



8<sup>th</sup>  
World Water  
Forum

Brasília-Brazil  
2018

# From Data and tools to information: Knowledge for decision-making.

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UNESCO International Hydrological Programme



# UNESCO's International Hydrological Programme (IHP)

- Sole intergovernmental programme of the UN system that is dedicated to water-related science, management, education, and capacity-building
  - 169 Members – 1 Bureau – 1 Council
  - UNESCO Water Family network
- To support Member States and contribute their capacity for science-based, sound water resources management



# A unique and global network: the UNESCO Water Family

**UNESCO staff** located at the Paris headquarters of the **IHP Secretariat** and the **Regional Hydrologists** located in the UNESCO field offices

The **World Water Assessment Programme (WWAP)**, with its secretariat hosted and led by UNESCO in Italy and which produces the periodic **World Water Development Report**

**IHP National Committees** representing the Programme in **169** Member States

**42 UNESCO Water Chairs**

**37 water-related Category 2 Centres** under the auspices of UNESCO

Together, they represent more than **3000** water experts worldwide



**“Data is the new oil. Data centres are the factories of the 21st century. Data is the lifeblood of decision-making. It provides the raw material for accountability”**

Ban Ki-Moon, former United Nations Secretary-General during his official visit to Republic of Korea, Umoon at two forums on May 20 2015

# Universal access to information and knowledge: Open access policies

*“You can’t manage what you don’t know” !*

Achievement of SDG 6 is conditional to the improvement of **access to and dissemination of knowledge** on water

**OPEN**  **ACCESS**

## Universal access to information and knowledge: Information and communications tools

# Free and Open Source Software combine openness and ICTs

- Practical instrument for development
- Tool to reduce the knowledge- and capacity-access gap between industrialized and developing countries

## Empowering practitioners to creating Data

# Hydro Free and/or Open-source software Platform of Experts

→ To **support** Member States, Institutions, People in using and developing FOSS for **the effective management of water resources** in their respective countries.





## FREE and open source software tools for WATER resource management

→ Open source and free **GIS**  
**integrated modeling platform**  
for promoting Water Resources  
Management.

