

*The Asian River Restoration Network (ARRN) is an Asian-based non-political network supporting the exchange of information related to environmental restoration of rivers and watersheds, through the promotion of collaboration between participants of the world. The network aims to contribute to the development of technology and knowledge for river and watershed restoration through its activities.*

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**ARRN Event News**

**ARRN's 7th International Forum on Waterfront and Watershed Restoration  
(14 Sep. 2010, Seoul, KOREA)**

The 7<sup>th</sup> International Forum on Waterfront and Watershed Restoration was held in Seoul, Korea, on Tuesday, September 14, 2010. This event was held at a special session of ISE 2010 (International Symposium on Ecohydraulics).

With the participation of Dr. Bart Fokkens, President of the European Centre for River Restoration (ECRR), who gave a keynote speech at the symposium, participants exchanged valuable findings and opinions through pioneering experience in river restoration.



7<sup>th</sup> ARRN Forum



Opening Address by Dr. Tamai

**The 7<sup>th</sup> International Forum on Waterfront and Watershed Restoration**

Time and Date: September 14, 2010 14:00 – 15:30, Venue: COEX complex, Seoul KOREA  
Chair: Dr. Naoki Shirakawa (Tsukuba Univ. Japan), Co-Chair: Dr. Sukhwan Jang (Daejin Univ. Korea)

**Program**

- Opening Address** Dr. Nobuyuki Tamai (Chairperson of ARRN)
- Lecture 1** Dr. Bart Fokkens (European Centre for River Restoration, Netherlands)  
*River Restoration in Europe and the European Centre for River Restoration*
- Lecture 2** Dr. Wang Xingong (Yellow River Water Resources Protection Scientific Institute, China)  
*Study On Environmental Flows and Eco-Restoration Practice In Yellow River Delta Wetlands*
- Lecture 3** Dr. Masatoshi Denda (Water Environment Research Group, Public Works Research Institute, Japan)  
*Improvement of Individual-based Models by Using GIS and a Wild Animal Auto-Tracking System*
- Lecture 4** Dr. Sunok Jeon (Eco-STAR Project, Korea)  
*Development of Technology for Aquatic Ecosystem Restoration in Korea*
- Lecture 5** Dr. Weon Jae Kim (Korea Institute of Construction Technology, Korea)  
*A Prototype of Decision Support System for Ecological Urban River Restoration*

■ Lecture 1: Dr. Bart Fokkens  
*River Restoration in Europe and the European Centre for River Restoration*

The lecturer introduced restoration of the continuity between the Danube and habitats in the basin as a good case example of river restoration. He explained projects in Austria, Bulgaria, and Croatia. In the latter half, he delivered a lecture on the development process of ECRR and its future activities.



■ Lecture 4: Dr. Sunok Jeon  
*Development of Technology for Aquatic Ecosystem Restoration in Korea*

The Water Environment Management Master Plan 2006-2015 formulated by the Ministry of Environment, Korea clearly stipulates "creating ecologically healthy rivers where people can swim with fish". In 2007, the Center for Aquatic Ecosystem Restoration (CAER) was established. In the lecture, the lecturer introduced the efforts of eco-star projects aimed at technological development for the restoration of aquatic ecosystems, and specific examples of restoration.

■ Lecture 2: Dr. Wang Xingong  
*Study On Environmental Flows and Eco-Restoration Practice In Yellow River Delta Wetlands*

The Yellow River, which runs through nine provinces, has problems mainly of water quality and drought. Projects for water resource management of the Yellow River are carried out through technical cooperation with Netherland. This time, the lecturer gave a lecture on surveys in the Yellow River Delta, which is a stopping point for migrant birds, and consideration of environmental flows to manage the delta.



■ Lecture 5: Dr. Weon Jae Kim  
*A Prototype of Decision Support System for Ecological Urban River Restoration*

To restore urban rivers, it is important to carry out research including water resource evaluation, ensure an adequate supply of water resources, and set up a decision support system. The lecturer made a presentation on research for suggesting a prototype of a decision support system to manage the water quality and quantity of urban rivers.

■ Lecture 3: Dr. Masatoshi Denda  
*Improvement of Individual-based Models by Using GIS and a Wild Animal Auto-Tracking System*

The lecturer made a presentation about improving mathematical models called individual-based models (IBMs) based on behavior analyses and use of space by badgers in the Kita River using an auto-tracking system, to consider conservation of wild animal habitats.



