



Our Water Commons

Toward a new freshwater narrative

by Maude Barlow



Our Water Commons

Thousands have lived without love, not one without water.

W.H. Auden

The world's water crisis due to pollution, climate change and a surging population growth is of such magnitude that close to two billion people now live in water-stressed regions of the planet. By the year 2025, two-thirds of the world's population will face water scarcity. The global population tripled in the twentieth century, but water consumption went up sevenfold. By 2050, after we add another three billion to the population, humans will need an 80 percent increase in water supplies just to feed ourselves. No one knows where this water is going to come from.

- Blue Covenant: The Global Water Crisis and the Coming Battle for the Right to Water, 2007

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Introduction

This paper is intended to serve as a backgrounder for an exciting process originating from the inspiration of Harriet Barlow and the hard work of members of the new organization called On The Commons (previously known as the Tomales Bay Institute). It brings key activists, writers and thinkers together to address the global water crisis by naming and reclaiming the freshwater Commons. Most of these participants have been engaged in exploring the concept of the Commons in a variety of areas and feel the time has come to turn their attention – and their pioneer work on the Commons – to the earth’s declining freshwater supplies. We view water as the most crucial Commons, one of the very few things on which everyone is dependent, and believe that approaching the future of water through the Commons lens offers the possibility of a path to a sane and just future for water use and management. This paper is accompanied by a survey of water Commons practices around the world gathered by a leading group of academics and practitioners.

There are two competing narratives about the earth’s freshwater resources being played out in the 21st century. On one side is a powerful clique of decision-makers, heads of some powerful states, international trade and financial institutions and transnational corporations who do not view water as part of the global Commons or a public trust, but as a commodity, to be bought and sold on the open market. On the other is a global grassroots movement of local communities, the poor, slum dwellers, women, indigenous peoples, peasants and small farmers working with environmentalists, human rights activists, progressive water managers and experts in both the global North and the global South who see water as a Commons and seek to provide water for all of nature and all humans. This paper describes the tense – and globally threatening – relationship between these two prominent narratives and points to ways that the life affirming water Commons can be used as a framework to bring water justice to all.

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Toward an Understanding of the Commons

In recent years, some very important work has been done to create a renewed awareness of an ancient concept known as “the Commons.” In most traditional societies, it was assumed that what belonged to one belonged to all. Many indigenous societies to this day cannot conceive of denying a person or a family basic access to food, air, land, water and livelihood. Many modern societies extended the same concept of universal access to the notion of a social Commons, creating education, health care and social security for all members of the community. Since adopting the Universal Declaration of Human Rights in 1948, governments are obliged to protect the human rights, cultural diversity and food security of their citizens.

American Commons pioneer and journalist Jonathan Rowe captures the essence of the concept: “The commons is the vast realm that lies outside of both the economic market and the institutional state, and that all of us typically use without toll or price. The atmosphere and oceans, languages and culture, the stores of human knowledge and wisdom, the informal support systems of community, the peace and quiet we crave, the generic building blocks of life – these are all aspects of the commons.” Noted Canadian environmentalist Richard Bocking says that the Commons are those things to which we have rights just by being a member of the human family: “The air we breathe, the freshwater we drink, the seas, forests, and mountains, the genetic heritage through which all life is transmitted, the diversity of life itself.” Commons is synonymous with community, cooperation and respect for the rights and preferences of others, he adds. Some Commons, such as the atmosphere, outer space and the oceans, may be thought of as global, while others, such as public spaces, common land, forests, the gene pool, and local medicines, are community Commons. “The commons have the quality of always having been there. One generation after another, available to all,” says Rowe.

The International Forum on Globalization (IFG) suggests that there are basically three types of Commons. The first category includes the water, land, air, forests and fisheries on which everyone’s life depends. The second includes the culture

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and knowledge that are collective creations of our species. The third is the social Commons that guarantees public access to health care, education and social security. The IFG reminds us that as recently as two decades ago, large parts of the world still lived off the land, many in complete isolation from the global trade and market system, and billions lived their everyday lives within a Commons framework.

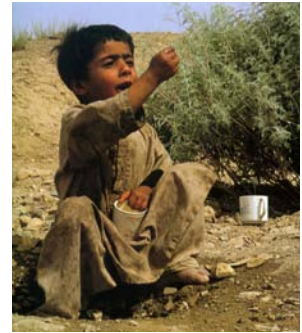
The integrity and health of the Commons, notes the IFG, crashed when economic globalization and market fundamentalism were introduced as the only model of development for the world, and transnational corporations gained access to the genetic, mineral, timber and water resources of even the most remote parts of the earth for the first time. Some refer to this process as the second “enclosure of the Commons,” the first personified by the removal, starting in 1740, of peasant rights to farm, graze and hunt on lands owned by nobility in England and Wales. Enclosure of the Commons took place in the global South as well. Indian physicist and writer Vandana Shiva points out that the privatization of the Commons was essential for the industrial revolution in order to provide a steady supply of raw material to industry. The policy of deforestation and the enclosure of the Commons were replicated in the colonies of India, for instance. In 1865, a law was passed, lifting protection of the forests as a Commons, paving the way for the commercial exploitation of both land and forests. The ensuing marginalization of peasant communities’ rights over their forests, sacred groves and “wastelands” was the first and prime cause of impoverishment for millions of Indian people.

A famous essay written in 1968 called *The Tragedy of the Commons* by American biologist, Garrett Hardin, gave philosophical and political momentum to the private assault on the Commons. Hardin claimed that if no one owned the Commons, it would soon be plundered, as no one would be responsible for it. He used this argument as a rationale for privatizing common property and proponents of privatization cite his book to this day. This is despite the fact that most researchers have denounced Hardin for ignoring the capacity of common property management systems to provide for sound and sustainable stewardship of the biological and ecosystem commons, where such management structures exist and are nurtured. In fact, as Anil Naidoo of the Blue Planet Project argues, the tragedy of the Commons could be better described as the tragedy of the market, allowed because there were no functioning Commons management structures. Indeed no one is advocating an open free-for-all on the Commons as a counter argument to Hardin. Rather than being used to impose control on access to public resources, however, Hardin’s book was used to destroy common regimes.

In a short period of time, the private values of exclusion, possession, monopoly and personal or corporate gain started to replace the Commons’ values of inclusion, collective ownership and community assets. In his book *Capitalism 3.0, A Guide to Reclaiming the Commons*, Peter Barnes of On The Commons describes this as “striving to share ownership as widely, rather than narrowly, as possible.” Many areas once thought to be outside the purview of the market became fair game; the race was on to, on one hand, capture and profit from the land, genetic, water, mineral and forest resources of the Commons, thus turning these Commons into commodities, and, on the other, to use the air, ocean and

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freshwater Commons as a dumping ground for waste (thus passing the problems created by the enclosure of the Commons back to the public to live with or clean up). More recently, the social Commons of public health care, universal education and water services have all become targets for large for-profit corporations, backed by powerful global trade and financial institutions such as the World Trade Organization and the World Bank. These institutions often limit the capacity of governments to regulate and protect the Commons on behalf of their citizens in order to open up markets, in the name of economic prosperity, for corporations to grow and compete.



