

HOW WE ALL HAVE TO CHANGE TO PROTECT OUR MOST CRITICAL RESOURCE

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Cover photo by Ben Roberts shows an "acequia" in New Mexico, a communal irrigation system that dates back thousands of years to the peoples of present day India, the Middle East, and the Americas. Acequias embody the principles of democracy, equity, and sustainability, and provide a model for water use in the United States.

Chapter 13

ON DEVELOPING "WATER CONSCIOUSNESS": EIGHT MOVEMENT BUILDING PRINCIPLES

By Tony Clarke

I often wonder what it is that makes us so oblivious about the essence of life itself on this planet, namely, water. If one lives in conditions where water is scarce at certain times of the year, then perhaps one is bound to be more aware of the value of water itself, where it comes from, who owns and controls it, how much of it should be used, and how to treat it with care and respect. But, if we live in places where there is adequate access to abundant sources of water, then we tend to take water for granted in our daily lives, not knowing the local watershed from where it comes, let alone who controls it, how to use it, or treat it with respect.

In effect, our consciousness about water largely remains underdeveloped. Yet, as this book shows, the signs of a red alert are everywhere—the poisoning of our freshwater systems through the relentless contamination and pollution of lakes, rivers, and streams; the continuous damming of rivers, the tearing down of forests, and the disappearance of our wetlands; the over-irrigation of our farmlands along with the non-stop mining of our groundwater systems; plus the spread of urban sprawl and the increasingly

A stream at the Braulio Carrillo National Park, 60 miles from the Costa Rican capital San Jose.

heavy use of water by certain high-tech industries—all signifying the assault and damage being waged against the Earth's freshwater sources. Add to this the impacts of global warming, which will dramatically increase the hot spots around the world while reducing annual water runoffs for rivers from melting glaciers.

In short, the time has come to develop a new consciousness about water before it is too late. In varying ways, the chapters in this book provide entry points into this water consciousness. But underlying these chapters is a web of eight themes about water itself. Each of these themes is interrelated and interwoven with the others. Taken together, they can help us deepen our understanding of water, thereby providing a better framework for acting to protect this precious resource.

1. Water Integrity: Recognizing Water's Unique Properties

For the most part, indigenous peoples and cultures have always had a deep understanding of, and relationship with, water. Through their traditions, indigenous peoples have recognized that water has special characteristics and integrity in its own right. As a result, their legends and stories speak about water with a certain sense of mystery and awe. Water is understood to be the

blood of Mother Earth, giving life to plants, animals, and humans alike. As such, water is considered by indigenous peoples to be sacred, possessing great value and dignity, and is therefore to be treated with both reverence and respect.

While indigenous cultures have long recognized many special characteristics and properties of water, more recently scientists have made new discoveries about how unique it really is. In a variety of ways, water scientists are using the new technologies available to them to better understand the molecular characteristics and properties of water. For example, the fact that water in trees will expand or contract in response to changing moon cycles during different seasons of the year suggests that there are unique characteristics and properties of water that need to be better understood.

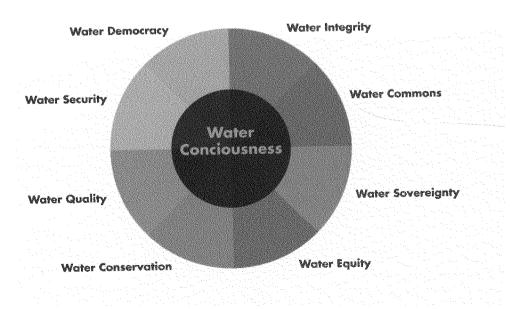
One method used by scientists today is studying the diverse crystal formations of water. When water is frozen, crystal formations take place. Viewed under a microscope, however, these water crystals take on very different shapes and forms. What these scientists have also found is that water crystal formations do change as wa-

ter passes naturally through different kinds of terrain and foliage like flowers, trees, or shrubs. Moreover, there is even some evidence that water crystals will alter their formation in response to changing colors.

In short, water has special characteristics and properties that give it a unique integrity. By knowing and appreciating the special characteristics of water, we begin to learn more about the integrity of water, which in turn, brings us in touch with the essence of our water consciousness.

2. Water Commons: Sharing with People and Nature

The very fact that water is essential to life on this planet means that water belongs to all people and nature. Neither humans, plants, or animals can survive on this planet without water. Like the air we breathe, water is an essential ingredient of the space and life we share in common with each other as human beings and with nature itself. As an essential part of the commons, therefore, water must be available to all people and nature.



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Today, however, we live in a world where everything is for sale. While most human societies and civilizations have traditionally recognized the water commons, our modern world is rapidly moving in the opposite direction by commodifying water as a product to be bought and sold in the marketplace. Instead of viewing water as a life-giving source, it is considered an economic good or commodity to be sold in the market like cars, perfume, or shoes. And once the market becomes the mechanism for the distribution of water, it is made available to those who have the ability to pay, rather than universally available to all people and nature.

