

2012

(Jan. 2012 – Dec. 2012)

Asian River Restoration Network Annual Report



7th ARRN Governing Council Meeting
(2012.11.24 Beijing, CHINA)

What's ARRAN?

ARRN is a non-political organization for exchanging knowledge and technical information on the restoration of rivers and watersheds in Asia. The primary objective is to provide various opportunities for river restoration related organizations and individuals to share and exchange knowledge and experiences through this network, aiming to enrich the participants' knowledge and scientific technology through mutual and multilateral cooperation.

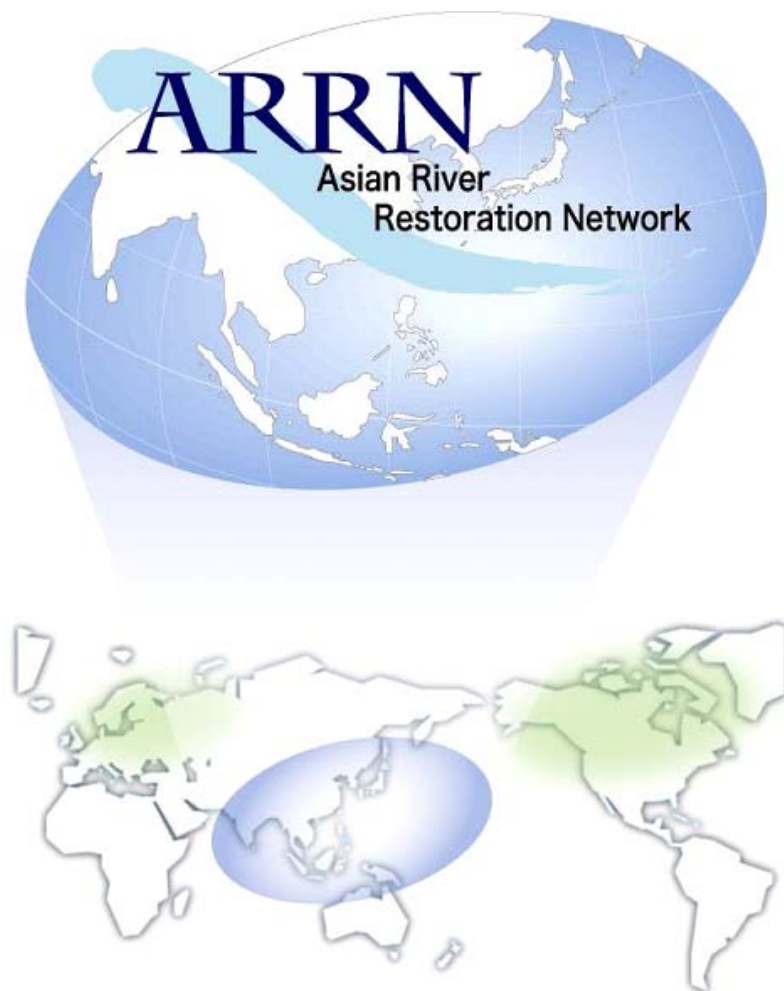


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Yarra River (Melbourne, AUSTRALIA)

Message from the ARRN Chairperson



Prof. Zhiping Liu

Chairperson of ARRN

Vice president, China Institute of Water Resources and Hydropower Research (IWHR)

Dear ARRN members and river restoration supporters, ARRN secretariat has been transferred from JRRN to CRRN since November 24th 2012. Authorized by you, I am going to resume duties as chairperson of ARRN, I would like firstly address my sincere appreciation for your trust and support.

I understand that as chairperson of ARRN, heavy responsibility is a great challenge. With collaboration of secretariats and members, rules and regulations of ARRN have being gradually revised since its foundation in 2006, and the operation is running smoothly. The book, *"Reference Guideline for Restoration by Eco-Compatible Approach in River Basin of Asia"*, has been published, and plays key roles in river comprehensive management, protection and restoration of ecosystem, improvement of ecological environment, improvement of living quality and cultural inheritance. On the platform of ARRN, specialists, scientists and engineers from different regions share their advanced technologies, successful experiences, and expert resources on river restoration, that has greatly promoted river restoration and the progress of technologies. Many of these works are frontiers of the world.

Protection and restoration of river ecosystem is a burgeoning profession with broad development prospects. The domestic and international communications are more and more active, and an increasing number of research institutes and companies are devoting effort on relative topics. River restoration in China is turning from traditional harness-oriented strategy into comprehensive management mode, which takes water security, water resources, water environment, water ecosystem, water landscape and water cultural into consideration. Large-scale constructions of small and medium-sized river management projects are carried out throughout the country. With such domestic and international background, communication platform of ARRN is highlighted and facing higher demand. The future is full of opportunities and challenges, it is a test for ARRN to play well the role of communication platform, to further enhance the technological cooperation of regions and countries, to accelerate the development of science and technology.

That is also a great challenge for myself. I cherish this job opportunity very much, and will do my best to live up to your great trust. I believe that we can do the ARRN job well with collaboration, and create a beautiful world of clean water, green banks, and beautiful sceneries.

Thank you.

About ARRN

Background of ARRN Establishment

In the "River Restoration in Asian Monsoon Region" session cosponsored by three countries of China, Korea, and Japan that was held in the 4th World Water Forum in Mexico City in March 2006, the necessity of cooperation among Asian countries was emphasized, and it was recommended that a network and a database should be established to exchange information on river/watershed restoration, and that a technical guideline specifically suitable for the Asian monsoon region should be developed. As a response to this recommendation, the "3rd International Forum on Waterfront and Watershed Restoration" was held in Tokyo in November 2006, and "Asian River Restoration Network (ARRN) " was formally established by concerned organizations of China, Korea and Japan.



Objectives

ARRN aims to contribute to the creation of rich Asian water environment for the following two purposes as a non political organization.

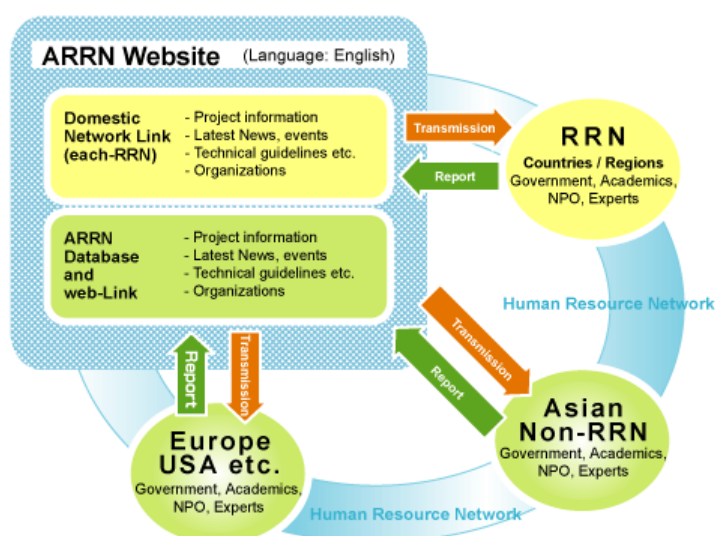
- To establish a mechanism to exchange and share case studies, information, technologies, and experiences related to river/waterfront restoration in the world and in the Asian countries, with engineers, researchers, ecologists, government officials and citizens through events and websites.