Another On The Commons pioneer, David Bollier, outlines five reasons to be concerned with the increasing market exploitation of our Commons. First, enclosure needlessly siphons hundreds of billions of dollars away from the public purse every year, money that could be used to invest in and protect the Commons. Second, enclosure fosters market concentration and the dominance of large corporations, which have the market clout and political influence to obtain public resources on favorable terms. Third, enclosure threatens the environment by favoring short-term profits over long-term stewardship. Corporations find it financially desirable to shift health and safety risks to the public and future generations. Fourth, enclosure imposes new limits on citizen rights and public accountability, as private decision-making supplants open procedures of democratic polity. Finally, says Bollier, enclosure imposes market values in realms that should be free from commodification, such as community and family life, public institutions and democratic processes.

A new narrative

Instead of this privatization and unregulated use, what is needed is a new narrative for the Commons. As Richard Bocking notes, a central characteristic of a true Commons is its careful collaborative management by those who use it, a management often more cautious than that of private, or even state owned resources. In fact, wise use of a Commons does not always mean there is no place for the market (although there are powerful arguments to keep the market out of some Commons areas altogether.) Rather, wise management of the Commons allocates access based on a set of priorities. As Peter Barnes points out, when capitalism started, nature was abundant and capital was scarce, so protections for capital were created. Now however, we (in the global North at least) are “awash in capital and literally running out of nature.” Another set of priorities and another economic system are badly needed. In fact, it is because there is little acknowledgment of the value of the Commons in our culture, argues Rowe, that we have not created a legal framework to protect it, leaving the Commons subject to constant despoilation. Growth has cannibalized the Commons, taking goods from the Commons and selling them back to us as commodities.

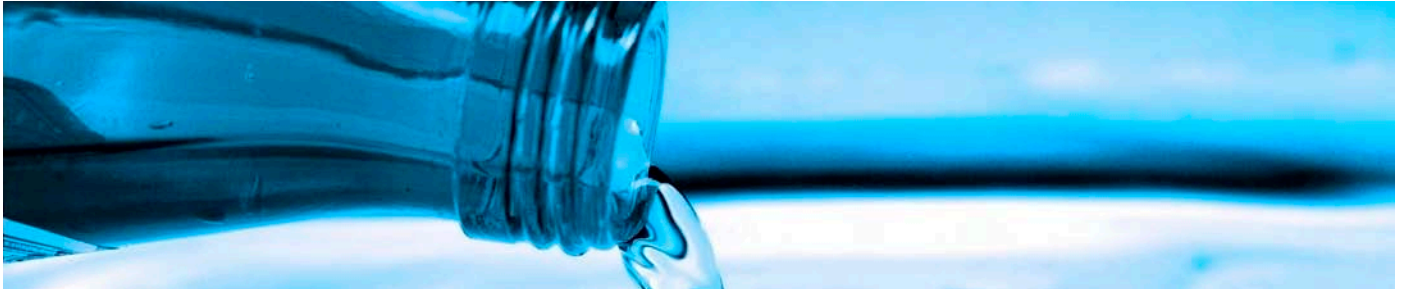
David Bollier reminds us that we, as citizens, own the Commons. When governments do not adequately protect the Commons on our behalf, they fail us, the Commons and future generations. Business exists to perform in the market and will do so until constrained by governments. Or, as Dr. Martin Luther King Jr. said, “It may be true that the law cannot change the heart, but it can restrain the heartless.” The issue, says Bollier, is how to set equitable and appropriate

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boundaries between the two realms, and redress the imbalance that has created the true tragedy of the Commons. “The market and its values assert dominion over all, and in so doing, erode the sinews of community, undermine open scientific inquiry, weaken democratic culture and sap the long-term vitality of the economy.” The Commons need not result in “tragedy” if the right structures are put in place. When ownership of resources in a Commons is not alienated, but controlled by a stable, defined community, argues Bollier, environmental sustainability and democratic accountability are more easily achieved.

On the Commons members advocate for the preservation of Commons assets and the equitable sharing of their benefits. How to do this will vary with the type of Commons. Some, like wilderness, should be largely off limits. Others, like the cultural Commons, need to be more inclusive. Those with a physical threshold, like fisheries and the atmosphere, need strictly enforceable sustainable-use limits. We ignore the enclosure of the global Commons at our peril. The market is like a runaway engine, with no governor to tell it when to stop depleting the Commons that sustains us all. What is needed is a “counter narrative” to the current narrative of individual ownership and control as the best way to manage resources. A new narrative, protected by a legal framework of its own, would allow us to manage our collective resources for the common good. This is not an esoteric concept. If we fail to create a new way of thinking about the planet and our role in it, we may not survive.

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The Enclosure and Commodification of the Fresh Water Commons: How It's Done

There is no better example of a “runaway market engine” than the corporate cartel now being created to own and profit from water. Private sector interest in the world’s dwindling water resources has been building for two decades, and has dramatically increased in recent years. Transnational corporations view water as a saleable and tradable commodity, not a Commons, and are set to create a cartel resembling the one that now controls every facet of energy, from exploration to production to distribution.

Private, for-profit water companies now provide municipal water services in many parts of the world; put massive amounts of fresh water in bottles for sale; control vast quantities of water used in industrial farming, mining, energy production, computers, cars and other water-intensive industries; own and operate many of the dams, pipelines, nanotechnology, water purification systems and desalination plants government are looking to for the technological panacea to water shortages; provide infrastructure technologies to replace old municipal water systems; control the virtual trade in water; buy up groundwater rights and whole watersheds in order to own large quantities of water stock; and trade in shares in an industry set to increase its profits dramatically in the coming years.

“Water is hot,” says Schwab Capital Markets. “Water is a growth driver for as long and far as the eye can see,” adds Goldman Sachs. “The water industry is the largest and perhaps most dynamic industry in the world,” claims Seidler Capital. The water business is the fastest growing of the “big three” assets industries – the others being energy and electricity, reports the Summit Water Equity Fund, one of dozens of exchange-traded funds and indexes dealing exclusively with water that have sprung up in the last several years. “Water commodities used to be thought of as defensive, boring stocks,” reports *MoneyWeek*. “Not anymore. The U.S. water sector has returned 244% over the past five years, outperforming the S&P 500 by about 260%.” At the launch of Australia’s PL100 World Water Trust in May 2007, its CEO declared, “The water industry resembles the oil industry

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during its golden era.” This sudden and intense interest in water as a *commodity* – something to be used for private profit and personal gain – is a direct contradiction to the notion of water as a Commons, with its emphasis on collective access and shared responsibility. It is far from clear which definition will prevail.

Selling water as a commodity

The notion of water as a commodity did not happen in a vacuum. It was deliberately imposed on the global South by global institutions and water companies (and their governments) in an open attempt to capitalize on the desperate water crisis in poor countries. There was more than a little hypocrisy in foisting private water services on the South by countries that had been well served by public systems. In Europe and North America, public delivery of water helped to create the political stability and financial equity necessary for the great advances of the industrial age. As well, it was understood that public water and sanitation services protected public health and advanced national economic development. With few exceptions, these countries still understand the benefit of water as a Commons and continue to provide water as a public service. However, the World Bank and the big water companies set out to promote a major shift in water policy in the global South (a model they have gone on to try to sell in the North) by actively seeking the buy-in of non-governmental organizations, think tanks, state agencies, the media and the private sector in order to manufacture consent for the commodification of water. When the carrot of persuasion failed, the World Bank used the stick of financial compliance.