The notion of the water commons, therefore, is an important part of developing our water consciousness. It sets the parameters for deepening our understanding of why it is imperative to preserve and protect this precious resource. For humans, it can also be deeply personal. After all, depending on our age, somewhere between 55 and 75 percent of our bodies is composed of water. As a constitutive part of our existence, it is essential for our very survival. We hold this in common with all other humans and with nature itself. Resisting the commodification of water in our lives is an important step in preserving our common humanity on this planet.

3. Water Sovereignty: Enhancing Local Community Control

Who owns and controls water? If we accept the principle of the water commons, then water essentially belongs to people and to nature. From this perspective, water is not to be owned and controlled by for-profit corporations or the private sector. Nor is it necessarily to be owned and controlled by governments or the public sector. If water really belongs to the peo-

ple, for example, then local communities should be able to exercise ownership and control over their local watersheds.

Today, we find this notion of water sovereignty constantly being twisted and distorted through the commodification and privatization of water. Under the guise of private-public-partnerships, forprofit corporations are increasingly taking control over the management of water supplies and the delivery of water services in cities and towns. At the same time, governments and corporations are constructing massive dams to redirect the natural flow of rivers to provide hydropower and water sources for cities, thereby often draining much needed water from food producing lands and rural communities. As a result, corporations and governments are seizing control over the water sovereignty of communities and nature itself.

This is why the issue of water sovereignty is key to developing our water consciousness. Above all else, water is local. Local watersheds exist to serve the needs of people and nature in their surroundings. Governments can play an important role in managing and regulating water as a public or an ecological trust, but ultimately water sovereignty should reside in people and nature.

4. Water Equity: Ensuring Equal Distribution

Water is essential to human survival and should be made available to all people equitably on the planet. Access to clean and adequate supplies of water is a universal human right. Accordingly, governments have an obligation to ensure that their people have adequate access to clean water on an equitable basis. For these reasons, water justice activists put a major priority on advocating that water services be delivered to people through public rather than private systems.

Once the private sector is in charge of water services, market mechanisms determine who gets access to water on the basis of the ability to pay.

Horror stories from around the world illustrate how poor people have had their water cut off simply because they are unable to pay the high water rates charged by for-profit corporations that have taken over the running of local water utilities. In virtually every case where a private company takes over the operations of a public water utility (through concessions, contracts or outright ownership), one of the first measures introduced is the spiking of water fees, not just to generate sufficient revenues to improve services but also to accumulate profits to meet the bottom line of its shareholders. As a result, millions of people in developing countries have experienced water cutoffs at the hands of private water companies and their water meters.

Understanding and acting on issues of water equity is an important part of the process of developing and deepening one's water consciousness. Unless we understand that water is a universal human right that must be made available through mechanisms of equitable distribution, there can be no solution to the impending worldwide water crisis.

5. Water Conservation: Using Only What We Need

As noted above, people living in conditions of water scarcity, drought, and deserts know much more about the need to practice water conservation than those living in places of water abundance. In addition, it is generally assumed that water is not finite but instead is a renewable resource. But this is largely a myth. The hydrologic cycle, whereby the earth's freshwater supplies are renewed through precipitation that falls and seeps

into the ground then evaporates again later, has been damaged by the expansion of urbanization, industrialization, and now global warming.

As a result, the earth is gradually drying up in many regions and the world as a whole is running out of freshwater. This has already become clear in many regions of the United States, ranging from the southwestern states of Arizona, California, New Mexico, and Nevada to the farm belt states of the Midwest and the southeastern states, including Florida, Alabama, Georgia, and the Carolinas. Moreover, water scientists are predicting the return of drought conditions to the Great Plains region of the Midwest, spurred on by global warming conditions. While water conservation practices have improved in several states, the United States and Canada continue to be the highest per capita consumers of water in the world.

Water conservation is one of the main keys for developing a deeper water consciousness. Very often it is only when people experience water scarcity and understand what it means to be water poor that they cultivate an awareness and appreciation of the essential value and importance of water. By the same token, it is through the activity of practicing water conservation that people learn how to deepen their respect and care for water as the source of life itself.

6. Water Quality: Protecting Healthy Ecosystems

Being conscious about the water around us is not only a matter being aware of water shortages, or unjust distribution, or who controls or governs, but also the quality of water and the issue of clean water. Fundamentally, this is a matter of health affecting people, animals, and plant life. If a watershed or groundwater system is polluted or contaminated by a nearby city dump or waste



A boy drinks the remaining water from a pitcher as he waits in line for the arrival of an army vehicle, which will supply drinking water at Mohammadpur in Dhaka, Bangladesh.

disposal from a neighboring farm, then this poses a direct threat not only to human health in the area but also to animal and plant life.

Throughout the world, the poisoning of our rivers, lakes, and groundwater systems continues apace, almost unabated. Industries such as mining, oil production, and auto and computer manufacturing, use huge volumes of water every day that becomes contaminated with toxic chemicals during their production processes. In the Great Lakes, the largest freshwater system on the planet, high levels of dioxins, polychlorinated biphenyls (PCBs), mercury, lead, and countless other chemicals have been found in all the

lakes at every depth, thereby polluting surrounding watersheds with up to a 100 million tons of hazardous wastes each year.

