

The Pitfalls, Perils, and Promise of Hydrophilanthropy

by David K. Kreamer 

Hydrogeologists and other water professionals have an ability, if not a predilection, to help the world by promoting the wise use and protection of our water resources. Additionally, many other non-professionals have similar motivations to provide sustainable, good quality water for people and ecosystems. There is great promise and potential to achieve these goals, but there are also risks and downsides to these goodhearted efforts. The numerous individuals and groups that seek to advance our understanding of this critical resource and to ensure its continued availability and equitable distribution face many challenges. Unfortunately, some attempts to provide and protect clean water can do more harm than good, no matter what the original intentions, particularly if practitioners are unaware of the many potential pitfalls of hydrophilanthropy.

“Hydrophilanthropy” has many different definitions and interpretations but generally embodies altruistic concern for the water, sanitation, and related needs of humankind, as manifested by donations of work, money, or resources. Clean water is a vital resource for the sustenance of life and an essential commodity for human dignity, with groundwater playing a particularly important role. Groundwater is not only the last lifeline in resilience to climate change, a defense against ecosystem loss, an underpinning of agriculture and food security, and a force in economic and social stability. Clean groundwater also provides health for millions in these turbulent pandemic times by supplying water for drinking and allowing handwashing in isolated communities.

This promise and challenge of trying to provide water resources for all (especially including groundwater) is recognized by international, national, and regional organizations, and by many individuals and groups that organize hydrophilanthropic efforts. The bad news is that

many efforts by small groups backfire and fail to achieve intended results (Kreamer 2016a). Many failed attempts to provide water are related to technical and informational failures (e.g., wells that are incorrectly drilled, completed, or drilled too close to a potential source of contamination). If not planned correctly, installation of a perfectly good well might dry up or diminish a nearby spring that may have supported wildlife habitat and supplied drinking water to a local population for millennia. And there are thousands of examples of wells where the pump has broken down beyond repair or there has been a well collapse, and the hope that a new well once brought to a village is dashed (Breslin 2010). Additionally, many wells and water systems are installed without understanding naturally occurring contaminant backgrounds of such elements as arsenic and fluoride that could be harmful to health. These technical design and planning issues are critical, but so are the socio-hydrological aspects of water projects (Wampler et al. 2016). Most successful projects require working with a community to understand their needs and to plan for sustainability.

Many hydrophilanthropic errors stem from inadequate time spent with the local community, before, during, and after a water-related improvement. One important reason for this is that many individuals and outside groups have inadequate financial resources for long-term residence or to make multiple visits to faraway countries. Preliminary work with a community is essential. Sustainable hydrological progress can be thwarted by not considering regional norms and traditions, and by the absence of a feasibility appraisal and coordination with the community both before and throughout installation of local improvements (Campana 2010; Kreamer 2016b). It does no good to install a perfectly good well, with good sustainable groundwater, in the backyard of someone who the entire community hates. In doing so, the potential hydrophilanthropist may have started a water war that could continue for generations.

In this context, a lack of coordination that can undermine a project means not permitting local people to explain their needs, resources, and concerns. This also includes not understanding local and regional power

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dynamics and the ability or inability of the community to provide continuing project stewardship. Other mistakes can involve not anticipating future contingencies and complicating issues, and no adaptive management plan in place to deal with these unanticipated events (McConville and Mihelcic 2007). One gap could be the absence of educational efforts for the local populace to understand and provide stewardship for the project. There is no single approach that fits all hydrophilanthropic situations. However, avoiding common difficulties in water and sanitation development can bring crucial resources to people and ecosystems globally, and in the process empower communities, reduce sickness and mortality, and improve the human condition. With awareness of pitfalls and perils, it is crucial that we continue to contribute to fulfilling the promise of hydrophilanthropy.

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