- To establish a river/watershed restoration guideline that can be utilized in the Asian monsoon area with similar social and natural environment, and improve knowledge and skills of network participants.

Major Activities

ARRN carries out following activities to achieve the above-mentioned objectives.

- Activities for exchanging and sharing information on river restoration through website, newsletters and email news
- To hold workshops and forums with a view to provide a platform to introduce or compile information on the latest situation and case studies of river restoration in Asia
- To draw up or revise guidelines for the restoration of rivers and watersheds
- To conduct joint studies to be undertaken by participating countries to support the provision of information for study purposes
- To exchange lecturers from participating countries
- To translate and publish books on the restoration of rivers and watershed



Outline of ARRN network activities

Organizational Structure

Members

ARRN members are classified as National RRN, Regional RRN and Non RRN.

(National River Restoration Network)

National RRN is a representative of River Restoration Network in a country which is approved by the Governing Council. Its representative participates in the Governing Council and be entitled to vote for discussion. In addition, one representative possibly participates as member in Information committee and Technical committee respectively.

(Regional River Restoration Network)

Regional RRN is a group organization (River Restoration Network), with more than twenty individuals or five organizations membership respectively, approved by the Information Committee. Its representative is able to participate in the Governing Council with no voting right.

(Non River Restoration Network)

Non RRN is an organization or individual member approved by the ARRN secretariat.

Governing Council

The operating policy of ARRN is decided by "Governing Council" that consists by the representative of each National RRN. The Council is summarized by the chairman approved in the Council, and resolves the activity plan and the budget planning, etc. of the year.

Information Committee

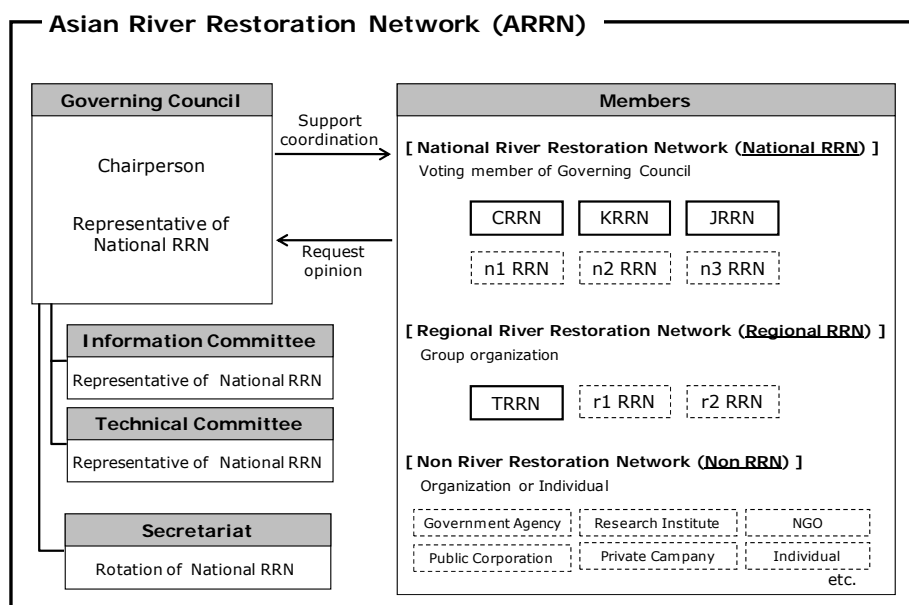
The Information Committee prepares future vision and activities of ARRN and shares knowledge by establishing a toolbox.

Technical Committee

The Technical Committee provides the technical methods for river restoration including the guideline for Asian countries.

Secretariat

The Secretariat is established for the Governing Council by a rotation of national RRN. The secretariat accomplishes the management conference and various ARRN activities.



ARRN's Organization Structure

ARRN Members (as of December 2012)

ARRN is currently consisted of 3-national network,
1-regional network and 5-organization as follows.

■ National River Restoration Network (National-RRN)

CRRN: China River Restoration Network

<http://www.cnrrc.cn/>



[Secretariat] Institute of Water Resources and Hydropower Research (IWHR)

CRRN Secretariat plays the role of ARRN secretariat from November 2012 to October 2014.

KRRN: Korea River Restoration Network

<http://www.krrn.net/>



[Secretariat] Korea River Association (KRA)

JRRN: Japan River Restoration Network

<http://www.a-rr.net/jp/>



[Secretariat] Japan RiverFront research Center (RFC)

■ Regional River Restoration Network (Regional-RRN)

TRRN: Taichung River Restoration Network

<http://www.trrn.tw/index.do>



[Secretariat] Water Resources Planning Institute, Water Resources Agency (WRAP)

■ Non River Restoration Network (Non-RRN)

(Government)

- Department of Water Resource, Thailand
<http://www.water.go.th/>
- Federal Flood Commission, Pakistan (FFC)
<http://www.ffc.gov.pk/>

(NGO)

- Australian River Restoration Centre, Australia
<http://australianriverrestorationcentre.com.au/>
- Global Environment Centre (GEC), Malaysia
<http://www.gecnet.info/>

(Private)

- Terracon Ecotech Pvt. Ltd., India
<http://www.terraconindia.com/>



ARRN Activities in 2012

Website Development

ARRN continues to update the ARRAN website, as well as renew the websites of each river restoration network (RRN) aiming to enhance information sharing on our activity reports, publications, news/events and useful technical tools and resources. In December 2012, TRRN was joined as our member and website of CRRN, KRRN, JRRN and TRRN were linked from ARRAN website.



URL: <http://www.a-rr.net/>

International Forum & Events

ARRN's 9th International Forum on Waterfront and Watershed Restoration (Nov. 24, 2012, CHINA)

In the afternoon of Nov. 24 2012, the 9th International Forum on Waterfront and Watershed Restoration was held in IWHR, Beijing CHINA. The title of this forum is "comprehensive management of urban water network", and five reports were given by scientists, including (1)eco-hydraulics and eco-sediment (Wang Zhaoyin); (2)Urban river management in Japan (Masafumi ITO); (3) Comprehensive management system of urban water cycle in Korea(Jin Chul Joo); (4)Comprehensive management of Yongding River (Zhu Chendong); (5) Hydraulic analysis of artificial lake in Cheongra city (Suk Hwan JANG).

