

**MEMORANDUM OF UNDERSTANDING**  
**ON**  
**RESEARCH EXCHANGE AND COOPERATION**  
**BETWEEN**  
**THE CIVIL ENGINEERING RESEARCH INSTITUTE FOR COLD REGION, PUBLIC**  
**WORKS RESEARCH INSTITUTE, SAPPORO, HOKKAIDO, JAPAN**  
**AND**  
**THE GEOMORPHOLOGY AND SEDIMENT TRANSPORT LABORATORY, UNITED**  
**STATES GEOLOGICAL SURVEY, GOLDEN, COLORADO, UNITED STATES OF**  
**AMERICA**

This Memorandum of Understanding (hereinafter referred to as MOU) establishes a framework for promotion of research exchange and cooperation in the fields of River Engineering and Environmental Fluid Dynamics between The Civil Engineering Research Institute for Cold Region, Public Works Research Institute, Sapporo, Hokkaido, Japan (hereinafter referred to as CERI) and The Geomorphology and Sediment Transport Laboratory, United States Geological Survey, Golden, Colorado, United States of America (hereinafter referred to as GSTL and USGS). The USGS authority to enter into this MOU is pursuant to Public Law 99-591 that bestows permanent authority on the USGS to prosecute projects in cooperation with other agencies, Federal, state, and private (43 U.S.C. 36c).

Article 1.  
Purpose

The purpose of the MOU is to promote mutually beneficial cooperative activities between CERI and GSTL (hereinafter jointly referred to as The Parties).

Article 2.  
Forms of Cooperative Activities

The forms of research exchange and cooperation shall involve the following:

1. Exchange of technical information, materials and publications
2. Exchange of visiting lecturers and researchers
3. Joint workshops and seminars

Article 3.  
Specific Research Cooperation

The Parties shall conduct specific research cooperation activities in the following fields:

1. Research on river sedimentation
2. Research on river bed morphology
3. Research on numerical simulation of riverine flow, sediment transport and morphologic evolution
4. Research on numerical simulation of flood inundation

5. Research on remote sensing of river surface elevations, surface velocities, and depths
6. Research and development on software tools for river prediction
7. Other researches as may be agreed among the Parties

#### Article 4.

##### Protection of Intellectual Property

All rights in intellectual property, which are defined as new/improved patents, copyrights, new inventions, discoveries, biological materials, or software, created in the course of the activities under this MOU, shall be the property or joint property of the organization employing the respective individual who made the invention or discovery, or the individual. Any IP developed will be reported by the developer to his/her Technical Contact who will in turn notify the other party's Technical Contact. If it becomes necessary to allocate intellectual property rights in a particular case, each party agrees to negotiate a separate written agreement for each case in accordance with the policies of the Parties on intellectual property.

#### Article 5.

##### Implementation

Implementation of the research cooperation shall be subject to the applicable laws and regulations of each country. In principle, each party shall bear its own expenses to pursue any of the above activities for each specific case. The two institutions understand that any activities that require exchange of resources, such as funding and services, will require negotiation of a separate written agreement based on the appropriate legal authority. Financial responsibilities will depend on the respective availability of funds of each institution.

#### Article 6.

##### Entry into Force and Termination

The MOU shall be effective for a period of five years from the date of signing. Thereafter, the MOU can be renewed for another five years with an exchange of letters. Either party can request amendment and termination of the MOU by giving six months notice in writing of such intent.

#### Article 7.

##### Forms of the MOU

The MOU shall be drawn up in English, in duplicate, with The Parties each retaining one copy.

#### Article 8.

##### Appointment of Representatives

Each institution will select a research coordinator from among its staff members. The research

coordinators will assume primary responsibility for the research programs, seminar contents and schedules established under this MOU.

Article 9.  
Amendments

This MOU may be modified at any time in writing by either party with the written concurrence of the other party, signed by a duly authorized representative.

Article 10.  
Research and Seminar Products

All data and information produced as a result of this MOU shall be available for use by each institution in connection with its ongoing programs. This includes publication of results where appropriate, except in cases prohibited by proprietary and security considerations. Authorship of collaborative research will be determined by the collaborating researchers and published in the public interest. All parties agree that any projects involving the exchange, reimbursement or contribution of resources, including allocation of intellectual property, between the Parties of this MOU, will be handled in accordance with applicable laws, regulations and procedures. Such projects will be documented in separate written agreements, with specific projects between the Parties spelled out.

Article 11.  
Administrative Provisions

- a. Nothing in this MOU may be construed to obligate each institution or its nation's government to any current or future expenditure of resources either in advance of the availability of appropriations from Congress or when funds are available.
- b. This MOU does not create an actual or implied intention, or requirement for each institution to enter into a contract or an assistance agreement (e.g., grant or cooperative agreement).
- c. This MOU in no way restricts each institution from participating in similar activities or arrangements with other public or private agencies, organizations, or individuals.
- d. Nothing in this MOU may be interpreted to imply that the United States, the Department of the Interior, or the U.S. Geological Survey endorses any product, service or policy of CERI. CERI will not take any action or make any statement that suggests or implies such an endorsement.
- e. Nothing in this MOU may be interpreted to imply that Japanese government, or CERI endorses any product, service or policy of GSTL. GSTL will not take any action or make any statement that suggests or implies such an endorsement.

f. Any press releases resulting from this MOU must be coordinated with the USGS Office of Communications and Publishing and CERl Planning Division.

**Legal addresses and subscripits of The Parties**

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Kenji IKEDA

Director General

Date: *14. April*, 2014



Jerad Bales

Acting Associate Director for Water

Date: *18 MAY*, 2014