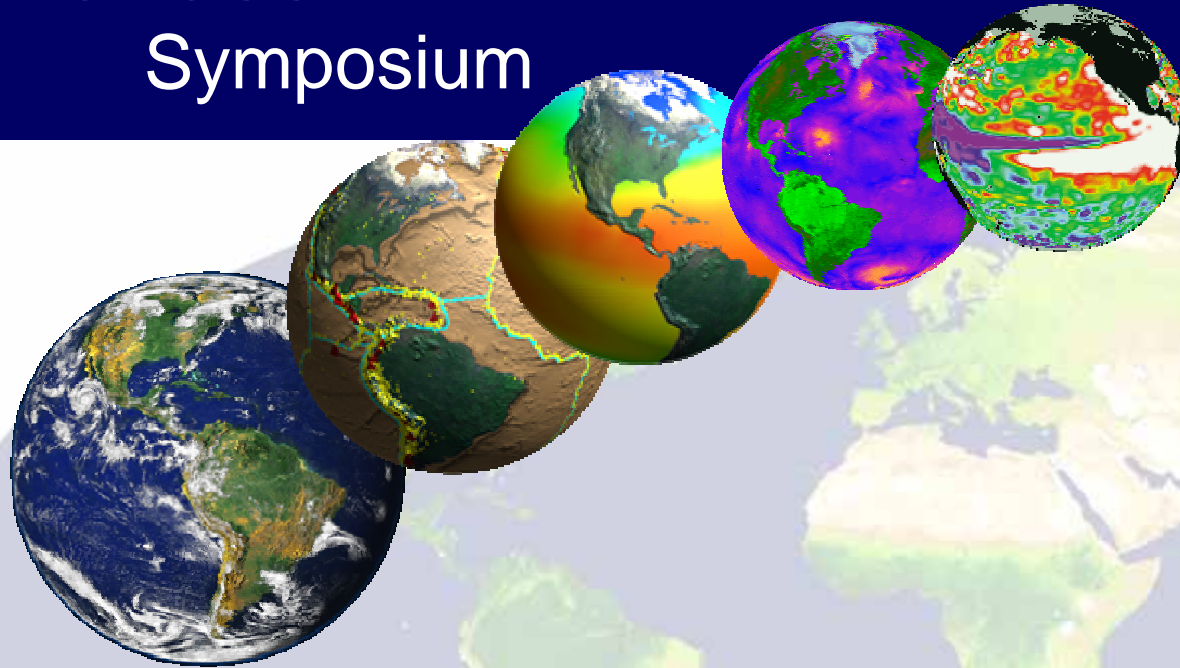


3rd GEOSS Asia-Pacific Symposium



Water for the World IEEE Water Project

Dr. John Lyon
(Lyon.Johng@epamail.epa.gov)
Dr. Tom Wiener
(t.wiener@ieee.org)

IEEE

- ◆ **World's largest professional organization**
- ◆ **375,000 members world-wide**
- ◆ **Ten regions, 326 Sections**
- ◆ **Forty-four Technical Societies and Councils**
- ◆ **Standards Association**
- ◆ **Educational Activities Board**
- ◆ **Participating Member of GEO**

The Challenge

- ◆ One billion people without safe drinking water
- ◆ Water insufficient to support crops
- ◆ Industrial development limited
- ◆ Wildlife and biodiversity affected

Approach

- ◆ Global, world-recognized study panel develops

Actionable Vision

- ◆ Actionable Vision includes

Pilot Projects

- ◆ Pilot Projects result in

Significant Institutionalized Progress

Panel Membership



- ◆ Recognized Experts
- ◆ International
- ◆ Innovative
- ◆ Results-oriented

Phases

◆Phase 1

Actionable Vision (2008)

◆Phase 2

Pilot Projects (2009 - 10)

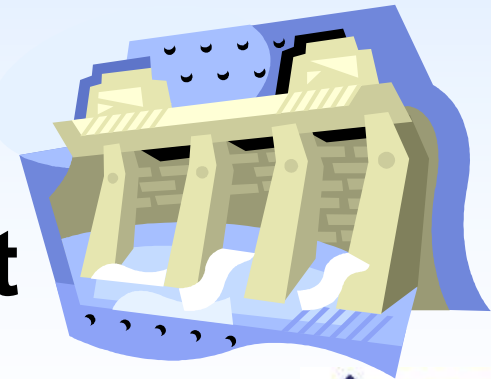
◆Phase 3

Institutionalization

Phase 1: The Vision



- ◆ Actionable
- ◆ Global
- ◆ Comprehensive
- ◆ Innovative
- ◆ Achievable
- ◆ GEO-relevant