More than 70 researchers and students from IWHR attended the forum, submitted questions and interacted with the lecturer.



Lecturers



Scene of the report

URL: http://www.a-rr.net/report/2012/12/the_9th_international_forum_on.html

ARRN's Field Technical Exchange at Yongding River
(Nov. 25, 2012, Beijing CHINA)

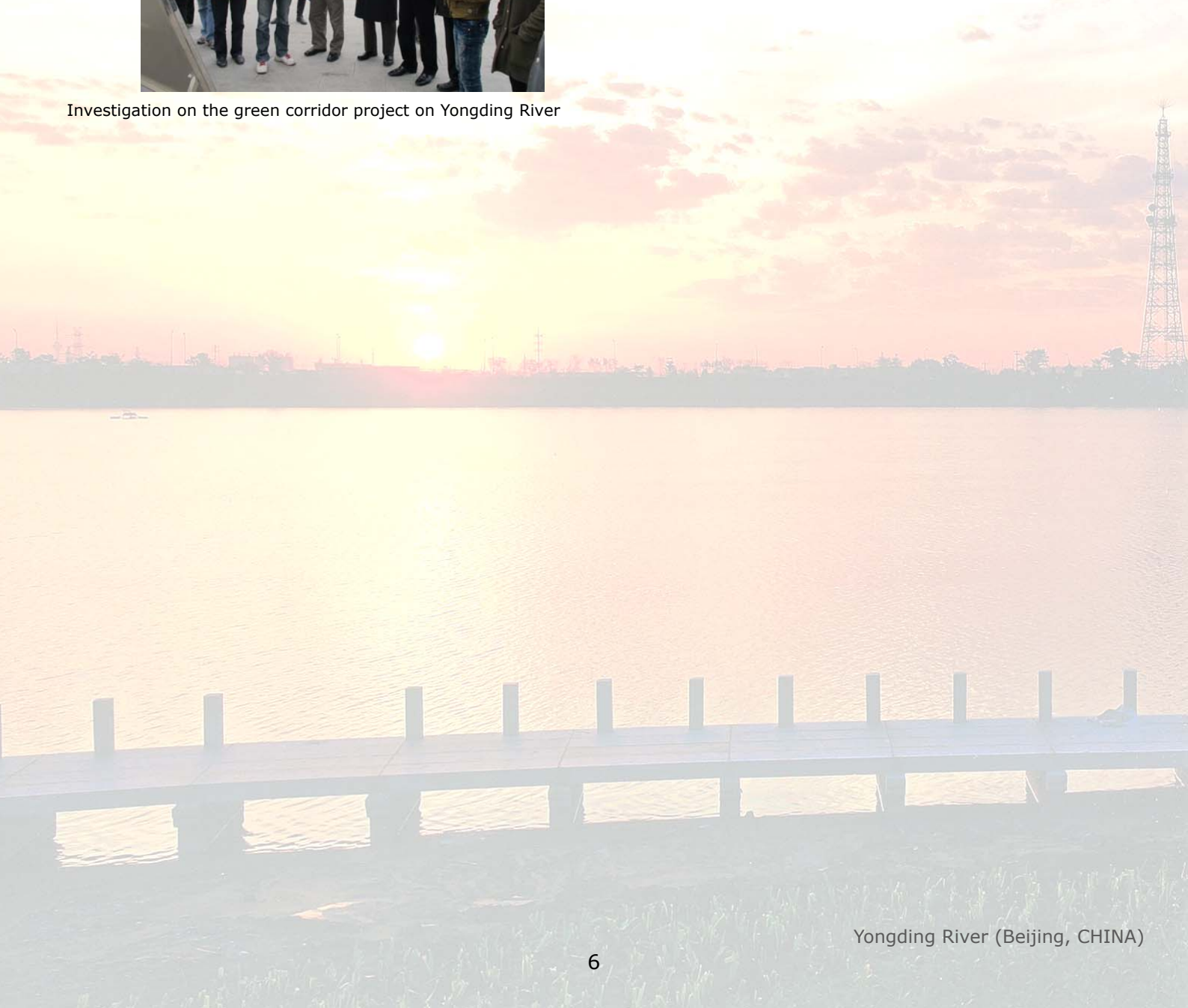
In the morning of Nov. 25, members of ARRN investigated the green corridor project on Yongding River under the technical guide of scientists from Yongding River management Bureau. They learned about the ecosystem restoration and river management of Mencheng Lake, Lianshi Lake, Xiaoyue Lake and Wanping Lake.



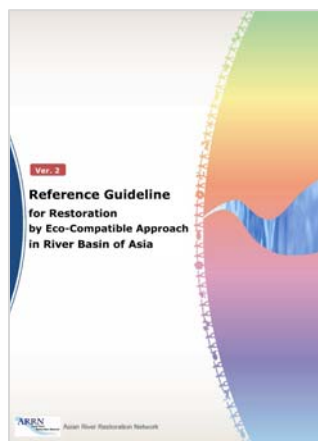
Investigation on the green corridor project on Yongding River



Group photo at Yongding River



Formulating a Guideline on River and Watershed Restoration



Guideline Ver. 2

ARRN regards the preparation of a guideline for river restoration to be a pillar of its activities. ARRN holds repeated consultations with ARRN experts, and is working on the preparation and continuous updating of the guideline that contributes to favorable river environment restoration in Asia.

In March 2012, ARRN published the "**Reference Guideline for Restoration by Eco-Compatible Approach in River Basin of Asia, Ver. 2**", as a revised edition of "Reference Guideline Ver. 1" released in March 2009. We will continue to update it to Ver. 3.

URL: http://www.a-rr.net/publication/reference_guideline/

[Revision history of ARRN Guideline]

Mar. 2009: Reference Guideline for Restoration by an Eco-Compatible Approach in River Basin of Asia **Ver.1, published**

Jan. 2011: Case studies as a separate volume of the Reference Guideline ver.1, **published**

Mar. 2012: Reference Guideline for Restoration by an Eco-Compatible Approach in River Basin of Asia **Ver.2, published**

Updated contents in Ver. 2

- Enhancement of specific examples that plainly show the background/history, issues and measures of river restoration
- Insertion of plentiful photos of cases in Japan, China and Korea, without too much emphasis on Japan, for the purpose of helping to understand the characteristics of river restoration in Asia
- Listing information sources (websites) on river restoration in Europe and the United States in the appendix, for the purpose of helping to understand the characteristics of river restoration in Asia by comparing with Europe and the United States

About ARRN's River Restoration Guideline

(1) Background

The necessity of cooperating network, data base of the river restoration and river restoration technical guideline suits for an Asian monsoon region was proposed in the "River Restoration in Asian Monsoon Region" session on 4th World Water Forum.