Consortium  
19 partners

EU  
Horizon  
2020  
project

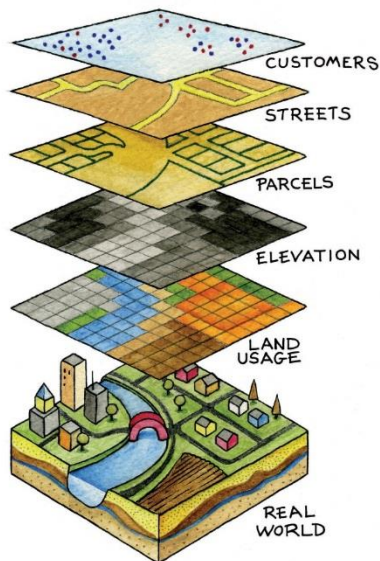
Total  
Budget  
>1,4 M €



# Water Information Network System - WINS

## Online participatory platform for sharing data, information and knowledge on water

A georeferenced  
information  
database



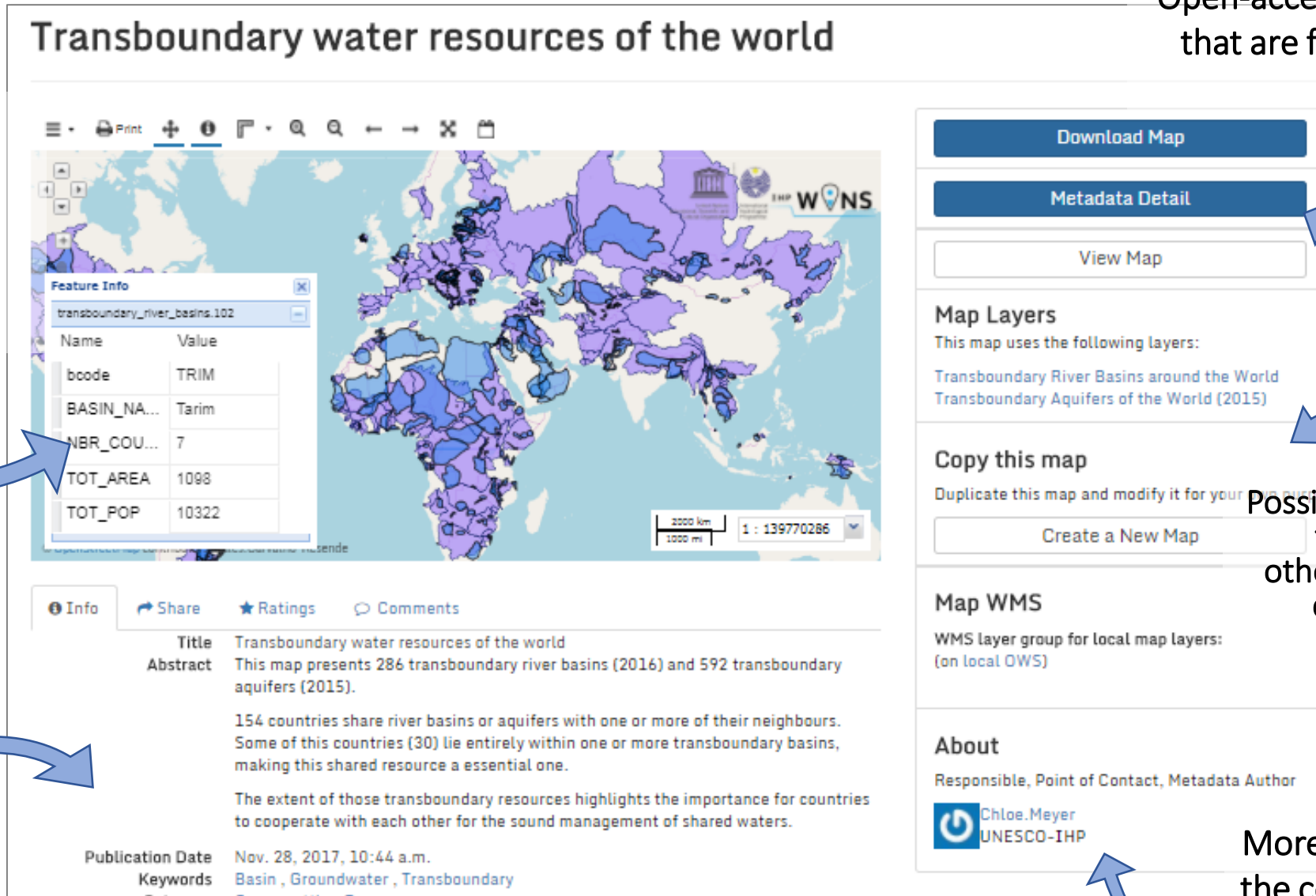
A knowledge sharing platform



A networking hub



# WINS is a georeferenced information database



**Transboundary water resources of the world**

Feature Info

Name	Value
transboundary_river_basins.102	
boode	TRIM
BASIN_NA...	Tarim
NBR_COU...	7
TOT_AREA	1098
TOT_POP	10322

Map Layers

This map uses the following layers:

- Transboundary River Basins around the World
- Transboundary Aquifers of the World (2015)

Copy this map

Duplicate this map and modify it for your purposes


Create a New Map

Map WMS

WMS layer group for local map layers:  
(on local OWS)

About

Responsible, Point of Contact, Metadata Author

 Chloe Meyer  
UNESCO-IHP

Info Share Ratings Comments

Title Transboundary water resources of the world

Abstract This map presents 286 transboundary river basins (2016) and 592 transboundary aquifers (2015).

154 countries share river basins or aquifers with one or more of their neighbours. Some of this countries (30) lie entirely within one or more transboundary basins, making this shared resource a essential one.

The extent of those transboundary resources highlights the importance for countries to cooperate with each other for the sound management of shared waters.