Actionable Vision

**I. Background and
Issues**

**II. Methods and
Approaches**

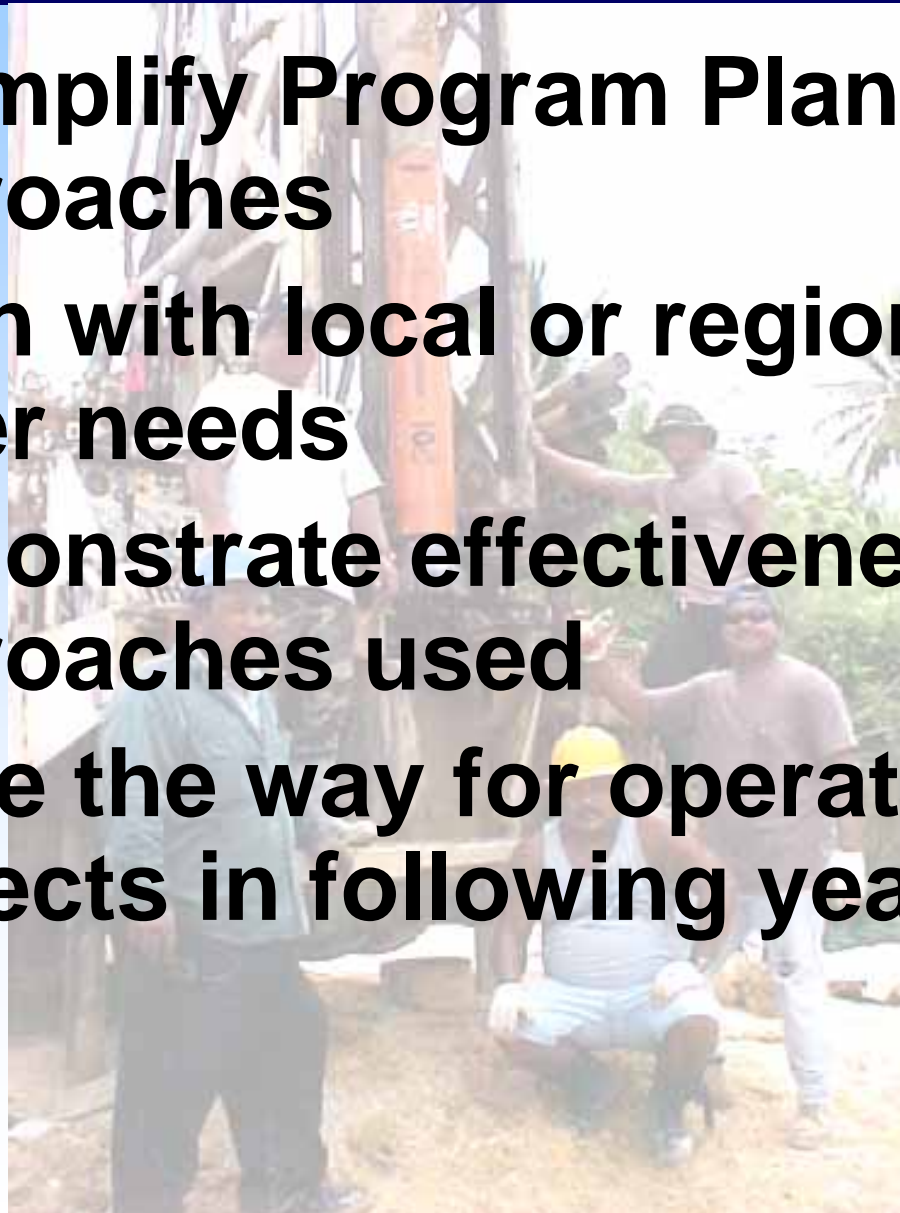
III. Pilot Projects

IV. Institutionalization




Phase 2: Pilot Projects

- ◆ **Exemplify Program Plan approaches**
- ◆ **Align with local or regional water needs**
- ◆ **Demonstrate effectiveness of approaches used**
- ◆ **Pave the way for operational projects in following years.**



Pilot Project Features

- 
- ◆ Realizable in the field within one year
 - ◆ Focused in developing countries
 - ◆ Sustainable
 - ◆ Persistent
 - ◆ Repeatable
 - ◆ Scalable
 - ◆ Reusable
 - ◆ Fundable

Pilot Projects Proposed

- ◆ Africa-Asia Climate Change Vulnerability
- ◆ Amazon Water Quality
- ◆ Aquifer Health Assessment
- ◆ Bangladesh Arsenic Removal
- ◆ Drilling in Mozambique
- ◆ Food Processing
- ◆ Ghana Weija Reservoir Management
- ◆ HydroSHEDS
- ◆ Irrigation Management
- ◆ Lake Nicaragua Water Quality
- ◆ Limpopo Water and Sanitation
- ◆ Nano-engineered Purifiers
- ◆ Small Irrigation
- ◆ Water Harvesting

Pilot Projects Integrated

- ◆ **Surface Water**
- ◆ **Ground Water**
- ◆ **Water Quality**
- ◆ **Information and Decision Support**

Surface Water

- ◆ Bangladesh Arsenic Removal
- ◆ Small Irrigation
- ◆ Water Harvesting
- ◆ Food processing
- ◆ Irrigation Management
- ◆ Nano-engineered Purifiers

Ground Water

- ◆ **Aquifer Health Assessment**
- ◆ **Drilling in Mozambique**
- ◆ **Food processing (solar power)**
- ◆ **Nano-engineered Purifiers**

Water Quality

- ◆ Amazon Water Quality
- ◆ Lake Nicaragua Water Quality
- ◆ Limpopo Water and Sanitation
- ◆ Nano-engineered Purifiers

Information and Decision Support

- ◆ **Africa-Asia Climate Change Vulnerability**
- ◆ **Aquifer Health Assessment**
- ◆ **HydroSHEDS**
- ◆ **Irrigation Management**
- ◆ **Ghana Weija Reservoir Management**

Phase 3: Institutionalization

- ◆ Builds on Pilot Projects
- ◆ Encourages local ownership of the plans
- ◆ Spreads practices and technology
- ◆ **Water for the World**
owned and directed by
Users and Beneficiaries

"Make no little plans. They have no magic to stir men's blood and probably will not themselves be realized."

- Daniel Burnham

Summary

- ◆IEEE Water Project
- ◆Actionable Vi
- ◆Pilot Pr
- ◆In

What we do in this generation
will determine the destiny of our
children's children



for the World

Thank You

That's all, folks!

(t.wiener@ieee.org)