Hydrophilanthropy: Quo Vadis?

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Talk Organization

- My Background
- Introduction
- The Need
- Hydrophilanthropy in Practice
- Pitfalls, Mistakes, and Issues
- The Future of Hydrophilanthropy
1) My Background

• Born in Manhattan (NY, not KS). Grew up on Long Island, NY. Left East for good in 1970 (one year of penance in Atlanta in early 1980s)

• Undergraduate degree in Geology – College of William & Mary (40th reunion in a week!)

• Learned my water (hydrology) at U. of Arizona – emphasis on groundwater


• International work: Central America, South Caucasus, Central Asia, Egypt, Europe

• Favorite compliment (depending upon who says it): ‘You don’t sound like an academic!’
Significant ‘Water’ Events

- 1975:Finished graduate work at U of AZ
- Mid-1990s: went over to “dark side” - policy, management, etc. Hung out with economists, sociologists, lawyers, et al. Subsequently banned from many scientific meetings.
- Late 1990s: Started focusing on WaSH (water, sanitation, and hygiene) issues in developing regions. Volunteer work with LI and LWI.
- 2002: Founded 501(c)(3) - Ann Campana Judge Foundation (www.acjfoundation.org) – funds and undertakes water and sanitation projects in Central America
- 2006: Social Media - Blogging and Tweeting
2) Introduction

“Be ashamed to die until you have won some victory for humanity.” – Horace Mann
Purpose

• Introduce the concept of Hydrophilanthropy
• The need for clean water and sanitation
• Example of a hydrophilanthropic project
• Mistakes, pitfalls, issues
• Future
Hydrophilanthropy - 1

Term coined by David Kreamer of UNLV around 2005. Never really defined it.

[See DK’s article ‘The Meaning of Hydrophilanthropy’ in September 2010 Water Resources IMPACT]
Hydrophilanthropy -2

**Definition:** Altruistic concern for the water, sanitation, and related needs of humankind, as manifested by donations of work, money, or resources.
David Kreamer: “I propose a flexible, open minded approach to the description of hydrophilanthropy and its attributes, a definition that includes many diverse activities and practitioners who advance the sustainability of clean water in the world.” (IMPACT article, p. 4)
Hydrophilanthropy - 4

Alternate definition: “I can’t define hydrophilanthropy, but I know it when I see it.”

(apologies to former Supreme Court Justice Potter Stewart)
Readings
1) September 2010
Water Resources IMPACT

2) August 2010 J. of Contemporary
Water Research and Education
(http://bit.ly/9tFTWR)

3) ‘Hydrophilanthropy’ category at:
aquadoc.typepad.com/waterwired
3) The Need

“There are probably more annoying things than being hectored about African development by a wealthy Irish rock star in a cowboy hat, but I can’t think of one at the moment.” – Paul Theroux, referring to Paul Hewson (aka Bono), *The Honolulu Advertiser*, 8 January 2006
Lack of access to safe water
An improved water source includes wells or public pipes that provide at least 20 litres per day, accessible within a few minutes walk.

- Developed countries (Europe, North America, Australia etc.)
  - 0 million people

- Latin America and the Caribbean
  - 70 million people without an improved water source

- Africa
  - 320 million people

- Asia, and the Middle East
  - 1.1 billion people

Millennium Development Goals

• By 2015, reduce by 50% the number of people who do not have access to safe drinking water (~ 1.1B) or sanitation (~ 2.4 B)
• Requires that each day until 2015, we must provide safe drinking water to about 250,000 people and sanitary facilities to about 500,000 people
• Not ‘rocket science’ but requires $$ and political will
Why was that woman smiling? She’s got a job!

got water?

Job opening: Water-Carrier
Requirements: must be able to balance 45 pounds on your head while trekking rocky dirt roads for miles.
Hours: up to 8 hours a day
Wages: $0

Only women and children need apply!
(courtesy www.nwpdrilling.com)
Digression: Does Aid Work?

*Three authors tackle the question*
2005

Wealthy nations can, and must, end extreme poverty worldwide by 2025 by redoubling the effort and increasing aid spending.
Aid spending so far has largely been wasted and more of the same will not solve the problem.
Dambisa Moyo, a Zambian woman formerly with the World Bank and Goldman Sachs, claims aid increases corruption and reduces accountability. Emphasizes private approach.
4) Hydrophilanthropy in Practice

“Beyond mountains there are mountains.” – Haitian proverb
Honduras Project

- From 2001-2005, I conducted the summer field course for U of NM Master of Water Resources students in Honduras. Spent 3 weeks in country each June.
- We worked with Hondureños Alex del Cid Vásquez, Rolando López, and local villagers to build gravity-flow water systems.
- Introduce students to hydrophilanthropy and the struggles of many just to obtain clean drinking water.
Alex del Cid Vásquez, “el jefe de agua”
A dam site was cleared above the village at ~800 m above sea level, near a spring with an average flow of 100 gallons per minute.

A local mason was hired to build the forms and work with the concrete.

Using only a chainsaw and machete, forms were hand-hewn on site using timber.

Sand from the streambed along with nearly 30 bags (1.5 tons) of cement were used.