The most important global institution to enlist in this crusade was the United Nations, which, as early as 1992 at the crucial Dublin Summit, declared water to be an economic good and encouraged user fees, even for the economically poor South. Since then, the UN has worked closely with the big water corporations and the World Bank to promote a private model of water development through its Millennium Development Goals. Several major business organizations were formed to promote private water delivery in the global South, the most notable being the World Business Council for Sustainable Development, which was influential in watering down environmental commitments in the original Earth Summit in 1992, and AquaFed, the recently formed International Federation of Private Water Operators. A major player in the promotion of a private water services model has been the World Water Council (WWC), formed in 1997 by the World Bank, the big water transnationals, the United Nations and the development agencies of a number of wealthy countries. WWC members have been dubbed “the Lords of water” for their powerful role in promoting a private water model to governments that attend the WWC’s huge World Water Forums held every three years.

Corporations are involved in many aspects of water, including the construction of big dams, pipelines and municipal infrastructure, which are worth trillions of dollars. Corporations take water from the atmosphere with high technology and buy and sell water, including sewage water, on the open market. Agribusiness interests purchase and control local water rights to divert vital water resources from municipal water taps to irrigate cash crops and factory livestock production. There are three ways, however, in which corporations are gaining direct control over actual water supplies and, as a result, are making life and death decisions about who has access to water and who does not.

Privatizing water utilities

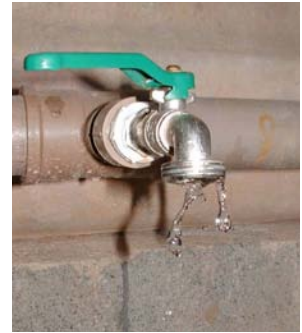
Until recently, just two companies, Suez and Veolia of France, dominated the water services industry. Both are counted among the Fortune 100 list of companies and have spread their operations throughout the global South, and more recently in Europe, North America and China. In recent years, however, a raft of new private operators has sprung up to challenge the “big two.” In 1990, only a fraction of the world’s population bought water from a private operator and where they did, the companies were generally local. Today, big private water companies provide water to about 15 percent of those in the world who have access to piped water. The utility companies predict (and hope) that within 10 years, the number of people buying their “product” will double.

However, the privatization of water services has been a terrible failure in almost every community where it has been tried, and it is far from certain that privatization of the water Commons will accelerate at the same rate. Water commodification has left a legacy of corruption, sky-high water rates, cut-offs of water to millions of people, reduced water quality, nepotism, pollution, worker lay-offs and broken promises. A multitude of studies has shown that private water companies have not brought new investments into the global South. In fact, because both the lending banks and the development agencies of many wealthy countries assumed that privatization would bring in new water services investment, they pulled back on their own investments, resulting in a net loss in funding to provide water to the global South over the last 15 years – the very time when demand was exploding. Studies have also found that the big water transnationals have so much power with the World Bank and other regional development banks, that they actually often decide which countries and communities will receive bank aid, ensuring that poor countries with no possibility of profit for the companies are left behind. The story is now repeating itself in municipalities in the global North that have opted for a for-profit water system.

Bottling water

Perhaps there is no better example of the enclosure of the water Commons than bottled water. Humans take free flowing water from its natural state, put it in plastic bottles and sell it to one another at exorbitant prices. In the early 1970s, about one billion liters of bottled water were sold globally. In 2007, more than 200 billion liters (50 billion gallons) were consumed, and the bottled water industry is growing at over 10 percent a year. Because bottled water costs anywhere from 240 to 10,000 times more than tap water, depending on the brand, profits are very high in this sector. The bottled water industry is conservatively estimated to bring in \$100 billion annually. Four companies dominate the industry: Nestle, Danone, Coca-Cola and PepsiCo. “This is an industry that takes a free liquid that falls from the sky and sells it for as much as four times what we pay for gas,” explains Indian State University anthropologist Richard Wilk. In recent years, the bottled water industry has targeted children, teaming up with movie and television companies selling famous children’s characters now featured on their favorite bottled water.

There is a growing backlash against this form of enclosure of the water Commons. The bottled water industry is now understood to be one of the most



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polluting on earth as well as one of the least regulated. Plastic water bottles are made up of chemicals and fossil fuels that leach into groundwater and human bodies. Nearly one-quarter of all bottled water crosses national borders to reach consumers, using enormous amounts of energy to transport. One million bottles of exported bottled water cause the emission of 18.2 tons of carbon dioxide. Fewer than five percent of bottled water containers are recycled. Water extraction for bottled water is draining communities all over the world, from the Great Lakes of North America to the rural villages of India. In most places, bottled water corporations pay little or no extraction fees, openly profiting from the local water Commons, and favored by governments over the needs of local communities.

Funding expensive water recovery and purification technologies

A more recent form of water Commons enclosure is the practice of relying on high technology solutions to the global water crisis instead of protecting the source waters of the water Commons. Far more attention is being paid (and billions of dollars annually invested) to cleaning up dirty water using expensive high water-reuse technology, than in stopping pollution and the destruction of the water Commons itself. The water industry's technology sector is growing at twice the rate of its utility sector and already accounts for more than one-quarter of all revenues. Desalination is one of the key technologies being touted. Global demand is expected to grow by 25 percent every year for decades, with capital investments of at least \$60 billion in the next decade. There are 30 plants planned for the coast of California alone. Due to the high-energy requirements of desalination, there are plans to build nuclear-powered desalination plants in several countries. Large investments are also going into water nanotechnology, where company scientists look to the sub-microscopic world of molecules to clean dirty water. As well, giant transnationals like GE, Siemens, Dow Chemical and ITT Corp. have invested billions in "toilet to tap" recycling and are now the water industry's heavyweights.

There are very serious questions to be asked about this industry, not the least of which is who will own the water these large corporations clean. No doubt the companies think they own it and who is to say differently? All of the technologies themselves give rise to serious questions. Desalination technology is expensive, fossil fuel intensive and polluting. It releases a chemical/salt brine back into the ocean that kills aquatic life for miles and adds to the acidification of the world's oceans. The move to run this technology by nuclear power adds a whole new dimension to the threat. Nanotechnology is completely unregulated, and warnings that it may hold dangers are unheeded by governments keen on a high-tech solution to the water crisis. Several key studies by independent groups and universities indicate that the smallness of the particles used in this technology may be a problem because they may break free and find their way into the skin, livers, lungs, kidneys and even the brain of people who consume it. And many studies show that even the most sophisticated filtration purification technologies are not removing all traces of toxic substances, hormones, antibiotics, chemotherapy medication, birth control and endocrine-disrupters from recycled water.

