BEST PRACTICES FOR INTERNATIONAL WATER EDUCATION:

CASE STUDIES FROM THE FIELD

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Project WET Foundation

Worldwide Water Education

www.projectwet.org

"It is widely agreed that education is the most effective means that society possesses for confronting the challenges of the future. Indeed, education will shape the world of tomorrow (UNESCO, 1997)."

Project WET

What is Project WET?

- 501(c)(3) dedicated to water education for all
  - **Materials** - water education curricula, lesson plans, kits
  - **Training** - workshops and seminars
  - **Water and Education Professionals -** delivery networks in 35+ countries
  - **Special Events** - Water festivals, World Water Day, World Water Forum, and more

Mission, Approach and History

- **Mission**
  - To reach children, parents, educators and communities of the world with water education
- **Goal**
  - Awareness and understanding that results in informed decisions and action
- **Pedagogy**
  - hands-on water education; inquiry-based, interactive
- **History**
  - Created in 1984 to educate teachers and students about the importance of water
  - 2008:
    - 300+ activities and more than 50 publications
    - All 50 US states plus DC
    - 41 countries on five continents in the network implementing Project WET/partnered with the Project WET Foundation
    - More than 40,000 educators trained and over 1 million students reached annually with water education

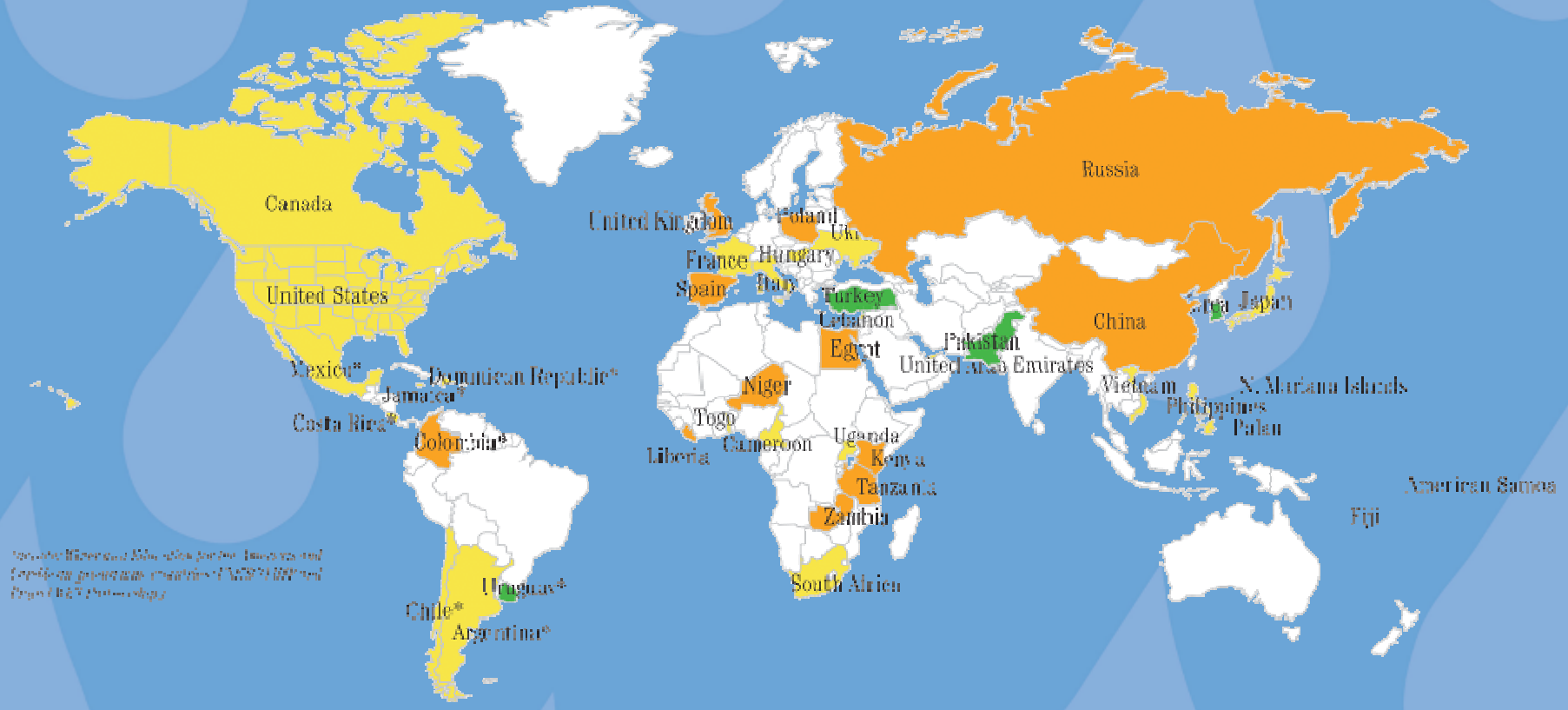
Why Water Education?