It took 6 days to build the dam and then 14 days for the concrete to cure.
Dam plans
Tank Site and Distribution

- We leveled a site above the village for a 5000 gallon water tank and dug a pit for the tank platform.
- After the tank site was cleared, 2 inch diameter (ID) galvanized iron (GI) pipe was laid between the dam and the tank site.
- The pipe was provided by SANAA, the Honduran government agency responsible for rural water supply.
- The head of rural water for SANAA's northern division inspected the dam and pipeline and was impressed.
Pipe cutting and threading
Some Facts

• The total cost of the project was 187,400 lempiras or just under $12,000 U.S.
• 44 domestic connections with an average of 7 persons per house
• Water use is ~20 gallons per person per day
• ½ inch GI tubing and control valves were installed to permit an efficient and regulated quantity of water at each household
• System was completed in fall 2003
Accomplishments

- Helped build five gravity-flow potable water systems serving about 2,000 people
- Provided instruction to locals in sanitation and hygiene
- Cross-cultural, life-changing (for some) experience for 65 students
- Empowered local women – can do other things besides gathering water; girls can go to school
- Gringos can be “good neighbors”
Shortcomings

• No follow-up – SANAA dropped the ball
• Need continued training, support
• Sustainability and Monitoring & Evaluation (see *IMPACT* articles by Christine Casey Matute and Stephanie Moore)
• Change in social dynamics of villages – gender roles. Is this good?
5) Pitfalls, Mistakes, Issues

“The next time you see an ad for a water charity featuring a cute, dark-skinned child and a deep-voiced announcer who says, ‘Last year, we drilled 50 wells in Terra Buena and one was in Rosa’s village,’ you need to ask, ‘How many of those wells are still working?’ “ – Curmudgeonly UK hydrogeologist, c. 1998
Thanks to Loring Green
Some Causes of Failure

• Inappropriate technology
  • Unsustainable, too complicated
• Lack of societal infrastructure
  • Effective governance
• Lack of understanding, commitment, training
• Stakeholder involvement is absent or minimal
• Failure to learn from mistakes - no outcomes assessment, monitoring & evaluation
• Self-congratulatory, feel-good approach
How Do We Help?

• Providing appropriate (sustainable) help is more difficult than one would think

• The difficulty comes from the many differences between the donor and the recipient, i.e. cultural, developmental, available skills, alignment of priorities
Rural WaSH: Where Do We Start?

- Focus on saving lives
- The KISS (Keep It Simple, Stupid!) Principle
- Do the easy projects first - stewardship, sustainability
- Small is beautiful
- Focus on needs instead of wants
  - Set priorities
What Should We Do?

- Improve sanitation
- Rehabilitate existing systems and wells
- Distribute existing water supplies more effectively (utilize gravity!)
- Purify existing water supplies
- Drill wells
- Educate, train stakeholders
- Outcomes assessment and M&E
Appropriate Technology

• One step at a time, incremental improvements
• The best solution for one might not be for the next, be flexible and creative
• Who can run it and fix it when I’m gone?
• Small is beautiful (NGOs, too!)
Mistakes We’ve Made

• We see a problem and are inclined to solve it with our methods, because that’s how we do it. How would they do it? Which is better and why?

• If we don’t ask for input and participation, then there is no “buy in” - “not my well – not my problem – he’ll come back and fix his well”

• Failure to learn from mistakes

• Neglecting economic development: people need means to maintain wells, pumps, etc.

• Multidisciplinary perspective often lacking
Don’t Forget Public Health!

• 150 years ago, the USA faced the same problems
• We learned that the highest return is found by improving basic public health: water, sanitation, and vaccinations
• More lives are saved preventing disease than curing it
6) The Future

“If you want to fast, go alone. If you want to go far, go with others.” – African proverb
Am I Optimistic?
Yes.
Why?
Examples of Secular NGOs Working with Local Organizations

Organizations providing funding and/or expertise

Kiva
  • Microfinancing
    www.kiva.org

El Porvenir (Nicaragua)
  • Water, sanitation, and reforestation projects
    www.elporvenir.org

Agua Para La Vida (Nicaragua)
  • Training locals - Escuela Técnica de Agua Potable
  • water projects
    www.aplv.org

Engineers Without Borders
  www.ewb-usa.org
More Reasons for Optimism

- **Universities WaSH Initiative**
  http://csis.org/program/wash-u
- **More focus on sustainability, M&E**
- **Ned Breslin (Water for People CEO – ‘Rethinking Hydrophilanthropy’ article in JCWRE)**
- **Programs that seek to build capacity, work with locals (Steve Silliman at UND – *JCWRE* article)**
- **Students – altruistic, motivated!**
- **Professional societies (NGWA, et al.)**
- **Private industry support**
- **No more throwing money at the problem**
Final Thought

“I really envy you guys. You have the power to keep people from getting sick. By the time I’m called, it’s really too late.”

-- A medical doctor, talking to some volunteer water professionals
Thank You!

WaterWired blog: http://aquadoc.typepad.com/waterwired

WaterWired Twitter: http://twitter.com/waterwired

AWRA: http://www.awra.org

"We make a living by what we get, we make a life by what we give." – Winston Churchill