Materials for each lecture given in the forum can be downloaded from the website shown below.

Download: [http://www.a-r.net/report/2010/09/the\\_7th\\_international\\_forum\\_on.html](http://www.a-r.net/report/2010/09/the_7th_international_forum_on.html)

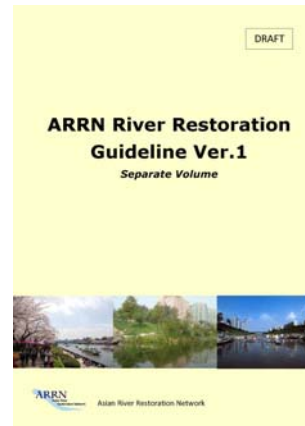
## ARRN's Roundtable Meeting

### How to develop technology and guidelines for river restoration through networks (14 Sep. 2010, Seoul, KOREA)

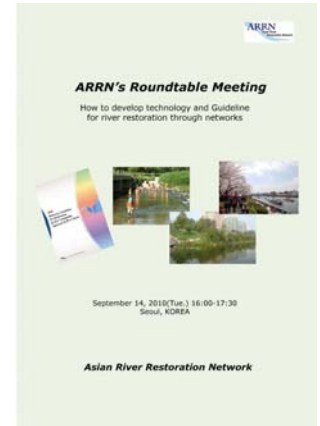
ARRN's Roundtable Meeting for sharing river restoration technology in Asia was held in Seoul, Korea, on Tuesday, September 14, 2010.

This event was held following the 7th ARRN International Forum. Under the theme of "How to develop technology and guidelines for river restoration through networks," open discussions were held actively with Dr. Bart Fokkens, President of the European Centre for River Restoration (ECRR) and other invited panelists who are experts from Japan, China, and Korea.

The minutes of the Roundtable Meeting will be opened in the ARRN website soon, and discussion outputs are reflected in the updated Guideline for River Restoration Ver. 2 drawn up by ARRN.



Handout



Minutes of Meeting



Roundtable Meeting



Participants

### ARRN's Roundtable Meeting: How to develop technology and guidelines for river restoration through networks

Time and Date: September 14, 2010 16:00 – 17:30, Venue: COEX complex, Seoul KOREA

Chair: Dr. Nobuyuki Tamai (ARRN Chairperson), Co-Chair: Dr. BongHee Lee (Secretary General of KRRN)

#### Discussion Points

- Role of River Restoration network
- Development of ARRN River Restoration Guideline

#### Panelist

- *Dr. Bart Fokkens* (President of European Centre for River Restoration, ECRR)
- *Dr. Dongya Sun* (China Institute of Water Resources and Hydropower Research, Secretary General of China River Restoration Network)
- *Dr. Naoki Shirakawa* (Tsukuba University, JRRN Technical Committee)
- *Dr. Sukhwan Jang* (Daejin University, KRRN Technical Committee)



Dr. Nobuyuki Tamai



Dr. Bonghee Lee



Dr. Bart Fokkens



Dr. Dongya Sun



Dr. Sukhwan Jang



Dr. Naoki Shirakawa

## Report from ARRN Board

### 5<sup>th</sup> ARRN Governing Council Meeting (15 September 2010, Seoul KOREA)

The 5<sup>th</sup> ARRN Governing Council Meeting was held in Seoul, Korea, on Wednesday, September 15, 2010.

At the beginning of the meeting, Professor Nobuyuki Tamai was reappointed as Chairperson of the ARRN, and JRRN was reappointed as the ARRN Secretariat. After a report was made on network activities over the last year, discussions and exchanges of opinion took place about holding events (e.g. forums and workshops), developing websites, preparing a guideline for river restoration, and cooperation with other networks.

The ARRN activities for 2011 can be summarized as follows.