- Global water problems continue to escalate and affect the quality of life for billions of people.
- Because of inequitable distribution of water and increased demand, understanding, innovation and cooperation will be necessary to ensure clean water for the predicted population of 8 billion in 2025.
- For peace, we must recognize that water does not divide, but instead connects us.

Why Project WET?

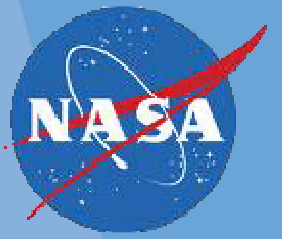
- By empowering students through an understanding of the relationship between their health and well-being and water resources, teachers can catalyze change in their communities.
- Educational theorists maintain that for people to learn, they must find pleasure and joy in learning.
- Students, teachers and community members of diverse cultures, often with divergent learning styles, use Project WET.

Global Project WET Network: 41+ countries



Project WET Partners

USAID
FROM THE AMERICAN PEOPLE



Organización
de las Naciones Unidas
para la Educación,
la Ciencia y la Cultura

Programa
Hidrológico
Internacional

WDCS
Whale and Dolphin Conservation Society

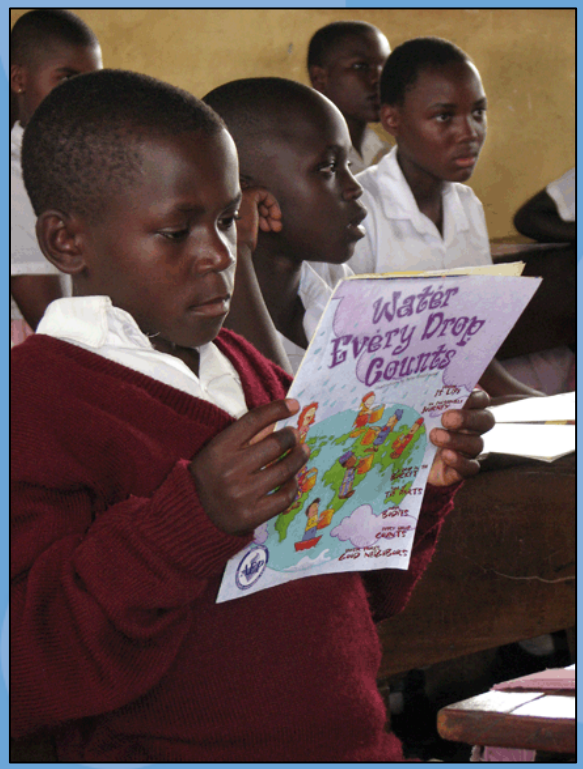
World
Meteorological
Organization
Weather • Climate • Water