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The Case Against the Commodification of Water and for Retaining it in the Commons

It is evident that the world is abandoning the notion of water as a Commons, moving instead toward a corporate-controlled freshwater cartel with private companies – backed by governments and global institutions – making fundamental decisions about who has access to water and under what conditions. It is unlikely that there will come a time when there is no private involvement in water. Nor are most critics saying there is no place for private companies in finding solutions to the coming global water crisis. However, there is a desperate need for public oversight and control of the world's declining water stocks and for elected governments and citizens, not corporations, to make the decisions about this shared Commons before it is too late. Simply put, the answer to the world's water crisis rests on the twin foundations of conservation on one side and water justice on the other. No global corporation that must be competitive to survive can operate on those two principles.

There are three major problems with the abandonment of water as a Commons and the adoption of water as a commodity.

There is no incentive to conserve water or stop water pollution

The first problem is that there is no profit in conservation. In fact, it is to the distinct advantage of the private water industry that the world's freshwater Commons are being polluted and destroyed. Even if individual corporate leaders do not take pleasure in the global water crisis, it is exactly this crisis that is driving profits in their industry. The "dead hand" of the market will favor those companies that maximize profit and, in the water business, that means taking advantage of a dwindling supply that cannot meet a growing demand. Further, with governments, industries, and universities investing so heavily in the burgeoning

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water clean-up technology industry, there is less and less incentive at every level to emphasize source protection and conservation. Once a massive and expensive clean-up industry is in place, economic and political pressure will come to bear on governments and global institutions to protect it. Technology, controlled by corporations, will drive policy.

Already global trade rules to promote the water technology industry are in place. The World Trade Organization (WTO) promotes and protects the trade in “environmental services,” encouraging cross-border trade and investment in private water clean-up companies. As in all tradable goods and services, governments are encouraged to relinquish public control of water treatment to the private sector and have to ensure that any rules they have in place are the “least trade restrictive” possible. This means that the rules and regulations meant to protect the public and the environment must not hamper private business, and the pressure is on governments to “cut red tape” and lower their standards. As well, under the “National Treatment” provision of the WTO, governments cannot favor domestic water companies and will have to open up their bidding process to the water technology transnationals that are getting more powerful all the time.

Nature has no one to buy it for ecosystem survival

The second major concern around the commodification of water is that with no regulatory oversight or government control, there will be no protections for the natural world, and a need to safeguard integrated ecosystems from water plundering. As it is now in most parts of the world, governments have little knowledge of where their groundwater sources are located, or how much water they contain. Consequently, they have no idea how much pumping they can maintain or if current water mining operations are sustainable. The more private interests control water supplies, the less government and public interests have to say about them. The commodification of water is really the commodification of nature. If water in the future will only be accessible to those who can pay for it, who will buy it for nature?

An added strain is put on rural and wilderness water Commons by the water needs of urban centres, especially the burgeoning mega-cities of the global South – needs increasingly being supplied by draining rural and wilderness lakes, rivers and aquifers. Agriculture, especially irrigated industrial farming and livestock production, typically put the single largest demand on surface and aquifer resources. In water-scarce regions, irrigation can consume well over three-quarters of total water withdrawals. If governments maintain control of water systems, they can try to protect rural ecosystems, although it is true that governments are under competing pressures. But if, as is increasingly the case, water transfers are in the hands of private brokers who are competing with one another for dwindling resources and the process is unregulated by governments, there will be few protections in place to stop the destruction of watersheds and ecosystems and the species and plant life they sustain.

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Only the rich will have clean water, a flagrant violation of human rights

The third problem with the commodification of water is that water, and water infrastructure – from drinking water and sanitation utilities services, to bottled water, clean-up technologies and nuclear-powered desalination plants – will flow where the money is, not where it is needed. No corporation is in business to deliver water to the poor. That, say corporate leaders, is the job of governments. People who cannot pay do not get served. Already, wealthy countries like Saudi Arabia and Israel are dependent on expensive water purification technologies for their day-to-day living, while equally water-starved countries such as Namibia and Pakistan cannot afford such technology, and so their citizens suffer from severe water shortages. Bottled water is the exclusive prerogative of those who can pay for it, as is clean water from the tap in many parts of the world. World Water and Flow Inc, two companies on the verge of a bulk water transfer business, are looking to send their first shipments, not to the parts of the world where people are dying for water, but to Las Vegas and Los Angeles in the case of World Water, and Saudi Arabia and the United Arab Emirates in the case of Flow.

Further, as in every major industry sector, the water industry is becoming very powerful in lobbying and advising governments and global institutions on water policy. The big service companies have enormous clout with the World Bank and the United Nations as well as with their own governments. Big utility corporations such as Suez and Veolia actually influence World Bank decisions as to where funding for water services should go. Studies show that they now set the agenda in terms of prioritizing the contents, regions and cities where investment in the water sector will flow. Because of the corporate need to make a profit, donor-funded investments have not concentrated on the areas of greatest need, be it by country or by city where the greatest number of poor live. Rural communities have suffered as well from lack of attention because of their inability to create a profit for the water companies. As a consequence, sub-Saharan Africa and South Asia have been the focus of only one percent of total promised private sector water investment.

A Commons approach to water, on the other hand, would act in the reverse in each of these areas, protecting water, watersheds and species, and all people.



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The Global Movement to Reclaim the Freshwater Commons and Distribute it More Fairly

A fierce resistance to the destruction of water and watersheds and the inequitable distribution of water has grown in every corner of the globe, giving rise to a coordinated and, given the powers it is up against, surprisingly successful global water justice movement. “Water for all” is the rallying cry of local groups fighting for access to clean water and the life, health and dignity that it brings. Many of these groups have lived under years of abuse, poverty and hunger. Many have already been left without public education and health programs. But somehow, the assault on the water Commons has been the great standpoint for millions and has been a catalyst for forging new alliances between groups in the global South and those in the wealthier countries who have not had to face these issues before. Without water there is no life and for many communities around the world, North and South, the struggle over the right to their own local water Commons has become a politically galvanizing milestone.

The origins of this movement, generally referred to as the global water justice movement, lie in the hundreds of communities around the world where local groups and communities are fighting to protect their local water Commons from pollution, destruction by dams, and theft, be it from other countries, their own governments, or private corporations such as bottled water companies and private transnational utilities providing water on a for-profit basis. From thousands of local struggles for the basic right to water, galvanized through international resistance to the denial of these rights, a highly organized and mature global water justice movement has been forged and is shaping the future of the world’s water Commons. To the question, “who owns water?” they say, “no one – it belongs to the earth, all species and future generations.” The demands of the movement are simple but powerful: keep water public; keep it clean; keep it accessible to all. In other words, keep it in the Commons.

This movement has already had a profound effect on global water politics, forcing global institutions such as the World Bank and the United Nations to address

A highly organized and mature global water justice movement has been forged and is shaping the future of the world’s water Commons.

the inadequacies of their policies, and has helped formulate water policy inside dozens of countries. The movement has forced open a debate over the control of water and challenged the “Lords of Water” at the World Water Council who have set themselves up as the arbiters of this dwindling resource. The growth of a democratic water justice movement is a critical and positive development that will bring needed accountability, transparency and public oversight to the water crisis as conflicts over the water Commons loom on the horizon. The reclamation of the water Commons converges around three struggles.