5<sup>th</sup> GCM

### ARRN Action Plan for 2011 (from Nov. 2010 to Oct. 2011)

Activity	Implementation Plan (responsibility)
<b>Administration</b>	- Information & Technical Committee discussion by email ( <b>Committee</b> ) - 6 <sup>th</sup> Governing Council Meeting around Oct. or Nov. 2011 in Tokyo ( <b>ARRN secretariat</b> )
<b>Website (database, toolbox etc.)</b>	- Setting up and development of KRRN website ( <b>KRRN</b> ) - Accumulation of examples of river restoration projects in each-RRN website ( <b>each-RRN</b> ) - Updating ARRN website ( <b>ARRN secretariat</b> )
<b>Newsletter</b>	- Once in a half year publication in 2011 ( <b>ARRN secretariat with CRRN and KRRN contribution</b> )
<b>News mail</b>	- Test dispatch of JRRN news mail to ARRN members in English monthly (Headline only) ( <b>ARRN secretariat</b> )
<b>Forum and Workshop</b>	- 8 <sup>th</sup> International Forum as small sized workshop(to be held with the 6 <sup>th</sup> GCM around Oct. or Nov. 2011 in Tokyo ) ( <b>ARRN secretariat</b> ) - Other workshops / Regional Seminar ( <b>each-RRN</b> )
<b>Reference Guideline</b>	- Collection and Sharing of major examples of river restoration projects in each country ( <b>each-RRN</b> ) - Collection and Sharing of existing technical guideline of river restoration in each country ( <b>each-RRN</b> ) - Preparing for ARRN River Restoration Reference Guideline vol.2 (Oct. 2011) ( <b>Technical Committee</b> )
<b>Publication</b>	- ARRN River Restoration Guideline vol.2 (Nov. 2011) ( <b>ARRN secretariat</b> )
<b>Public Relations (PR)</b>	- Exchange with related organizations on river restoration ( <b>ARRN secretariat with each RRN contribution</b> ) - Presentation in international symposium or events ( <b>ARRN secretariat &amp; RRN</b> ) - Meeting with related organization in Asia and other region ( <b>ARRN secretariat with each RRN contribution</b> )
<b>Membership</b>	- Expansion to Other Asian countries ( <b>ARRN secretariat with each RRN contribution</b> )

#### Participants

##### Governing Council Member:

**Nobuyuki TAMAI** (ARRN Chairperson, Graduate School of Kanazawa Gakuin Univ.),  
**Junzo SAGO** (ARRN/JRRN Secretary General, Foundation for Riverfront Improvement and Restoration), **Bong Hee LEE** (KRRN Secretary General, Saman Corp.), **Dongya SUN** (CRRN Secretary General, China Institute of Water Resources and Hydropower Research),  
**Jeong Seok YANG** (KRRN Information Committee, Kookmin Univ.), **Suk Hwan JANG** (KRRN Technical Committee, Daejin Univ.), **Jinyong ZHAO** (CRRN deputy Information Committee, China Institute of Water Resources and Hydropower Research), **Hongwu TAN** (CRRN deputy Technical Committee, China Institute of Water Resources and Hydropower Research), **Kazumasa ITO** (JRRN Information Committee, CTI Engineering Co, LTD), **Naoki SHIRAKAWA** (JRRN Technical Committee, Univ. of Tsukuba)

##### ARRN Secretariat:

**Sayumi NUMATA**(JRRN secretariat, Foundation for Riverfront Improvement and Restoration), **Tatsushi KIMURA**(JRRN secretariat, CTI Engineering Co, LTD), **Akira WADA** (JRRN secretariat, CTI Engineering Co, LTD)

**8<sup>th</sup> International symposium on Ecohydraulics, ISE2010** (September 13-16, 2010, Seoul, Korea)

The 8th International symposium on Ecohydraulics 2010 was held in Seoul, Korea from 13th to 16th of September 2010. With the main theme of "Making a Bridge between Ecology and Hydraulics, and Exploring Society's New Need to Live with Nature," more than 500 river environment experts got together from 30 countries around the world.

The 8th symposium this year was held in Korea as an event hosted by the Korea Water Resources Association, which was the first one in Asia. The former Secretary-General of the Korea River Restoration Network, Dr. Hyoseop Woo, served as the chairperson of the local committee in Korea.

The ARRN Secretariat had a presentation entitled "*Characteristics of River Restoration in Japan and Case Studies*" in the section meeting under the theme of "River Restoration", and set up an exhibition booth for ARRN where outline of ARRN and domestic networks, and case examples of river restoration in Japan, China, and Korea were introduced. Website of ISE2010 : <http://ise-2010.org/>



Opening Speech



ARRN's Presentation



ARRN's Exhibition booth

**13<sup>th</sup> International Riversymposium** (October 11-14, 2010, Perth, Australia)

The 13th International Riversymposium was held in Perth, Australia, from Monday, 11th to Thursday, 14th of October 2010.

The ARRN Secretariat presented a paper entitled "*Development of the Asian River Restoration Network for Knowledge Sharing*" in the section called "Moving water through cities", and mingled with river restoration organizations such as the Australian River Restoration Centre (ARRC).