United States Department of Agriculture
Natural Resources Conservation Service

conserving
natural resources
for our future

Case Studies from the Field

1. Latin America and the Caribbean in partnership with UNESCO-IHP
2. Africa Project in partnership with USAID



1. UNESCO-IHP and Project WET Joint Project: Water and Education in Latin America and the Caribbean

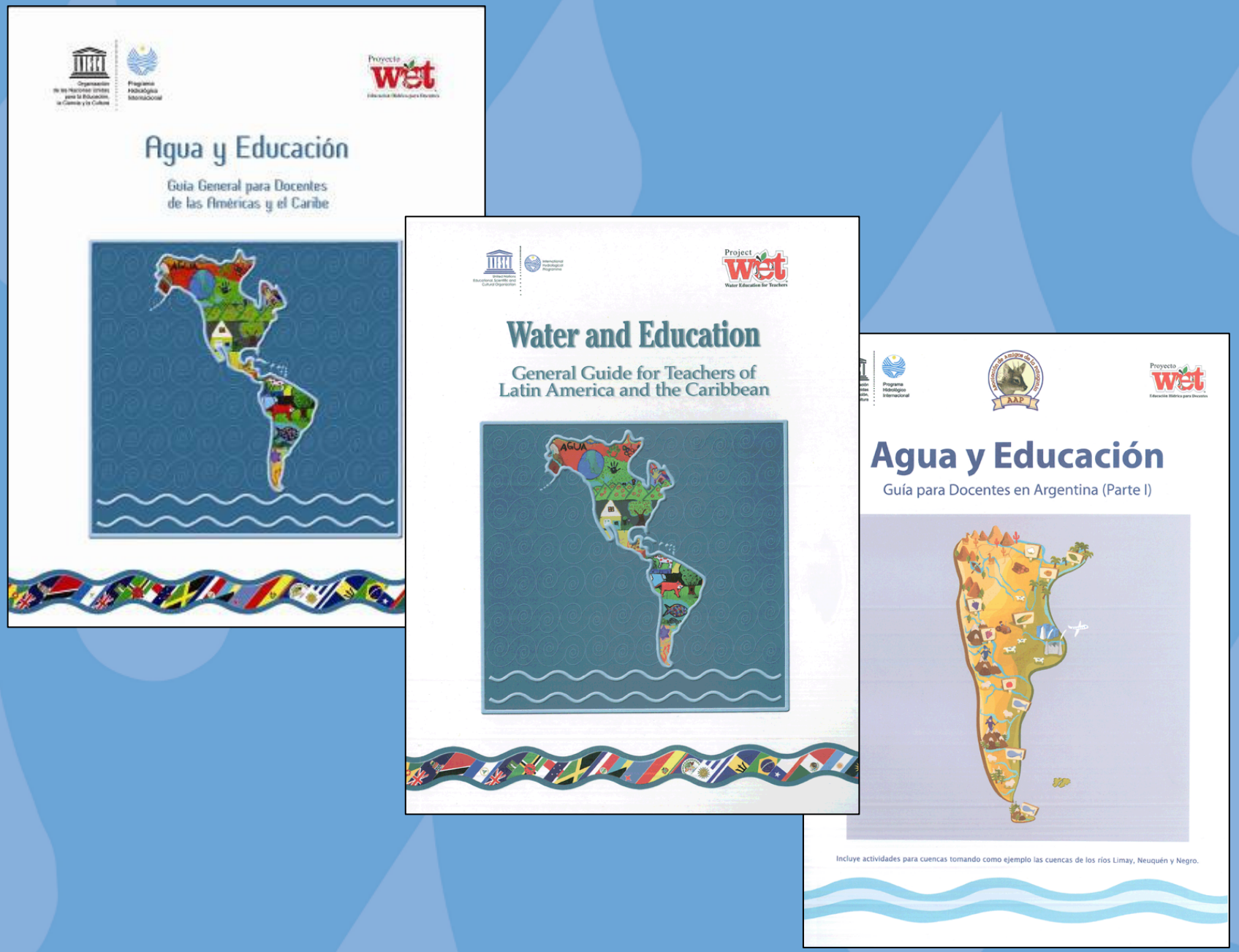
Establish Water and Education *programs through host institutions in every Country (27) in Latin America and the Caribbean by 2015.*

- Model
  - Uruguay
  - Chile
  - Jamaica
- Publications
  - Spanish for Latin America and the Caribbean
  - English-Speaking Caribbean
  - Argentina

UNESCO
Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura

Programa Hidrológico Internacional

Project WET


Agua y Educación
Guía General para Docentes
de las Américas y el Caribe
Water and Education
General Guide for Teachers of
Latin America and the Caribbean
Agua y Educación
Guía para Docentes en Argentina (Parte I)
Incluye actividades para cuencas tomando como ejemplo las cuencas de los ríos Limay, Neuquén y Negro.