Reclaiming and conserving water

The Current Crisis

All over the world, our water Commons is used as a dumpsite for our wastes. Ninety percent of the wastewater produced in the global South is discharged, untreated, into local rivers, streams, and coastal waters. In China, close to 80 percent of the major rivers are so degraded, they no longer support aquatic life. Less than 25 percent of the population of Pakistan has access to clean drinking water, so polluted has that country’s surface water become. Fewer than three percent of Indonesia’s residents are connected to a sewer, leading to severe pollution of nearby lakes and rivers. Seventy-five percent of India’s and Russia’s surface waters are so polluted they should not be used for drinking or bathing. The UN has revealed the unprecedented deterioration of all of Africa’s 677 major lakes and every one of its major rivers. Lake Victoria, the source of the Nile, is being used as an open sewer. In Latin America, more than 130 million people do not have access to clean drinking water because of the pollution of lakes and rivers. Major cities such as Sao Paulo and Mexico City are facing the twin crises of over-consumption of water and mass pollution. Only about two percent of Latin America’s wastewater receives any treatment at all. The situation in the global North is better, but not good. Twenty percent of all surface water in Europe is “seriously threatened” and 40 percent of U.S. rivers and streams are too dangerous for swimming, fishing or drinking, as are 46 percent of lakes due to massive toxic run-off from industrial farms.

The Commons Solution

This unparalleled environmental crisis can only be met and reversed through the lived affirmation that water is a Commons that belongs to everyone and therefore, any harm to water is a harm to the whole – earth and humans alike. All over the world, groups and communities are confronting the twin engines of water pollution: industrial agriculture and industrial production for a global economy. The move to local, sustainable agriculture is growing everywhere as people question the wisdom of using fossil fuels to move food grown with chemicals and irradiated to prevent decay, over long distances to their dinner tables. The sales of organic food are soaring at about 20 percent a year, well ahead of the regular food industry, and the Slow Food Movement now claims 100,000 members in more than 100 countries. A survey done for the University of Surrey in Great Britain found that organic food consumers share the common (Commons) values of protection of their own health and the health of others, as well as of the environment at large. Community Supported Agriculture (CSA),

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where local families and communities support local farms, are growing daily. (One of the key goals of the network Our World is Not For Sale in fighting the power of the World Trade Organization is to prevent the ability of transnational corporations to use trade rules to challenge local regulations and practices that favour the local, sustainable production of food, and therefore the protection of the local water Commons.)

In countries around the world, groups have come together to fight the power of large agri-business, the water-guzzling practices of the Green Revolution and water-destroying factory farms. Beyond Factory Farming, a Canadian network of groups devoted to sustainable and humane farming, is working with local municipalities to establish regulations that would limit the amount of water available to intensive livestock operations. Similarly, groups everywhere are challenging the abuse to the water Commons by foreign corporations and the rights of these corporations to override local environmental rules in their operations. Mining companies are major culprits in the contamination of groundwater in the global South; but an emerging North-South network is challenging these companies and their water-destroying practices. Activists in Canada and Chile teamed up to force Canadian mining company Barrick Gold to abandon a plan to remove the top of three glaciers on the Chile-Argentina border in order to get at the gold deposits underneath them. Massive amounts of glacier water that serve as the only source for 70,000 farmers would have been destroyed. Meanwhile, the network in Canada is promoting a law that would hold mining companies incorporated in Canada accountable overseas to the same standards they would have to obey at home, a way to protect the global Commons from theft or destruction.

As well, from all over the world, come stories of reclamation of polluted water sources, some thought dead. In 2000, the European Commission launched the Water Framework Initiative, a European-wide plan for water conservation, clean-up and administration based on the joint management of river basins and the Commons values of cross-border cooperation of watersheds and the right of all citizens to clean drinking water. Europe is also looking to adopt “best practice” examples, such as the requirement in Northern Germany that water coming out of the tap must be clean enough to give to a baby and therefore, all who live, farm or do business along the water source flowing from the Alps must conduct their lives in a way that does not harm this water. Europe is also home to the miraculous recovery of Lake Constance, once almost lost to phosphorus and other pollution, now recovered so much that it provides drinking water to the 320 cities and four million people who live on it. The recovery of Lake Constance was undertaken in 1954 by Germany, Austria and Switzerland, the three countries that surround the lake, in a joint effort to save this great water Commons, which is the third largest lake in Europe. Only by seeing the lake as common property, belonging to all, were the countries, municipalities, and residents able to bring it back from near extinction.

Waterkeepers is an alliance of 177 affiliate programs started in North America and is becoming an international phenomenon. The goals of Waterkeeper Alliance International, which embraces Riverkeepers, Baykeepers, Coastkeepers and Lakekeepers, are fully rooted in the history and culture of the Commons. Waterkeepers empowers local communities to protect their shared water Commons and ecosystems and to work on other joint projects together. In the last year



Groups everywhere are challenging the abuse to the water Commons by foreign corporations and the rights of these corporations to override local environmental rules in their operations.

alone, Waterkeepers has had several major victories. The Hudson Riverkeepers went to court to get power plants and industrial facilities to use closed-cycle cooling systems, saving vast amounts of water and aquatic species. The Delaware Riverkeepers stopped army plans to dump byproducts of a deadly chemical weapon in the Delaware River. And the San Francisco Baykeepers forced the state of California to adopt a tough plan to slash mercury pollution to the San Francisco Bay.

Examples are harder to find in the global South where there is less money available for pollution clean up. Nevertheless, there are powerful examples. Eco-fundo, a Colombian environmental and human rights network of 110 NGOs and 15 government organizations, funds “debt for nature” swaps where Canada, the U.S. and the Netherlands exchange debt owed to them by Colombia for conservation restoration. Perhaps the most exciting project is the restoration of 16 large wetland areas of the Bogotá River to pristine condition. The river supplies the water for the eight million people of Bogotá and is badly contaminated. Eventually the plan is to clean up the entire river. True to principles of the Commons, the indigenous peoples living on the sites were not removed, but rather, have become caretakers of these protected and sacred places. In another example, the citizens (especially students) of many countries of the global South have become involved in the annual Clean Up the World Campaign. Held on the third weekend of September, it was started in 1993 by an Australian sailor upset at water pollution, and now involves more than 35 million people in 120 countries in an annual ritual of Commons protection. The United Nations Environment Program has adopted Clean Up the World and now funds the secretariat and promotes the day around the world. The water Commons in many participating countries is the key target for restoration.