Website of Riversymposium 2010 : <http://www.riversymposium.com/>

**Seminar Report from "Japan River Restoration Network (JRRN)"**

JRRN promotes seminar as "*JRRN Mini-Seminar on River Environment*" to provide opportunities for JRRN members and non members to share and exchange their knowledge and experiences on river restoration.

■ The 5th JRRN Seminar: "*River restoration through watershed cooperation: Mersey Basin Campaign, U.K.*"

- Date: May 11, 2010

- Lecturer: Mr. Walter Menzies (Chief Executive, Mersey Basin Campaign, U.K)

- Subject: A partnership approach to catchment wide river restoration: Mersey Basin Campaign experience, U.K.



The lecture started with historical descriptions of the industrial revolution in Liverpool, Britain where the Mersey runs, to its decline. He described the water deterioration of the Mersey around the 1980s, using pictures from those days. Then, he discussed the Mersey Basin Campaign with three central pillars: economics, society, and restoration of natural environment. He explained its objectives, concept, and strategies in detail, as well as specific activities over the past 25 years and key factors for the success of the campaign.

■ The 6th JRRN Seminar: "*China's challenge: against flood, drought and water pollution under climate change.*"

- Date: September 8, 2010

- Lecturer: Prof. Xu Zongxue (Professor at Beijing Normal University/Deputy Dean, College of Water Sciences)

- Subject: China's challenge: against flood, drought and water pollution under climate change



First, the lecturer introduced the latest situation of damage caused by floods and droughts in China, using pictures. In addition, he outlined water resource management in China, explained flood and drought control in detail, and measures for water quality; he also explained the future direction and ideas of the Chinese government's water resource management policy.

## Membership Benefits (How to become an ARRN member)

Joining the ARRN is *Free!*

To become member of ARRN, please contact to [secre@a-rr.net](mailto:secre@a-rr.net) by email.

### Membership Benefits

- Easy obtaining of domestic and foreign information on river restoration through website, email, and direct contact to ARRN secretariat or other ARRN members as following;
  - ✓ Latest news, topics, projects, experiences, lessons, case studies
  - ✓ International and domestic events such as seminar and workshops
  - ✓ Standard books, technical guidelines, video images, etc.
- Holding opportunity to introduce member's organization and their activities to other ARRN members
- A coordinated business with various foreign countries or organizations
- Holding management support such as international seminar, workshops and establishment of regional river restoration network by ARRN secretariat

### Possible Tasks

- (1) Members will participate in ARRN with commitment to use their own resources and to work effectively in partnership with other members that are collaborating in the network. Members will support the objectives of ARRN described in the charter. (<http://www.a-rr.net/charter.html>)
- (2) Members can freely inspect the Web site, and moreover, useful information on river restoration in your organization and your region can be freely sent through the Web site for other members.
- (3) Members positively join for ARRN events such as international forum and the workshop by each RRN sponsoring. Also, every member can hold original workshop by receiving the backup of ARRN or RRN.
- (4) Members cooperate positively when the specialist's technical advice is required or the advanced case investigation committee is sent to another region.
- (5) Members share the information sent by ARRN with related persons in your organization.

### Procedure for joining ARRN

- (1) An organization which wants to join ARRN is requested to submit a membership application form by email.
- (2) The membership application form submitted by the organization is judged by the Secretary General and the Chairperson of ARRN.
- (3) After the Chairperson of ARRN approves the membership application form, the organization becomes the ARRN member as a Non-RRN organization.
- (4) ARRN secretariat will send email soon to the contact person named in the application form.
- (5) When plural groups gathered in a certain country or regions, the ARRN secretariat supports the establishment of each RRN. The establishment of new RRN will be judged by ARRN governing council meeting.

Note) In a country/region which RRN secretariat has already established, applicants to ARRN should be registered through the RRN secretariat. (China, Korea, and Japan)

ARRN Membership Application Form for organization (MS-WORD:601kB) is available here.

<http://www.a-rr.net/jp/en/arn/docs/appform.doc>



## Asian River Restoration Network

[Secretariat]

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"Japan River Restoration Network (JRRN)" has a role of ARRN secretariat since Nov. 2006. Secretariat of ARRN and JRRN is operated by **Foundation for Riverfront Improvement and Restoration** and **CTI Engineering Co., Ltd.** as a joint study on development of international information network of river environment. <http://www.a-rr.net/jp/en/>