LAC Project: Methodology

1. Established partnership with UNESCO-IHP Regional Office
2. Existing LAC WET partners (since 1996) expressed need for a regional guide that could be customized as needed by country
3. Several Needs Assessment and Development Workshops held in various LAC countries between 2003 - 2007
   - Hundreds of teachers, government officials, water experts, NGOs, implementers
   - Builds ownership from the start of the project

3. 30 of 300 activities chosen for their topics and relevance to LAC water situation. Customized for the region and translated into Spanish and British English; included 3 UNESCO activities

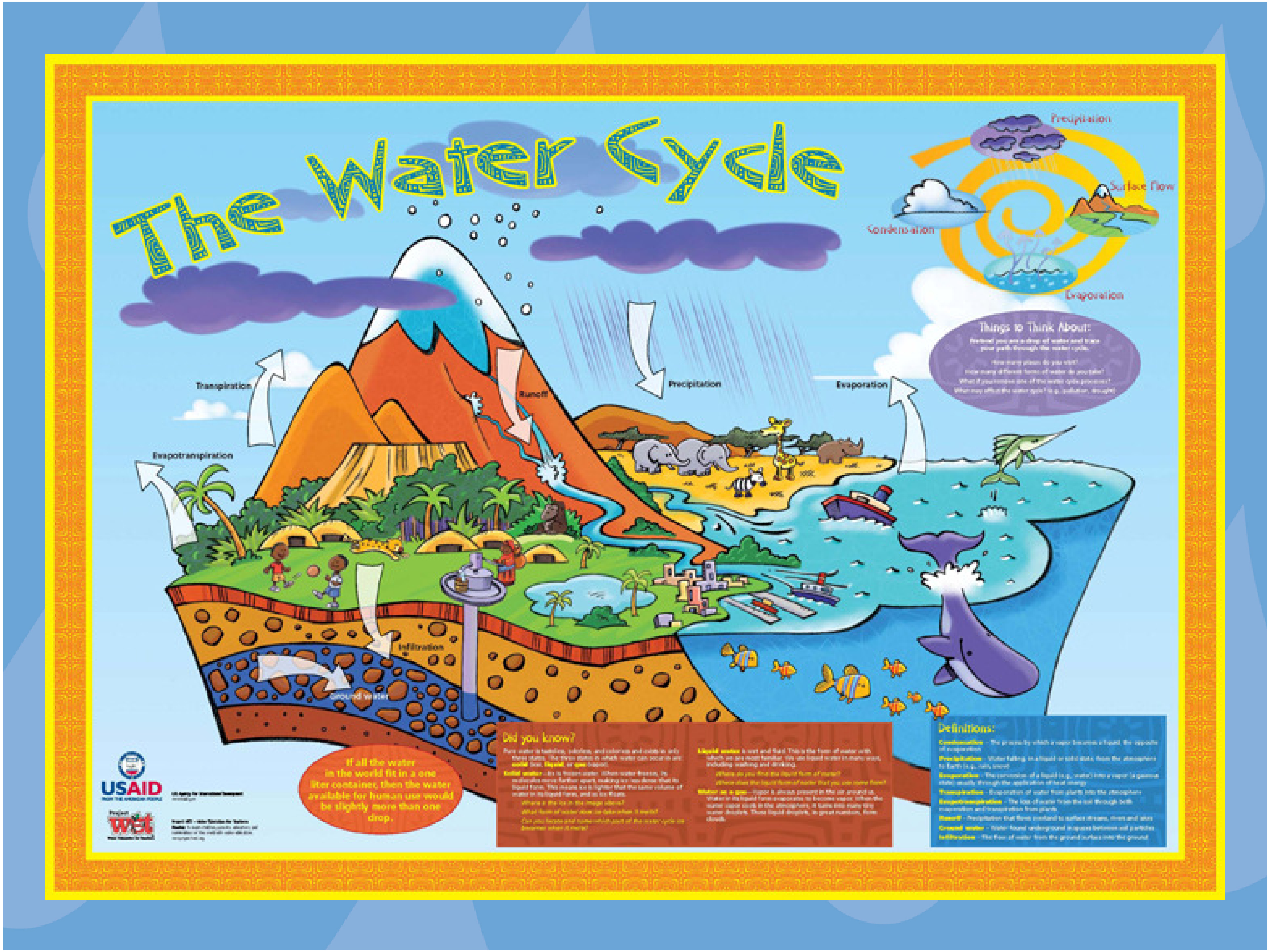
4. Partner meetings ongoing in conjunction with existing UNESCO meetings; ongoing evaluation and development