"It is urgent to establish a river restoration guideline suitable for the Asian monsoon region as a reference for countries with similar social and natural conditions."

Based on the above proposal, ARRN regards preparing/updating/distributing river restoration guideline as one of main activities.

(2) Objective

To establish the suitable methodology and technology for river restoration in Asian monsoon region

(3) Users/Customers

General public making efforts for river restoration activity (not specialist)

(4) Language

ARRN publishes the guideline in English, and ARRN member promotes and uses the guideline after translating it into own language.

(5) Task force

ARRN technical committee initiates the update operations while getting cooperation of ARRN and each RRN secretariat.

Governing Council & Committee

ARRN Charter provides that policies for actions shall be decided by the Governing Council consisting of representatives from each National RRN, and the Governing Council meeting is normally held once annually to coincide with the ARRN's International Forum. In addition, ARRN's two committees are set up to support the Governing Council.

7th ARRN Governing Council Meeting (Nov. 24, 2012, Beijing, CHINA)

In the morning of Nov. 24 2012, the 7th ARRN GCM was held in the 1020 meeting room of IWHR A block, Beijing CHINA. Former chairperson and present counselor of ARRN, Prof. Nobuyuki TAMAI, president of KRRN, Dr. Bong Hee LEE, vice president of IWHR, Prof. Liu Zhiping and Prof. Wang Xiaogang participated the meeting. Members from the International Cooperation, institute of hydraulics of IWHR, and CRRN/KRRN/JRRN secretariats attended the meeting.

Activities in 2012 were reviewed in the meeting. The secretariat was transferred to CRRN officially, and Prof. Liu Zhiping was elected new chairperson of ARRN. Future plans of ARRN were discussed and determined in the meeting.



Former chairperson of ARRN, Prof. Nobuyuki TAMAI from JRRN



Current chairperson of ARRN, Prof. Liu Zhiping, attends the meeting.



President of CRRN, Prof. Wang Xiaogang, hosts the meeting.



Chairperson of KRRN, Dr. Bong Hee LEE

ARRN Information and Technical Committee Meeting in 2012

In two ARRN standing committees, committee consultations among committee members from National RRN have been experimentally conducted through e-mail. Two times of Information Committee meetings were held in 2012 for preparing ARRN bylaws and pre-discussion for the 7th Governing Council Meeting. Technical Committee supervised and published ARRN guideline ver.2 in 2012.



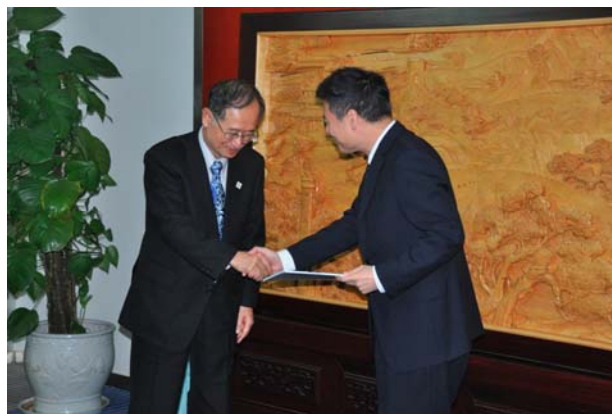
Discussion in 7th ARRN Governing Council Meeting

URL: http://www.a-rr.net/report/governing_council_meeting/

Transfer of Secretariat

In the 7th ARRNGoverning Council Meeting held on November 24 (Sat.) 2012, ARRNGsecretariat was officially transferred from JRRN to CRRN.

JRRN had been in charge of ARRNGsecretariat since its establishment for six years, and CRRN will be a secretariat of ARRNGfor next two years.



Transfer ceremony of ARRNGsecretariat

ARRNGoverning Council member (as of Dec. 2012)

Chairperson of ARRNG:

Prof. Zhiping Liu
Vice president, China Institute of Water Resources and Hydropower Research (IWHR)

Adviser of ARRNG:

Prof. Nobuyuki Tamai
Prof. Emeritus, The University of Tokyo JAPAN / Past President, International Association for Hydro-Environment Engineering and Research (IAHR)

Secretary General of ARRNG:

Dr. Wenxue Chen, Chief Engineer, China Institute of Water Resources and Hydropower Research (IWHR)

CRRN(China River Restoration Network):

(Secretariat organization)
China Institute of Water Resources and Hydropower Research (IWHR)
(Chairperson)
Prof. Xiaogang Wang, Vice president, China Institute of Water Resources and Hydropower Research (IWHR)
(Secretary General)
Dr. Baiyinbaoligao, China Institute of Water Resources and Hydropower Research (IWHR)
(Information Committee)
Dr. Xiaosong Wang, China Institute of Water Resources and Hydropower Research (IWHR)
(Technical Committee)
Dr. Jinyong Zhao & Dr. Xiangpeng Mu, China Institute of Water Resources and Hydropower Research (IWHR)

KRRN(Korea River Restoration Network):

(Secretariat organization)
Korea River Association (KRA)
(Chairperson)
Dr. Bonghee Lee, Saman Engineering Ltd.
(Secretary General)
Prof. Suk Hwan Jang, Daejin Univ.
(Information Committee)
Prof. Jeong-Seok Yang, Kookmin Univ.
Dr. Jin Chul Joo, Korea Institute of Construction Technology (KICT)
(Technical Committee)
Prof. Hyun-Han Kwon, Chonbuk National Univ.
Dr. Moonhyeong Park, Korea Institute of Construction Technology (KICT)

JRRN(Japan River Restoration Network):

(Secretariat organization)
Japan RiverFront research Center (RFC)
(Secretary General)
Dr. Junzo Sago, Japan RiverFront research Center (RFC)
(Information Committee)
Dr. Kazumasa Ito, CTI Engineering Co,LTD
(Technical Committee)
Prof. Naoki Shirakawa, Tsukuba Univ.

Activity Reports of River Restoration Network in 2012

CRRN: China River Restoration Network

<http://www.cnrrc.cn/>



In 2012, news of major activities by CRRN and the projects in which the staff of CRRN secretariat are involved are as the following:

1. Transfer CRRN secretary general

CRRN finishes the institution transfer under supervision of IWHR, and the recruitment scope includes the CRRN secretariat, technology committee and information committee. The CRRN staff mainly comprises experts who are from the departments of hydraulics, water environment of IWHR.