Publication Date Nov. 28, 2017, 10:44 a.m.

Keywords Basin, Groundwater, Transboundary

Open-access information that are freely available for download

Map viewer with several tools for analysis  
Able to retrieve information from the layers

Standardized metadata

Possibility to combine those layers with other information to create new maps

More information on the contributors who shared this map

# WINS is a georeferenced information database

**LAYERS**

- Overlays
  - Transboundary Aquifers of the World (2015)
  - Transboundary River Basins around the World
- Base Maps
  - OpenStreetMap
  - MapBox Streets
  - MapBox Satellite Streets
  - Humanitarian OpenStreetMap
  - UNESCO GEODATA
  - UNESCO
  - No background

**Query**

Query by attributes

Match **all** of the following:

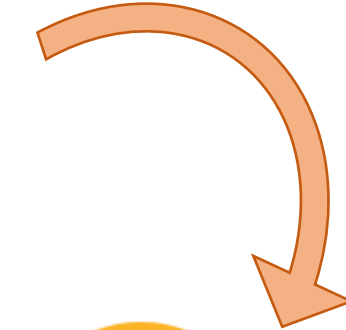
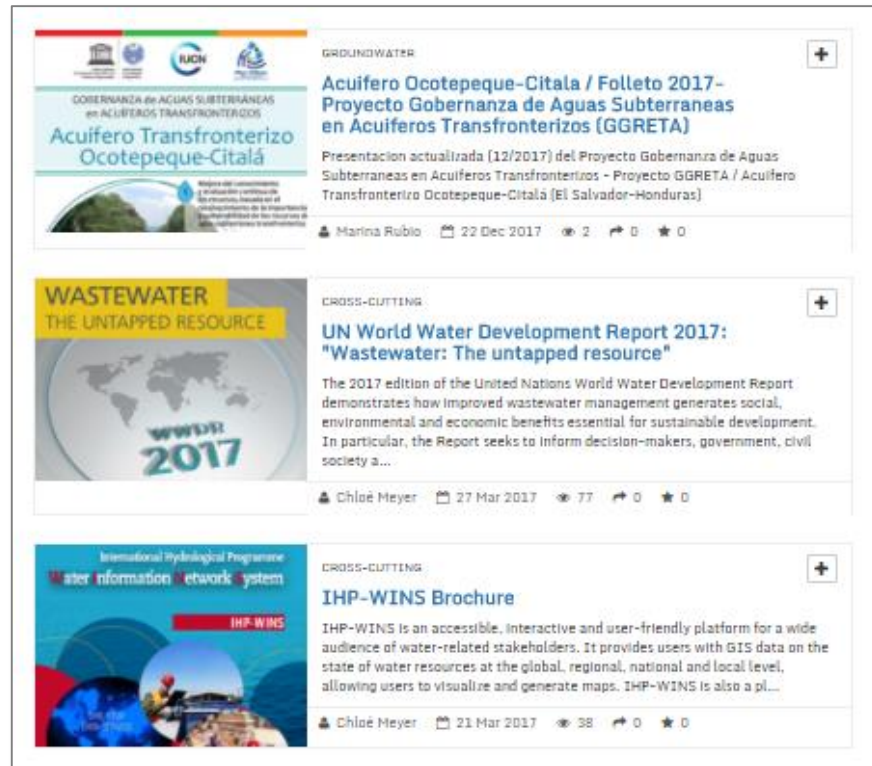
- NBR\_COUNTR = 4
- add condition

**Table**

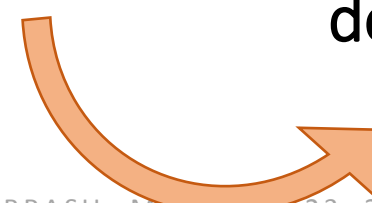
bcode	BASIN_NAME	NBR_COUNTR	TOT_AREA	TOT_POP
ALSK	Alsek	2	28	1
AMUR	Amur	4	2093	65217
AMZN	Amazon	9	5888	32164
ARAL	Aral Sea	9	1219	50052