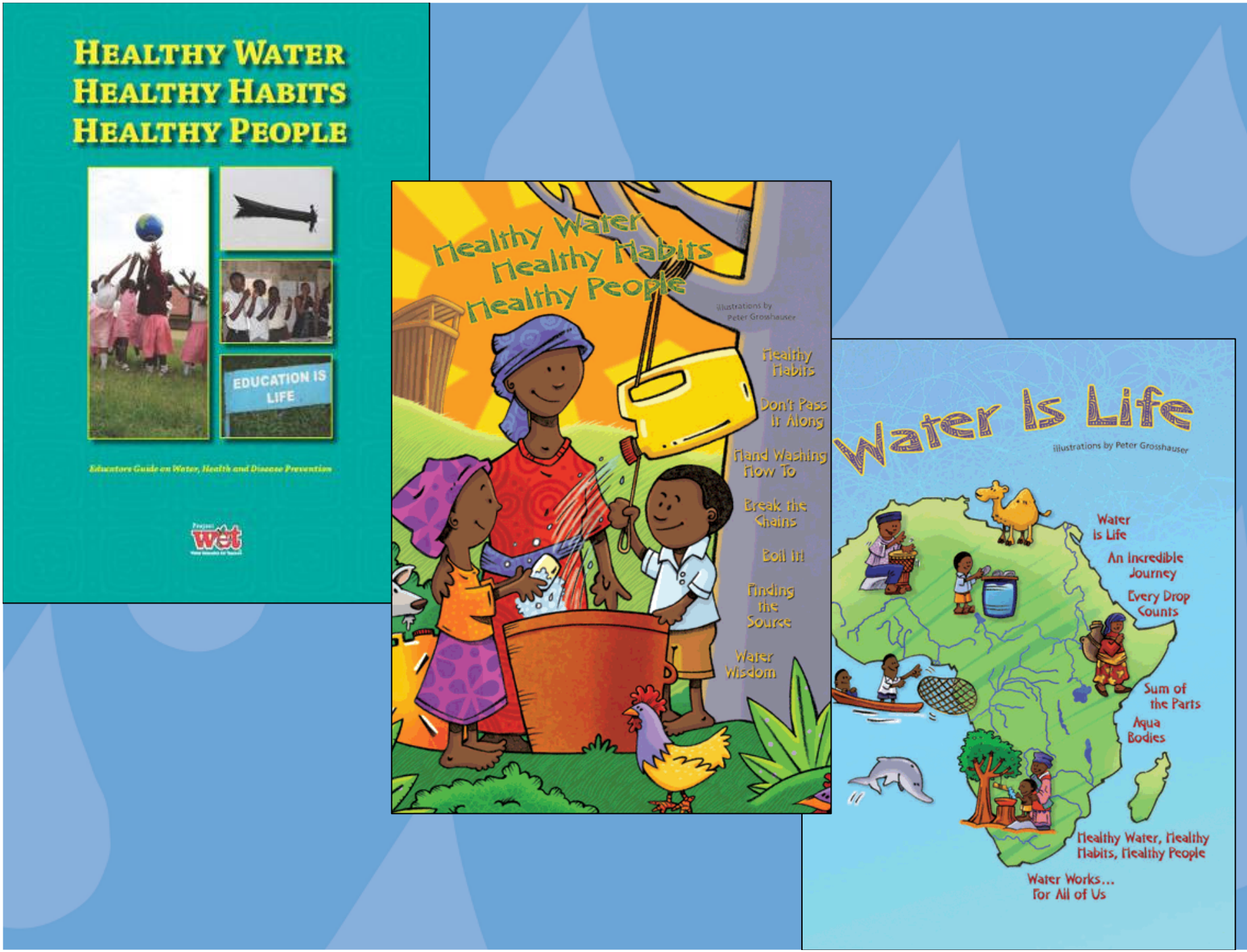

SNOW
ICEBERG

2. Project WET and USAID: Sanitation and Hygiene Education for sub-Saharan Africa

This project addresses key priorities for the United Nation's International Year of Sanitation (2008) as well as its Millennium Development Goals.

- Water and sanitation materials for schools in sub-Saharan Africa
- Deliverables (French and English)
  - 2 student activity booklets
  - 7 new activities (Teachers Guide)
  - Water cycle poster
- By August 2008 – will reach 1,000 schools, nearly a million children, in 11 countries of sub-Saharan Africa


The Water Cycle
Precipitation
Surface Flow
Condensation
Evaporation
Things to Think About:
Transpiration
Runoff
Precipitation
Evaporation
Evapotranspiration
Infiltration
Ground water
If all the water in the world fit in a one liter container, then the water available for human use would be slightly more than one drop.
USAID
FROM THE AMERICAN PEOPLE
Project WET
Did you know?
Definitions:


HEALTHY WATER
HEALTHY HABITS
HEALTHY PEOPLE
EDUCATION IS LIFE
Educators Guide on Water, Health and Disease Prevention
Project WET
Healthy Water Healthy Habits Healthy People
Illustrations by Peter Grosshauser
Healthy Habits
Don't Pass It Along
Hand Washing How To
Break the Chains
Boil It!
Finding the Source
Water Wisdom
Water Is Life
Illustrations by Peter Grosshauser
Water is Life
An Incredible Journey
Every Drop Counts
Sum of the Parts
Aqua Bodies
Healthy Water, Healthy Habits, Healthy People
Water Works... For All of Us

Africa Project: African Partners

USAID Mission offices
Ministries of Education and Environment (several countries)
AfriCare
WaterAid
UNICEF
Microcredit in Africa (Niger)