2. Participation in Workshop on Monitoring and Assessment Method for River and Lake Health

CRRN participated in Workshop on Monitoring and Assessment Method for River and Lake Health on 13 January, 2012. The workshop held by GWP (China) aims to discuss the techniques on the health assessment of river and lake.

3. Proposal submission in the 11th NPC and CPPCC

Delegates from CRRN had submitted a proposal on 'Awaken the sleeping levee – proposal on ecological reconstruction of hard-revetment of urban river' in the annual session of the National People's Congress (NPC) and Chinese People's Political Consultative Conference (CPPCC) in March 2012 in Beijing.

The proposal pointed out that in recent years most levees of urban river are covered with concrete boards which induced serious ecological environment problems. It is suggested that the government introduced policies to instruct the reconstruction of levees with ecological materials and eco-friendly techniques.



4. Holding the 6th China Urban Rivers & Lakes Integrated Management Senior Seminar

From October 29-30, 2012, the CRRN hosted the 6th China Urban Rivers & Lakes Integrated Management Senior Seminar at Beijing International Conference Center. The seminar was a parallel session of 'Water Expo China, 2012' organized by Chinese Hydraulic Engineering Society (CHES) with the support of Ministry of Water Resources (MWR) of the People's Republic of China.

The theme of the seminar is 'River ecological protection and water economy'. About 300 delegates participated the seminar. Experts from MWR and Beijing Water Authorities delivered key note speeches about mitigation of flood disaster in urban areas and problems encountered in pilot cities of water eco-system protection and restoration respectively. Secretary General of CRRN presented a report on theories and methods on



integrated planning of urban rivers. The seminar also set exhibition area for research institutes and enterprises to exhibit products and technologies related to river & lake eco-management.



5. CRRN investigation of Yongding River

In September 1, 2012, twelve team members from CRRN investigated sub-district section of Yongding River which was hit hard by a 61-year rainstorm flood in July 21. Investigation revealed that man-made factors were largely to blame for the scale of the destruction. Poor warning systems, industrial waste aggravated the disaster. Concerns have especially risen over flood diversion zone.



6. Supplying internship program to JRRN student

From September 23 to 28, a master degree candidate from Nagoya University had visited CRRN. On the one week tour, he was arranged to visit the hydraulic laboratory of IWHR, investigate urban rivers of Beijing and participate in academic report.

7. Establishing guidelines for water ecosystem protection and restoration

Sponsored by Bureau of Comprehensive Development Ministry of Water Resources, CRRN has undertaken the task of establishing design guidelines for water ecosystem protection and restoration from March, 2012 to December 2012. The guidelines being compiled are based on some works including summing up of relevant laws and regulations, domestic and overseas technical manuals, practical experiences from pilot projects in China organized by MWR, and successful cases on regulation of small and mid-sized rivers in China.

8. Modification of technological standard system of Ministry of Water Resources

CRRN is involved in the program of modification of technological standard system of Ministry of Water Resources, which embarks on the renewal of current standard system to satisfy the contemporary needs in hydraulic engineering.

9. Handover of ARRAN secretariat

During the preparatory stage of ARRAN secretariat handover, some key affairs were discussed by two sides in terms of revision of ARRAN Charter, succeeding ARRAN chairperson, bylaw relating to the ARRAN membership incl. organization structure, bylaw relating to the ARRAN secretariat duties incl. transfer rule. Agenda on the 7th GCM and 9th ARRAN International Forum were also discussed.

KRRN: Korea River Restoration Network

<http://www.krrn.net/>



JRRN: Japan River Restoration Network

<http://www.a-rr.net/jp/>

Website, Newsletter, News-mail

JRRN renewed its website in April 2012 to enhance information sharing in Japan. JRRN website provides information on topics related to river restoration in Japan and in other countries, examples of restoration projects, events, books, useful resources etc. in both Japanese and English. In addition, JRRN published "JRRN Newsletter" once per month, and distributed "JRRN News-mail" once a week. (Total 12 newsletters, 51 news mail in 2012).

JRRN's Symposium on River Environment

JRRN held the "How to see and examine river environment by local citizens: learning from PRAGMO" on 1st December 2012 in Tokyo for JRRN members and non members to share and exchange their knowledge and experiences on river restoration.

URL: <http://www.a-rr.net/jp/>**JRRN's Symposium in 2012****"How to see and examine river environment by local citizens: learning from PRAGMO"****1 December 2012 (Saturday): Tokyo - JAPAN****Program**

- **Opening:** 13:30-13:40 Opening address (Dr. Junzo Sago, JRRN Secretary General)

- **Lecture:** 13:40-15:10

Concept and application of the River Restoration Centre's Practical Guidance to Monitoring PRAGMO

(Dr. Jenny Mant, the River Restoration Centre, UK)

River Restoration at Arakawa River, Japan

(Dr. Sayuri Megumi, Arakawa River Basin Network, Japan)

- **Panel Discussion:** 15:25-17:00

Chair: Prof. Naoki Shirakawa
(Tsukuba Univ. / ARRN technical committee)

Panelist: Dr. Jenny Mant, Dr. Sayuri Megumi,
Mr. Shouzou Yamamichi, Mr. Masato Fjii

- **Closing:** 17:00 Closing



JRRN's Technical Exchange

JRRN held technical exchange with foreign organizations. In 2012, JRRN supported seven technical exchange/training programs

1) Kaohsiung County mission, Taiwan (Mar., 2011)



2) Future Resources Institute, Korea (Mar. 2012)



3) Participation in 1st Philippine International River Summit (May. 2012 Iloilo City)



4) Participation and presentation in 1st Malaysia National River Forum (Sep. 2012 Putrajaya)



5) Participation and presentation in 15th Int. Riversymposium (Oct. 2012 Melbourne)



6) Supporting JICA grass roots technical training program for Philippine (Nov. 2012 Tokyo)



7) Department of Irrigation & Drainage (DID), Malaysia (Dec., 2012: Tokyo)



URL: <http://jp.a-rr.net/jp/activity/public/>

JRRN's Publication

JRRN compiled the results of various activities as online publication, and promoted efforts to disseminate them through the JRRN Website so that they will be widely utilized.