Protecting watersheds, groundwater and ecosystems

The Current Crisis

We are, as a human species, destroying our water Commons to the extent that we are now losing water from the hydrologic cycle itself, destroying watersheds necessary for our survival and the survival of the planet. We are, quite literally, running out of water. Right now, humans use more than half of the earth’s accessible run-off water, leaving little for nature and other species. In the United States, industrial agriculture withdraws as much water as nuclear power plants, guzzles four-fifths of the nation’s total water use, and is the leading source of impairment for the country’s rivers and lakes. In the global South, irrigation consumes more than 85 percent of the total water use and is draining the world’s rivers. As our demand grows, the strain on the earth and other living creatures accelerates. We humans have assumed that we could never “run out” of water and have used it as if it were an infinite resource. Fresh water is not an infinite resource. Less than one half of one percent of the world’s water stock is available for our use without drawing down the water stock needed to replenish this cycle. We are depleting our water Commons in six crucial ways: *aquifer mining*, where we use sophisticated technology to pump groundwater far faster than it can be replenished by nature; *virtual water trade*, where we trade massive amounts of water from watersheds “embedded” in exported food products;

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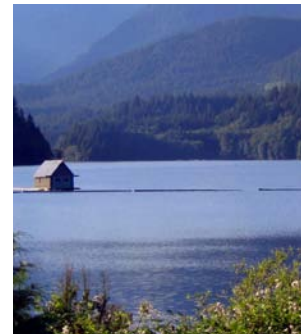
pipeline diversions, where we move water from where nature put it and where it is needed for ecosystem health to where we want it to grow food in deserts, or provide water for massive urban areas; *deforestation*, where degraded forests cause a reduction in the amount of rain falling in an ecosystem; *urban heat islands*, which destroy water retentive landscapes, creating massive deserts; and *climate change*, which is causing greater evaporation of surface waters and is melting the glaciers.

The Commons Solution

This unparalleled threat to the earth can only be met if we humans understand that we depend on ecosystem health for our own lives and work together to restore the water Commons in nature. Slovakian scientist and Goldman Prize winner Michal Kravcik is leading a global crusade to save the earth's hydrologic cycle. His groundbreaking research in his own country showed that when water cannot return to fields, meadows, wetlands and streams because of urban sprawl and the removal of water-retentive landscapes, the actual amount of water in the hydrologic cycle decreases, leading to desertification of once green land. Kravcik is spearheading a movement to view water in the hydrologic cycle as a Commons before it has even fallen from the clouds and asserts the right of a drop of water to "domicile." Restoring ecosystems and watersheds by rainwater harvesting is key to the restoration of the hydrologic cycle upon which we all depend for life, he explains, and adds that the beauty of this project is that it is a natural, as opposed to a high-tech solution to the water crisis that could employ millions in what he calls "community sustainable development programs."

Rainwater harvesting is the collection and storage of rainwater and has been used traditionally in arid and semi-arid areas for millennia. But increasingly, rainwater harvesting is being used in urban areas and areas that are not arid, but running out of clean water. China and Brazil have extensive rooftop rainwater harvesting programs. Bermuda has a law that requires all new construction to include rainwater-harvesting facilities. The Centre for Science and Environment in Delhi, India, runs dozens of rainwater harvesting programs around the city and has trained thousands of practitioners from all over India to renew this ancient technique for water retention. In Rajasthan, Rajendra Singh's Tarun Bharath Sangh movement has brought life and livelihoods back to the region through a system of rainwater harvesting that has made deserts bloom and rivers run again through the collective action of entire villages. People come from all over the world to learn from Singh (known in India as the "rain man") whose work and vision have brought health and harmony to hundreds of once rain-impooverished communities. Recently, a new international coalition has been formed to promote water harvesting. The International Rainwater Harvesting Alliance, with members from dozens of countries, is targeting rooftop harvesting using community buildings and surface rainwater harvesting for groundwater recharge. Its mandate reflects the Commons values of inclusion in serving women and the poor first, and asserting the right to water for all.

The water Commons is also being fiercely protected from bottled water hunters in communities around the world. Brazil's Citizens for Water Movement travelled all the way to Nestlé's headquarters in Vevey, Switzerland two years ago to protest the damage the company is causing to the ancient mineral springs of



Restoring ecosystems and watersheds by rainwater harvesting is key to the restoration of the hydrologic cycle upon which we all depend for life.

Sao Lourenco. Five hundred families in the Philippine port city of Bacolad have charged Coca-Cola with dumping harmful contaminants into their water supply. Friends of the Earth Indonesia is fighting government concessions to several bottled water companies in central Java. Opposition is growing in Chiapas Mexico against groundwater concessions granted to Coca-Cola, some as long as 40 years. The “Quit India Coca-Cola” campaign is gaining steam in that country as dozens of communities are reclaiming their water Commons. The fight in Plachimada, Kerela, went all the way to the Indian Supreme Court, which forced the company to close its operations in 2006, returning the local water supplies to the people. In Michigan, Sweetwater Alliance and others have taken Nestlé to court for destroying their local water supplies. They won an important court victory, but the company is fighting back. Residents of Fryeburg, Maine are fighting to save their aquifer from Nestlé subsidiary Poland Springs and local communities are adopting “ordinances” to assert their control over local water sources. A citizen’s group in McLeod, California successfully stopped Nestlé from a major water taking from Mount Shasta.

Groups are also turning to their state legislatures for aid in protecting their water Commons. In New Hampshire, the group Save Our Groundwater (SOG) is working with a state committee to draft a law that would allow the residents of any municipality to turn down a request for a commercial water-taking with a two-thirds majority vote. In next-door Vermont, a bi-partisan committee co-sponsored legalisation to protect that state’s groundwater Commons by creating a new permitting program for large-scale withdrawals and declaring the resource a public trust.

International Rivers is a powerful network on five continents working to protect rivers from the destruction of big dams. They believe that the interruption caused by big dams to the natural flow of rivers destroys a vital element of the water Commons. Today, everywhere a big dam is being planned or built, there is organized local opposition. International Rivers is there to offer legal advice, training and technical assistance, and advocacy with governments. One sure sign of success is that the numbers of big dams being built around the world has steadily declined since International Rivers was set up two decades ago. The newest fight is to block the damming of the two largest rivers in Patagonia, the Baker and the Pascua Rivers, to supply Chile’s copper industry with hydro-electricity. The transmission line to carry this electricity would require the world’s largest clear-cut through an untouched temperate rainforest. Groups from around the world are joining this campaign to save the water and forest Commons of Patagonia. Activists in British Columbia, Canada recently celebrated a victory when a project to build private hydro-electric facilities through a provincial park was put on hold. They are continuing to fight similar projects around the province arguing that private hydro companies would be able to use and control for profit the water Commons that belong to all residents of B.C.

The greatest indictment of our collective abandonment of the notion that water is a Commons is the water apartheid now suffered by the poor and disenfranchised of the global South.

Fighting For Water Justice

The Current Crisis

One of the definitions of a Commons is that it is accessible to all without discrimination. The greatest indictment of our collective abandonment of the notion that water is a Commons is the water apartheid now suffered by the poor and disenfranchised of the global South. Almost two billion people live in water-stressed regions of the planet; of those, 1.4 billion have little or no access to clean drinking water every day. Not surprisingly, most of these 1.4 billion live in poor countries in the global South and suffer unbearable hardships at the loss of their water Commons. Two-fifths of the world's people lack access to basic sanitation, leading to a return of communicable diseases like cholera and the plague, once thought extinct. Half the world's hospital beds are occupied by people with an easily preventable water-borne disease and the World Health Organization reports that contaminated water is implicated in 80 percent of all sickness and disease worldwide. More children die every year from dirty water than war, malaria, HIV/AIDS and traffic accidents together. In the last decade, the number of children killed by diarrhea exceeded the number of people killed in all armed conflicts since the Second World War. Every eight seconds, a child dies from water-borne disease. The average North American uses almost six hundred liters (150 gallons) of water a day. The average African uses just six. A newborn baby in the global North consumes between forty and seventy times more water than a baby in the global South.