SoftPower Education (Uganda)
Environmental Education NGOs
Health NGOs (several countries)
Engineers Without Borders

Africa Project: Methodology

1. Project WET African partners expressed need for customized materials for African teachers and students
2. Needs Assessment and Development Workshop held in Uganda in February 2008
   - 50 teachers, government officials, water experts, NGOs, implementers
   - WET curriculum development process led to more than 30 lesson ideas
   - Builds ownership from the start of the project
3. Drafts field tested in April, finalized in May, printed in June, distributed to 1000 schools in July
4. Ongoing evaluation and feedback will be enhanced by an educational portal allowing discussion groups; also electronic survey

Best Practices for Water Education: Lessons Learned

1. Critical to begin with input from the end-user: teachers, students, water professionals in the local area
2. Strong local partners are the key to success
3. Focus on tools that the teachers/audience can use – must be relevant and locally applicable
4. Water issues are ubiquitous – water is important everywhere
5. Hands-on teaching is effective globally – lecture less
6. Encourage customization and adaptation to local contexts
7. Focus on key water concepts and simplify them, adding details only after the basic concepts are understood
8. Train the trainer is an efficient delivery model
9. Teachers are experts – seek their input and guidance
10. The "shoe" has to fit

Project WET

Thank you

- If you are interested in a Project WET program in your country, Contact: Sandra DeYonge, Vice President, Project WET Foundation, www.projectwet.org