■ Lecture Report on 8th International Forum

Publication of a report that summarizes lectures and question-and-answer sessions held at the ARR's 8th International Forum on Waterfront and Watershed Restoration

(Japanese/English)



■ Report on JRRN's Seminar

Release of report that summarizes lectures and question-and-answer sessions held at the 9th Mini-Seminar on River Environment through the JRRN website

(Japanese only)



■ Reference Guideline for Restoration by Eco-Compatible Approach in River Basin of Asia ver.2

Publication of "Reference Guideline for Restoration by Eco-Compatible Approach in River Basin of Asia ver.2"

(Japanese/English)



■ Cherry Blossom and Waterscape Photo Collection 2012

Publication of the "Cherry Blossom and Waterscape Photo Collection", a compilation of photos of waterscapes with cherry blossoms which were taken and sent by JRRN members in 2012

(Japanese only)



■ Report on "Participation in 1st Philippine International River Summit" & "Participation in Malaysia National River Forum"

Publication of summary reports on international conference in Asia.

(Japanese only)



■ Japanese edition of PRAGMO

Publication of "Japanese edition of PRAGMO: Practical River Restoration Appraisal Guidance for Monitoring Options" supported by the River Restoration Centre UK (RRC), translated by JRRN members voluntary and supervised by Prof. Naoki Shirakawa, ARR technical committee member.



TRRN: Taichung River Restoration Network<http://www.trrn.tw/index.do>**About TRRN**

Starting in 2008, the Water Resources Planning Institute initiated the "Taichung River Restoration Network website (TRRN)" project and is committed to collecting river restoration cases for this site and managing this platform. The site not only serves to promote river restoration awareness and related knowledge, but also offers the opportunity to exchange related ideas with and expose Taiwan to the international community.

This project is scheduled to complete in five years, and for this year, the key objectives include: 1) promoting the site by enriching website contents and attracting different user groups with the mobile app developed for them to search for river restoration related details ; 2) encouraging relevant river restoration efforts by inviting private organizations as pushers and enhancing awareness of the public, using courses as an incentive; 3) recruiting passionate environmentalists with aspirations for river restoration as civilian reporters to voice the efforts.

TRRN Activities in 2012**Main Issue Forum of River Community**

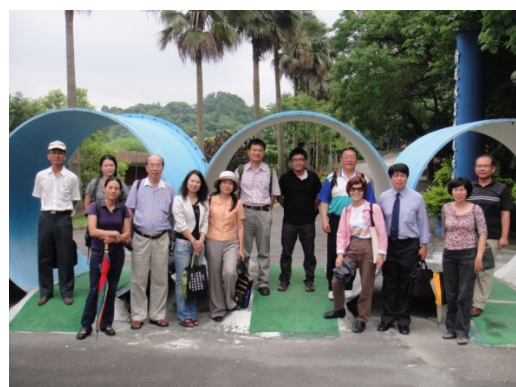
■ Date: May. 30, 2012

■ Location:

Environmental Education Center, Taipei Water Park

■ Objectives:

To promote river restoration awareness and attract attention of different user groups



Photos of Main Issue Forum of River Community

TRRN's Contribution in 2012

Restoration Microfilm and APP (Nov. 2012)



To consolidate all river restoration information in Taiwan and construct complete river restoration knowledge system, the Water Resources Planning Institute, Water Resources Agency, MOEA, R.O.C. established the Taichung River Restoration Network (TRRN), as the platform for exchange of information and experiences. However, as results from relevant river restoration efforts by the government and private sectors are rarely known to the public, TRRN hopes to promote them with heart-warming microfilms so that audiences can gain a deeper understanding about the river restoration efforts.

The first waves of the microfilms are centered on the Erren River restoration story and the before and after comparison will be featured. To watch this film whenever possible, the Water Resources Planning Institute has developed the first free APP in R.O.C., "Restore Rivers Let's Go", to feature updates about river restoration efforts. This educational and entertaining mobile APP not only can play microfilms, but is also further integrated with the LBS positioning feature for users to search for waterfront activities, water quality and aquatic attractions of the nearby rivers and environmental education facilities.



Watch "Erren River Concerto" microfilm:

http://www.youtube.com/watch?v=xk6znqogKYM&list=HL1352961782&feature=mh_lolz

Download "Restore Rivers Let's Go APP (Android)":



ARRN Charter

CHARTER OF THE ASIAN RIVER RESTORATION NETWORK

Article 1 Name

This international information exchange network shall be called "Asian River Restoration Network" (hereinafter referred to as ARRN).

Article 2 Objectives

ARRN is a non-political organization for exchanging knowledge and technical information on the restoration of rivers and watersheds in Asia. The primary objective is to provide various opportunities for river restoration related organizations and individuals to share and exchange knowledge and experiences through this network, aiming to enrich the participants' knowledge and scientific technology through mutual and multilateral cooperation.

Article 3 Categories of Activities

In order to attain the objectives stated above, activities in the following categories shall be carried out in relation to the restoration of rivers and watersheds:

- Activities for technical support
- Activities for research and development
- Activities for publication
- Activities for public relations

Article 4 Particulars of Activities

ARRN shall carry out the following activities in relation to the restoration of rivers and watersheds to attain the objectives defined in the Objectives.

- Activities involving exchanging and sharing information through newsletters to be distributed on the web-site and by e-mail.
- To hold workshops and forums with a view to provide a platform to introduce or compile information on the latest global waterfront situation and case studies of improved waterfront environment.
- To draw up or revise guidelines for the restoration of rivers and watersheds.
- To conduct joint studies to be undertaken by participating countries to support the provision of information for study purposes.
- To exchange lecturers from participating countries.
- To translate and publish books on the restoration of rivers and watershed.

ARRN will expand the scope of activities as required.

Article 5 Eligibility for Participation and Registration Procedure

1. ARRN shall accept applicant from administrative institution, private organization, researcher and individual to be a member of this network as long as they will follow the objectives of this network.
2. All participants shall register themselves with the Secretariat following the approach below.
3. In a country/region where "River Restoration Network" (hereinafter referred to as RRN) secretariat has already been established, applicants to ARRN should be registered through the RRN secretariat. In any country/region where there is no RRN, applicants to ARRN should be registered through the ARRN secretariat directly.

Article 6 Organization

ARRN is operated by the Governing Council. In this council, Information Committee and Technical Committee may be established to perform routine duties.

Article 7 Governing Council

1. The Governing Council make decisions on the management of ARRAN such as the organizational framework and action plans.
2. The Governing Council is composed of the representative of each national RRN.
3. A Chairperson shall be appointed for the Governing Council, who is a qualified expert in the field of river restoration and his/her term of office is 2 years.
4. The chairperson will be nominated by each national RRN and be elected at the Governing Council meeting.
5. In the Governing Council, the following items can be proposed by any ARRAN participant and the Secretariat shall be deliberated:
 - Decisions on the structure of the Governing Council and the Secretariat.
 - Decisions on the execution, revision and cancellation of this Charter
 - Decisions of the annual action plan and its implementation.
 - Other matters put on the agenda by participants

Article 8 Information Committee

1. The ARRAN Information Committee aims at preparing future vision and activities of ARRAN and sharing knowledge by establishing a toolbox.
2. Information Committee member shall be appointed by the representative of national RRN and his/her term of office is 2 years.