(However, poverty and water apartheid are not relegated to the South. When former Prime Minister Margaret Thatcher privatized and deregulated Britain's water services in the late 1980s, millions were unable to pay and thousands had their water cut off completely. Water cut-offs have spread to the United States where, in 2001, the Detroit Sewage and Water Department cut off water to almost 42,000 residences unable to pay their (rising) water bills. Those most hurt with the denial of their right to water were seniors, people with disabilities, single mothers with children and African Americans. To add insult to injury, the city's Social Services Department removed many children from homes because they now had no access to fresh water.)

The Commons Solution

Water apartheid will not end until we declare water to be a public Commons accessible to all. The global water justice movement is of one voice that water must be seen as a basic human right and must not be denied to anyone because of the inability to pay. In communities all around the world, local groups have resisted the privatization of their water services and won. For these tireless campaigners, the right to water and the concept of water as a Commons are one and the same. In response to intense public pressure under the leadership of a grassroots group called FEJUVE, the Bolivian government of Evo Morales recently ousted the private water company Suez from the capital, La Paz, after a disastrous 10-year contract to manage the city's water. In a ceremony marking the return of Bolivia's water to public ownership, President Morales said that water must remain a basic service so that everyone can have the water they need for life. Suez was also forced out of Buenos Aires and Santa Fe, Argentina, the latter after more than one quarter of the population signed a plebiscite



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to rescind Suez's contract. Local groups celebrated when the municipality of Adelaide, Australia took back its water from a private consortium after years of being engulfed in a "big pong" (stench) caused by leaking sewers. Recently, a powerful movement in the United States led by Food and Water Watch has successfully fought water privatizations in New Orleans, Louisiana; Laredo, Texas; Atlanta, Georgia and Stockton, California. Food and Water Watch is spearheading a campaign for a Clean Water Trust Fund that would finance badly needed municipal infrastructure repairs, allowing municipalities to keep their water services public. In Canada, the vast majority of water is delivered on an equitable basis to all citizens regardless of ability to pay. These water services are paid for out of an income tax regime supported by a majority of the population.

As well, citizens are not waiting for their governments in taking the lead on asserting the human right to water. On October 31, 2004, the citizens of Uruguay became the first in the world to vote for the right to water. Led by Friends of the Earth Uruguay and the National Commission in Defense of Water and Life, the groups first had to obtain almost 300,000 signatures on a plebiscite (which they delivered to Parliament as a "human river") in order to get a referendum placed on the ballot of the national election calling for a constitutional amendment on the right to water.

Several other countries have also passed right to water legislation. South Africa, Ecuador, Ethiopia and Kenya also have references in their constitutions that describe water as a human right (but do not specify the need for public delivery). The Belgian Parliament passed a resolution in April 2005 seeking a constitutional amendment to recognize water as a human right and in September 2006, the French Senate adopted an amendment to its water bill that says each person has the right to access to clean water, but neither country makes reference to delivery. The only other country besides Uruguay to specify in its constitution that water must be publicly delivered is the Netherlands, which passed a law in 2003 restricting the delivery of drinking water to utilities that are entirely public and, in March 2008, announced its full support for a right to water constitutional amendment.

Other exciting initiatives are underway. In August 2006, the Indian Supreme Court ruled that protection of natural lakes and ponds is akin to honoring the right to life – the most fundamental right of all according to the Court. Activists in Nepal are going before their Supreme Court arguing that hiring a private firm to manage the drinking water system in Kathmandu violates the right to health guaranteed in the country's constitution. The Coalition Against Water Privatization in South Africa is challenging the practice of water metering before the Johannesburg High Court on the basis that it violates the human rights of Soweto's poor. Bolivian President Evo Morales has called for a "South American convention for human rights and access for all living beings to water" that would reject the market model imposed in trade agreements. At least a dozen countries have reacted positively to this call. Civil society groups are hard at work in many other countries to introduce constitutional amendments similar to that of Uruguay. Colombia's Ecofondo has launched a plebiscite toward a constitutional amendment similar to the Uruguayan amendment. They need at least one and a half million signatures and face several court cases and a dangerous and hostile opposition. Dozens of groups in Mexico have joined COMDA, the Mexican Coalition for the Right to Water, in a national campaign for a Uruguayan-type constitutional guarantee to the right to water.

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Toward a New Freshwater Narrative Based on Commons Principles

While these and countless other initiatives are taking place within a framework of the Commons, they are not yet seen by either all the groups themselves, or society at large, in a Commons context. While most are using language that Commons pioneers cited in this paper would identify as fully compatible with the notion of the Commons, the concept is still new for many in our world. A reframing of this work from a Commons perspective could help the work of the whole movement and act as a unifying force.

If the world is to save its freshwater resources, it is clearly necessary to create a counter narrative to the dominant narrative currently governing water management thinking in powerful circles. Increasingly in the halls of government, business and international financial and trade institutions, water is seen as a commodity to be put on the open market and sold and traded to the highest bidder. A corporate water cartel is emerging to control every aspect of water, from when it is taken out of an ecosystem or aquifer, through its human use, to its circulation through the hydrologic cycle. It is argued that a market-based allocation system for water, complete with a pricing regime, will sort out the global water crisis and ensure conservation. In this worldview, water is an economic good, not a social or public good, and its users are customers, not citizens with rights to a common resource. Furthermore, international trade rules are incrementally creating a rules-based international constitutional framework confirming water as a tradable commodity.

It is time for a new language of the Commons, one that claims water for people and nature for all time. A new water narrative could be based on the following 10 principles.

1) Declare water to be a Commons

Who owns water? That is the key question. A new water narrative must assert that no one owns water; rather it belongs to the earth and all species alike. As

If the world is to save its freshwater resources, it is clearly necessary to create a counter narrative to the dominant narrative currently governing water management thinking in powerful circles.

Vandana Shiva explains, because it is a flow resource necessary for life and ecosystem health, and because there is no substitute for it, water must be regarded as a public Commons and a public good and preserved as such for all time in law and practice. The creation of a world-wide water cartel is wrong, ethically, environmentally and socially and ensures that the decisions regarding the allocation of water are made based on commercial, not environmental or social, concerns. Private ownership of water cannot address itself to the issues of conservation, justice or democracy – the underpinnings of a solution to the world’s water crisis. Only citizens and their governments, acting on their behalf, can operate on these principles. Water companies thrive on pollution and scarcity and on the growing desperation for water in many parts of the world. Water must be understood to be part of the global Commons, but clearly subject to local, democratic and public management.

No one has the right to appropriate water for personal profit while others are being denied access because of an inability to pay for it. Water should not be privatized, traded for profit, stored for future sale, or exported for commercial purposes. Governments must declare their domestic water Commons a public good and take responsibility for delivering clean, safe water as a public service to all their citizens. All decisions regarding the water Commons must be made transparently and with democratic oversight. This is not to say there is no place for the private sector in alleviating the global water crisis, as long as corporations are not running the water services directly. For instance, there is and will be a place for the private sector in providing water re-use technology and the building of water infrastructure. But all private sector activity must come under strict public oversight and government accountability, and would have to operate within a mandate where the goals are conservation and water justice. The high-tech water companies, in particular, need public oversight to ensure the wastewater returning to the water supply has met high quality assurance standards.

