under International Law. Further, nothing in this document shall be construed as either authorizing or obligating either party to commit funds or resources to any project or work except as otherwise authorized by the laws, regulations, and policies governing each party individually. Commitments of participation and/or financial contribution for any individual project will be established through a separate agreement.

Article VI

This Partnership Document shall become effective when signed by representatives of both ICIWaRM and ERCE and will remain in effect as long as it is deemed mutually advantageous for both Parties. Either Party may terminate this Agreement unilaterally by providing written notice. Termination shall take effect within 30 days following receipt of written notification sent by one of the contracting parties to the other.

parties to the other.

ROBERT A. PIETROWSKY

Director, Institute for Water Resources & the International Center for Integrated Water Resources Management, under the auspices of UNESCO

Date 17MAY 2016

PROFESSOR MACIEJ ZALEWSKI

Director, European Regional Center for Ecohydrology of the Polish Academy of Sciences (Polska Akademia Nauk)

Date 1.05.2016