Article 9 Technical Committee

1. The ARRAN Technical Committee aims at providing the technical methods for river restoration including the guideline for Asian countries.
2. Technical Committee member shall be appointed by the representative of national RRN and his/her term of office is 2 years.

Article 10 Secretariat

1. A Secretariat shall be established for the Governing Council. A Secretary General shall be appointed for the Secretariat by the chairperson.
2. The secretariat shall be appointed for the Governing Council by a rotation of national RRN. Consecutive re-nomination is possible and shall be agreed by the Governing Council Meeting. The term of office of the Secretariat is 2 years.
3. The Secretariat shall hold the Governing Council meeting.
4. The Secretariat shall submit an action plan and other matters for decision to the Governing Council.

Article 11 Funding for Activities

Funding for the activities of the Secretariat shall, in principle, be provided by the participants themselves who take charge of the Secretariat. However, cooperation may be solicited from other participants when necessary.

Article 12 Execution, Cancellation and Revision

This Charter shall come into force after it is signed by the representative of each national RRN and may be revised or canceled as required through deliberations in the Governing Council.

Memorandum:

The Charter was primarily proposed in accordance with the discussions between three organizations, China Institute of Water Resources and Hydropower Research (IWHR), Korean Institute of Construction Technology (KICT) and Foundation for Riverfront Improvement and Restoration of Japan (RFC) in November 2006.

The Charter was amended by the fourth Governing Council on September 30, 2009, the fifth Governing Council on September 15, 2010, and the sixth Governing Council on November 11, 2011.

ARRN Bylaws

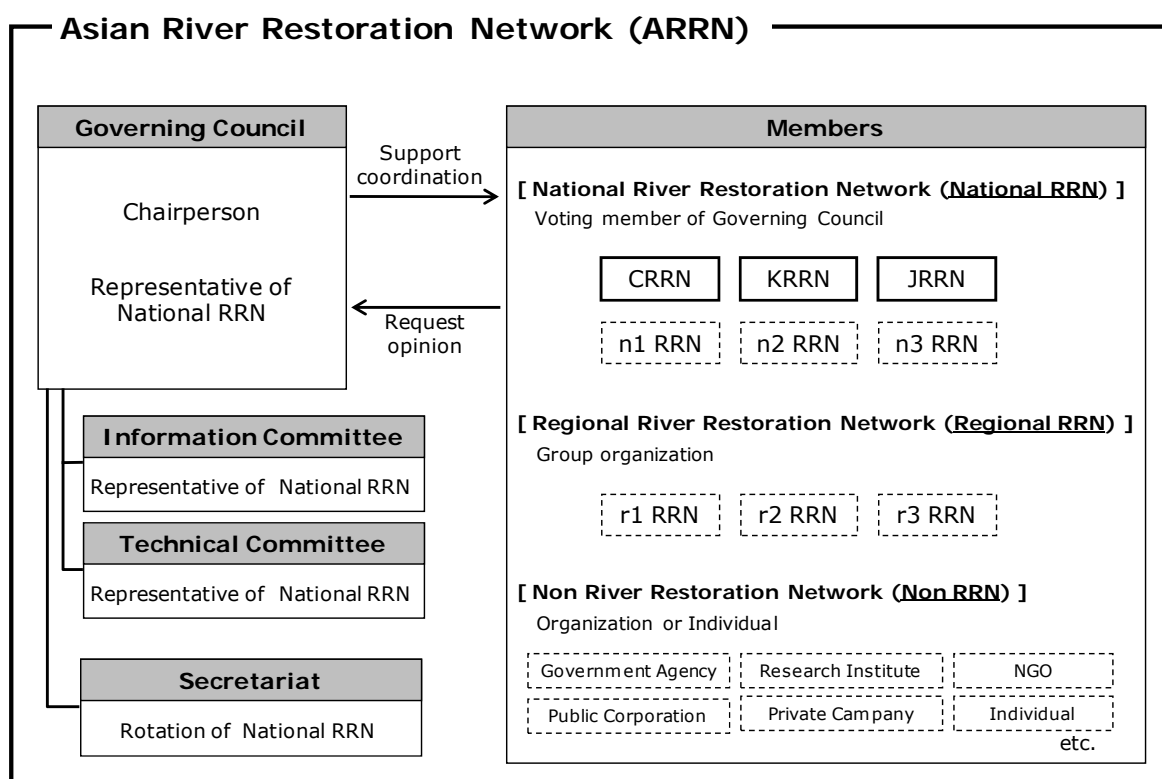
BYLAWS RELATING TO THE MEMBERSHIP ENROLLMENT PROCEDURE OF THE ASIAN RIVER RESTORATION NETWORK

A. Objectives

This bylaw intends to complement Article 5 and Article 6 of *ARRN Charter*.

B. Organization Structure

1. Organization of ARRN shall be as shown in the schematic below.



ARRN organization structure

2. ARRN members are classified as National RRN, Regional RRN and Non RRN, those are possible to participate in activities specified in Article 4 of the *ARRN Charter*.

- National RRN is a representative of River Restoration Network in a country which is approved by the Governing Council. Its representative shall participate in the Governing Council and be entitled to vote for discussion based on Article 7 of the *ARRN charter*. In addition, one representative possibly participates as member in Information committee and Technical committee respectively.
- Regional RRN is a group organization, with more than twenty individuals or five organizations membership respectively, approved by the Information Committee. Its representative is able to participate in the Governing Council with no voting right.
- Non RRN is an organization or individual member approved by the ARRN secretariat.