# WINS is a knowledge sharing tool

**INSTITUTIONAL MEMORY** created through several types of documents.  
Can be viewed and downloaded

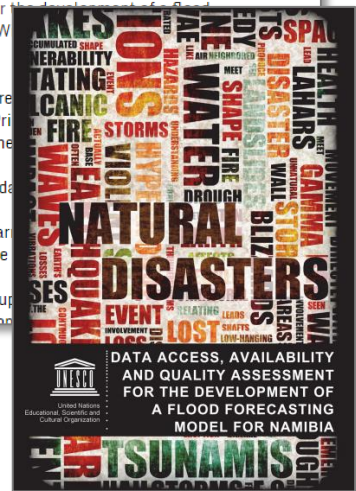


Transparency and traceability:  
A unique **Digital Object Identifier** is embedded in the metadata



<b>Title</b>	Knowledge platform - Phase I: data access, availability and quality assessment for the development of a flood forecasting model for Namibia
<b>Abstract</b>	The 2010 - 2011 floods in Namibia caused widespread damages over seven regions in the country. Some 200 000 people were displaced with a death toll of over 90 being recorded. The President of the Republic declared a state of emergency at the end of March 2011, and various national and international partners responded in diverse manners to the call for assistance and collaboration in addressing flood management issues. UNESCO also responded to the call by sending a team of hydrologists on an exploratory mission to determine areas in which UNESCO can further collaborate with Namibia in addressing flood management. The team visited Namibia in July 2011, and presented its initial findings to the Prime Minister on 29 July 2011.
<b>Publication Date</b>	Feb. 13, 2018, 5:49 p.m.
<b>Keywords</b>	Capacity-building , Flood
<b>Category</b>	Water education
<b>Regions</b>	Namibia
<b>Responsible</b>	Chloe.Meyer
<b>Group</b>	Theme 6: Water education
<b>DOI</b>	10.29104/WINS.D.0001.2018
<b>Maintenance Frequency</b>	There Are No Plans To Update The Data
<b>Restrictions</b>	Unless otherwise specified, no restriction applies.
<b>Edition</b>	Filali-Meknassi Y., Ouarda T., Wilcox C. (2014). Knowledge platform - Phase I: data access, availability and quality assessment for the development of a flood forecasting model for Namibia. Final Report. W
<b>Language</b>	English
<b>Supplemental Information</b>	The findings included: <ul style="list-style-type: none"> <li>• Strong political will and commitment in addressing flood management at the coordination at the level of the Office of the Prime Minister;</li> <li>• The provision of national budget for flood emergency relief;</li> <li>• The fact that a DDR policy is in place;</li> <li>• Uncertainty in forecasting flood levels, inundation and the impact on communities affected, etc.</li> <li>• Limited capacity for monitoring and early warning systems;</li> <li>• Sub-optimal flow of information between the national, regional, and community);</li> <li>• Mandates of the various institutions and group organizations and the</li> </ul>

True ID card for any document shared



# WINS is networking hub

Groups are administered by **MANAGER(S)**

**Namibia**  
Group for Namibia  
3 Members 1 Manager 19.10.2017

**Youth for Water**  
This group is dedicated to youth and young professionals involved in the water sector.  
14 Members 1 Manager 6.11.2017

**UNESCO-IHP Category 2 Centers**  
This group is dedicated to Category 2 Centers, which are water-related centres under the auspices of UNESCO, and which work on relevant thematic and geographic priorities in their areas of expertise. Since Member States have realized the potential of these centres, the network has been rapidly expand ...  
1 Member 1 Manager 29.5.2017

**UNESCO-IHP**  
UNESCO International Hydrological Programme is the only intergovernmental programme of the UN system devoted to water research, water resources management, and water-related education and capacity building.  
7 Members 1 Manager 29.5.2017