What happens when we continue to pollute our natural water systems? Not only do we contaminate a portion of nature but we reduce the amount of freshwater sources that are available for people, animals, and plant life. Being water conscious requires protecting and preserving healthy ecosystems, which, in turn, means being vigilant in resisting and preventing the polluting and poisoning of our lakes, rivers, and groundwater systems.

7. Water Security: Preventing Water Wars

In relations among countries, regions, and peoples around the world, disputes over

water are at the center of conflicts and wars. The struggle for water security has been a central factor in community survival since humans have been competing with each other for resources. By the same token, the pursuit of water security through the sharing of a common water source has also been the basis of peace and unity among peoples.

Throughout the world today we see conflicts and wars brewing over the struggle for water security. Although it is generally acknowledged that the war in Iraq has been largely about securing control over oil sources in the Middle East, it has also been about securing access to and control over water sources. One of the two largest river systems in the Middle East, the Euphrates River, runs through Iraq, and control over this water source is of high strategic importance for relations between peoples and nations in this region. And, in the United States, as problems of water scarcity mount in different regions, conflicts have already begun to intensify.

The struggle for water security, which is so intertwined with the other themes we have been discussing, provides another key to developing and deepening water consciousness. At their core, struggles for water security generally have to do with matters of life and death. This doesn't just apply to the drinking water that people need in order to survive. Like oil, water too has become the lifeblood of our industrialized society. Whether we are talking about the agriculture, energy, mining, or manufacturing sectors of our economy, the production processes involved in these industries require ever increasing amounts of freshwater. The struggle for water security has become imperative for the survival of our society. In turn, this serves to intensify potential conflicts.

8. Water Democracy: Working Together as Water Guardians

The operating principles of developing water consciousness include the recognition that water belongs first and foremost to people and nature, that it is deeply personal, and that it is local. In our capacity as citizens, people can become the primary water guardians. By working together to protect and preserve their local watersheds, citizens and communities actively engage in a process of water democracy. This process, in turn, involves a grassroots, bottom-up approach.

Around the world today, there are myriad examples of water democracy taking place in local communities where people have organized themselves to become water guardians. They include urban community groups who have organized to prevent the privatization of their municipal water utilities; peasants and indigenous peoples who have bonded together to stop the construction of dams and river diversions in rural areas; the local community environmental activists who are working with nature to protect their watersheds and wetlands while promoting rainwater harvesting; plus the growing networks of people who are building community resistance to bottled water consumption and calling for major water conservation initiatives in agriculture and other industries.

In effect, it is through our actions as water

"Governments can play an important role in managing and regulating water as a public or an ecological trust, but ultimately water sovereignty should reside in people and nature."

guardians that we give full expression to the principle of water democracy. And, it is by giving expression to water democracy that we, in turn, ignite our water consciousness, for it is through our actions as water guardians that our passion and our determination to preserve and protect this precious resource comes fully alive. It is also through our concrete actions with others in fighting for and defending water that we come in touch with the other themes of our water consciousness. What's more, if our actions in defense of water are rooted in local, community-based, grassroots activities, then, like free flowing water itself, we embody the essence of living democracy.

Translating Water Consciousness into Action

Taken together, these eight themes—water integrity, water commons, water sovereignty, water equity, water conservation, water quality, water security, and water democracy-are a set of keys for unlocking the doors of our consciousness about water itself. It is through these themes that we can come to develop and deepen our water consciousness, which is essential for the future of humanity and the planet itself. As we have seen, none of these themes exist in isolation from the others. They are all interrelated and interdependent with one another. Entering through one theme such as "water equity" can open up an awareness of the others like the importance of "water quality" and "water conservation" or the implications of "water commons" or "water democracy" itself.

Yet, these are not just themes to trigger or ignite our consciousness about water. They are also principles to motivate and inform our actions about water. Each of these eight themes is, at the same time, a principle for action that we can use as citizens and communities in preserv-

ing and protecting water as a precious resource. Community groups actively organizing and protesting against the privatization of their public water utilities are likely to emphasize "water equity" and "water democracy" as basic principles for their actions, while community groups fighting to protect their local watersheds are more likely to focus on the principles of "water conservation" and "water quality." Yet, just as a community's local watershed and public utility are interlinked, so too are these and related principles for action connected, as well.

In effect, these eight principles, taken together, are essential for cultivating and building a water justice movement. When it comes to social movement building, it's highly important to be conscious of what we are doing. Cultivating any movement involves enabling people to come together and unite around a shared vision of the future. And this, in turn, embodies key ideas and principles as foundation stones for the kind of society we want to build. This is also true with the building of the water justice movement, which is made up of diverse community-based struggles going on all around the world.

Together, these eight principles can help us to broaden and deepen our consciousness about water itself as the basis for our actions. This is imperative for the long haul when it comes to building a movement. Having a shared vision that can be broadened and deepened is an important part of ensuring that the movement endures.

In short, to become effective water guardians, we need to develop the discipline of working with these eight principles as an integral part of our actions to preserve and protect water as a precious resource on this planet. In so doing, we will contribute to the building of an authentic water justice movement—in our own communities and in regions throughout the world.