C. Applying for Membership

1. Groups and individuals to join the ARRAN perform the following steps in the procedure as Regional RRN or Non RRN. The membership application procedure shall be advertised on the ARRAN website.
 - (1) The application of Regional RRN shall be submitted to ARRAN secretariat.
 - (2) The application of Non RRN shall be submitted to the National RRN or Regional RRN existing in the country or region of the applicant. Where there is no National RRN or Regional RRN, the application shall be submitted to the ARRAN secretariat directly.
2. Application for Regional RRN membership shall be declared the followings.
 - (1) Profile of Organization
 - Name of Organization
 - Website of Organization (URL)
 - Name of Representative and Position
 - Field and Outline of Activity
 - Total number of members (organizations and individual respectively)
 - (2) Contact Information
 - Name of Contact Person and Position
 - Address
 - Telephone, Fax and Email
 - (3) Other matters as reference
3. Any groups or individuals applied for Non-RRN membership shall be declared the followings.
 - (1) Organization
 - 1) Profile of Organization
 - Name of Organization
 - Name of Representative and Position
 - Field and Outline of Activity
 - 2) Contact Information
 - Name of Contact Person and Position
 - Address
 - Telephone, Fax and Email
 - 3) Other matters as reference
 - (2) Individual
 - Name and Title
 - Organization (if any)
 - Field of activity
 - Address
 - Telephone, Fax and Email
 - Other matters as reference

D. Judging and Approval on Membership

1. Receiving the application for Regional RRN, ARRAN secretariat shall promptly report to the Information Committee. Judging shall be conducted in the Information Committee within one month after receiving membership applications of the Regional RRN to determine whether Regional RRN or Non RRN. ARRAN secretariat shall respond to the applicant the results.
2. After receiving the application for Non RRN, ARRAN secretariat will respond promptly to the applicant the results.
3. Transition from the Regional RRN to National RRN will be determined by the discussion in the Governing Council, if Regional RRN gave application to the Governing Council through the Secretariat.

Memorandum:

This bylaw is prepared by the ARRAN Information Committee.

- Enacted by the ARRAN Governing Council Meeting (email), 13 September, 2012

BYLAWS RELATING TO THE SECRETARIAT OF THE ASIAN RIVER RESTORATION NETWORK

A. Objectives

This Bylaw declares the implementation and transfer of the Asian River Restoration Network secretariat.

B. Term of Office

Term of office of the secretariat is two years. Two year period shall commence on the day of the ARRN Governing Council meeting.

C. Election of Succeeding Secretariat

The election and appointment of the succeeding secretariat shall be governed by the ARRN Governing Council meeting one year before the secretariat is changed in terms of keeping organizational continuity.

D. Allotment of Secretariat Member

1. Secretary General
 - Generalization of the secretariat
 - Call of the Governing Council meeting
 - Submission of an action plan and other matters for decision to the Governing Council
 - Public relations with the other organizations
2. Secretariat
 - Assistance of the secretary general
 - Implementation of division of duties of the secretariat establishing separately

E. Division of Duties of the Secretariat

The division of duties of the secretariat is as follows. Other national RRN secretariats can share some secretariat duties for smooth management when necessary based on discussion between each secretariat.

1. Management
 - Charge of ARRN membership list
 - Charge of ARRN charter, bylaws, action plans, Successive Governing Council member list
 - Charge of minutes of ARRN Governing Council meeting and other official meeting
 - Information sharing with all national RRN secretariats regarding the following public relations activities.
2. Meeting and Event Preparations
 - Preparation for the Governing Council
 - Preparation for the ARRN forum
 - Assistance for the Information Committee
 - Assistance for the Technical Committee
 - Preparation for other events sponsored
3. Public Relations
 - Procedure to membership subscribe/unsubscribe
 - Correspondence to non-member/general public
 - Announcement and reporting to stakeholder about sponsorship event
 - Website operation
 - Newsletter publication
 - Annual report publication
 - Cooperation with other organizations

4. General Affairs

- Arrangement and charge of reports/documents on secretariat work
- Arrangement and charge of ARRN publications
- Arrangement and charge of report on revenue and expenditure

F. Transfer of the Secretariat

After the succeeding secretariat is elected, smooth and prompt transfer from the existing secretariat to the next secretariat shall be accomplished within one year as follows:

1. With the transfer of the secretariat, new division of duties will be determined by consultation between the succeeding secretariat and other national RRN secretariats.
2. Transfer of necessary documents and electric files for secretariat work described in the article E "Division of Duties of the Secretariat".
3. Report on the transfer of the new secretariat
 - Report to the Governing Council
 - Report to the ARRN member
 - Report to the associated organizations

G. Funding for Secretariat

Funding for the activities of the secretariat shall be provided by the National RRN which takes charge of the secretariat in accordance with the Article 11 of the *ARRN Charter*. However, responsibility for expense is decided by all RRN's discussion if necessary.

Memorandum:

This bylaw is prepared by the ARRN Information Committee.

- Enacted by the ARRN Governing Council Meeting (email), 13 September, 2012

How to become an ARRAN member

Joining the ARRAN is Free!

To become member of ARRAN, please read the following instruction, and send a membership application form to secre@arran.net by email.

Membership Category

There are three membership categories. Please refer to page-3 in this report in detail.

- (1) National River Restoration Network (National RRN)
- (2) Regional River Restoration Network (Regional RRN)
- (3) Non River Restoration Network (Non RRN)

Membership Benefits

- (1) Easy obtaining of domestic and foreign information on river restoration through website, email, and direct contact to ARRAN secretariat or other ARRAN 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.
- (2) Holding opportunity to introduce member's organization and their activities to other ARRAN members
- (3) A coordinated business with various foreign countries or organizations
- (4) Holding management support such as international seminar, workshops and establishment of regional river restoration network by ARRAN secretariat

Possible Tasks

- (1) Members will participate in ARRAN 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 ARRAN described in the charter. (<http://www.arran.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 ARRAN events such as international forum and the workshop by each RRN sponsoring. Also, every member can hold original workshop by receiving the backup of ARRAN 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 ARRAN with related persons in your organization.

Applying for Membership

Groups and individuals to join the ARRAN perform the following steps in the procedure as Regional RRN or Non RRN, and are requested to submit a applicable membership application form by email.

- (1) The application of Regional RRN shall be submitted to the ARRAN secretariat.
- (2) The application of Non RRN shall be submitted to the National RRN or Regional RRN existing in the country or region of the applicant. Where there is no National RRN or Regional RRN, the application shall be submitted to the ARRAN secretariat.

Judging and Approval

- (1) Receiving the application for Regional RRN, ARRAN secretariat promptly reports to the Information Committee. Judging will be conducted in the Information Committee within one month after receiving membership applications of the Regional RRN to determine whether Regional RRN or Non RRN. ARRAN secretariat responds to the applicant the results.
- (2) After receiving the application for Non RRN, ARRAN secretariat responds promptly to the applicant the results.
- (3) Transition from the Regional RRN to National RRN will be determined by the discussion in the Governing Council, if Regional RRN gave application to the Governing Council through the Secretariat.

ARRAN Membership Application Form is available below.

<http://www.arran.net/membership/registration.html>



Asian River Restoration Network secretariat

China River Restoration Network (CRRN)

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China Institute of Water Resources and Hydropower Research (IWHR)

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Website: <http://www.a-rr.net/>