**Armenia**  
Group for Armenia  
3 Members 1 Manager 19.10.2017

**Theme 5: Ecohydrology**  
In the face of increasing climate instability, demographic growth and human migration, there is an urgent need to reverse the degradation of water resources and stop further decline in biodiversity. Ecohydrology uses the understanding of relationships between hydrological and biological processes at ...  
1 Member 1 Manager 19.10.2017

**Muhammad Wasif Bashir Babar (wasif.babar)**

**Muhammad Wasif Bashir**

**Position** Founding President

**Organization** Pakistan Youth Parliament for Water

**Location** wasifbashir15@gmail.com 37150 Faisalabad Punjab PAK

**Voice** +923007913418

**Fax** Not provided.

**Description** Mr. Muhammad Wasif Bashir Babar is son of soil of Pakistan and a very energetic young professional & Researcher in the field of Water, Ecological Sanitation, Hygiene (WASH) Climate Change , Ecosystem, and Disaster Risk Reduction. He hold Master of Science (MS) degree in Environmental Science with specialization on "Sustainable Water Sanitation Health & Development" white Master of Arts (MA) in Sociology with Specialization in Civic Engagement and Good Governance. He had been working in social & WASH development sector since 2008 with diversified national & international Research & humanitarians organizations. He is youth motivator and working to engage the young professionals in achieving the global commitments on Sustainable Development Goals (SDGs) Agenda 2030 especially for SDGs 5, 6 & 13. Mr. Babar is an Active Member of World Youth Parliament for Water (WYPW), Asia Pacific Youth Parliament for Water (APYPW). He is leading

Details on the profile and activities

Groups membership

In groups, contributors can connect with each others

Exchange messages

**Messages**

Inbox All

With	Subject	Last Sender	Preview	Delete?
Theme 6: Water education	Group work - layer on water education	me	Dear all, Many thanks for your great work on t...	Delete
vincent.durand	Layer uploaded	me	Hi Vincent, I am writing to you in regards to ...	Delete
gabin.archambault	test	gabin.archambault	Hello, ...	Delete
Youssef.Filali-Meknassi	Layer uploaded	Youssef.Filali-Meknassi	great!...	Delete

Update on each other's work and contributions

**Activity Feed for Theme 6: Water education**

All Layers Maps Comments

- vincent.durand uploaded Water Poverty Index (2002) 20 hours, 39 minutes ago
- vincent.durand uploaded Water Poverty Index (2002) 20 hours, 40 minutes ago
- Chloe.Meyer created Transboundary water resources of the world by Chloe.Meyer 3 months, 1 week ago
- Chloe.Meyer a charge Mean water footprint of national consumption per capita (1996-2005) 3 months, 2 weeks ago
- gabin.archambault uploaded Mean grey water savings through trade of agricultural and industrial commodities (1996-2005) 3 months, 3 weeks ago
- gabin.archambault created Water points in Central America by gabin.archambault 4 months, 1 week ago
- gabin.archambault uploaded Indigenous access to piped water in Latin America and the Caribbean 4 months, 1 week ago
- gabin.archambault uploaded Non-Indigenous access to piped water in Latin America and the Caribbean 4 months, 1 week ago
- gabin.archambault uploaded Indigenous access to improved sanitation in Latin America and the Caribbean 4 months, 1 week ago

Building capacity through an online community of practice

## In conclusion, IHP's activities contribute to:

- Worldwide efforts towards sound, **science-based management** of water resources
- Bringing different water stakeholders (agencies, Member States, etc.) **together to produce and circulate knowledge**
- **Visualizing and sharing** clear and understandable water-related information
- Feeding **decision-making and policy recommendations**

**THANK YOU FOR YOUR  
ATTENTION!**



UNESCO  
Organisation  
des Nations Unies  
pour l'éducation,  
la science et la culture

IHP  
Programme  
Hydrologique  
International

WINS





8<sup>th</sup>  
World Water  
FORUM

Brasilia-Brazil  
2018

Sharing Water

Organization



MINISTRY OF THE  
ENVIRONMENT



Support