As David Bollier explains, accepting the idea of a Commons helps us identify values that lie beyond the marketplace. Embracing the Commons helps us to restore to the center stage a whole range of social and ecological phenomena that market economics regard as “externalities.” A language of the Commons will restore more democratic control over water and establish the supremacy of citizenship over ownership in its care and stewardship.

2) Adopt an Earth Democracy narrative

Modern society has lost its reverence for water’s sacred place in the cycle of life, as well as its centrality in the realm of the spirit. This loss of reverence for water has allowed humans to abuse the water Commons. Over time, we have come to believe that humanity, not nature, is at the center of the universe; whatever we run out of can be imported, replaced with something else, or fixed with sophisticated technology. We have forgotten that we are also a species of animal that that needs water for life. Only by redefining our relationship to water and recognizing its essential and sacred place in nature can we begin to rectify the wrongs we have done. Only by considering the full impact of our decisions on the ecosystem can we ever hope to replenish depleted water systems and protect those that are still unharmed.

Governments must declare their domestic water Commons a public good and take responsibility for delivering clean, safe water as a public service to all their citizens.

Albert Einstein said that no crisis can be solved with the same thinking that created it. It is likely impossible to assert a new water Commons narrative within the current global economic model. A system driven by the imperatives of market expansion, export competition, unlimited growth and corporate power will not easily accommodate to a definition of water as a common good. To truly adopt the notion of water as a Commons requires a challenge to the tenets of economic globalization and the adoption of a new set of assumptions, values and models for trade, commerce, development and production. All systems now in place must be judged against their impact on the world's water resources. Growth in and of itself is anathema to the protection of the earth's dwindling water supplies, and unregulated capitalism places far too much power in the hands of CEOs whose sole mandate is to generate profits. This system must be abandoned in favor of one based on the notions of cooperation, sustainability, equity, democratic control and subsidiarity (if something can be grown, produced or managed locally, it should be favored over a regional, national or international solution). In this model, the private sector would be held to high standards and public scrutiny.

Vandana Shiva calls it "Earth Democracy" and defines it as a system that puts people and nature above commerce and profit, emerging out of a desire to sustain life for future generations. The enclosure of the water Commons deprives communities of their right to life and the earth to the blood that sustains it. Earth Democracy is deep democracy, a set of practices that sustain life and preserve the ecosystem. In this system, humans cannot attain their personal fulfillment if the earth is not cared for as well. As the International Forum on Globalization states, accountability is central to Earth Democracy. When decisions are made by those who will bear the consequences, they are likely to give a high priority to the sustained long-term health of their soil, forests, air and water because their own well-being and that of their children is at stake. Earth Democracy requires governance systems that give a vote to those who will bear the costs when decisions are made. It means limiting the rights of absentee landowners and foreign corporations and ensuring that those who hold decision-making power are liable for the harms their acts bring to others. Where Earth Democracy is practiced, it is generally done best by local communities in the most transparent way possible.

3) Protect water through conservation and law

The most important demonstration of a new water narrative would be a commitment to protect and conserve the water Commons for all time. Water Commons sustainability means protecting source water at every level, reclaiming polluted water and conserving water for the future. As American water pioneer Sandra Postel explains, we must learn to use every drop of water twice. Each generation must ensure that the abundance and quality of water is not diminished as a result of its activities. This will mean radically changing our habits, especially those of us who live in the global North. If we do not change our ways, any reluctance to share our water – even for sound environmental reasons – will rightly be called into question. The key is to stop polluting surface waters in order to allow local communities to return to the use of their rivers, lakes and streams for the majority of their water needs, lifting the burden off groundwater supplies. Primary sewage treatment must be an international aid priority



A language of the Commons will restore more democratic control over water and establish the supremacy of citizenship over ownership in its care and stewardship.

for the global South and infrastructure repair of leaking urban water systems everywhere must be implemented. The rule of law must be brought to bear on polluting industries at home and abroad. (Legislation would include penalties for domestic corporations that pollute on foreign soil. Such penalties could form part of a fund to pay for infrastructure repair.) Rigorous laws must be passed to control water pollution from industrial agriculture, municipal discharge and industrial contaminants. Flood irrigation, which wastes massive amounts of water, must be replaced by drip irrigation and more sustainable water use. The rush to adopt water-guzzling industrial biofuels as an alternative to fossil fuels must be halted. Water abuse in oil and methane gas production must stop, requiring conservation of energy supplies and the adoption of alternative renewable energy sources. Water conservation practices must be adopted everywhere. Examples in the industrialized world include water-saving washing machines, low-flow shower faucets, and low-flush or composting toilets.

Water conservation must extend to groundwater as well. Quite simply, humans cannot continue to mine groundwater supplies faster than they can be replenished by nature. Extractions cannot exceed recharge just as a bank account cannot be drawn down without new deposits. Governments everywhere must undertake intensive research into their groundwater supplies and regulate groundwater takings before their underground water supplies are gone. One important way to protect groundwater Commons is to protect the integrity of surface water and the drinking water available to the public. When public water sources are safe, the bottled water industry will be put out of business; this in turn will relieve the current insatiable demand on groundwater supplies.

4) **Treat watersheds as a Commons**

The mass transfer of water from wilderness and ecosystems, combined with the loss of water-retentive landscape, has displaced much habitat for the water Commons. Perhaps there is no greater right than the right of a drop of water to come back to the watersheds and water systems that nourish all life and maintain the integrity of the water Commons. Without this habitat, water cannot fulfill its ecosystem function and is lost as a nature Commons. Unless we protect water and its right to flow freely in nature, water will never be seen as a Commons, but rather a commodity to be moved around to serve industrialized humanity and our modern “needs.” Nature put water where it belongs. Tampering with nature by moving large-scale water supplies from an ecosystem by pipeline or through virtual water exports has the potential to destroy whole watersheds and all that depend on watershed health, including Indigenous Peoples. By practicing bioregionalism – living within and adapting to the ecological constraints of a watershed – we honor the narrative of water as a Commons not only for humans, but also for nature and other species. One powerful example is the clear-cutting of mountains for timber or to build ski resorts and adult sports playgrounds. Mountains are the “water towers” of our world. They hold and retain water, snow and ice that often provide the only water sources in a region. When their capacity to store water is reduced by the strip-mining of their trees and shrubs, people and nature alike suffer severe consequences.

To protect watersheds and water sustainability, every human activity will have to be measured against its impact on the water Commons and water’s natural habi-

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tat. Governments and their citizens will have to set priorities for water use, ensuring that the needs of people and nature come before the needs of industry. Large tracts of watershed lands will have to be set aside and protected. Water destructive economic policies such as virtual water trade will have to be curbed. An international network has come together to restore Lake Naivasha in Kenya's Rift Valley by halting the virtual water trade of the European flower industry, which is now destroying the lake. Large dams that prevent mighty rivers from flowing to the sea will be abandoned. Since 1993, there have been 273 dams "decommissioned" in the U.S., 54 in 2007 alone. Because of the harm we have already done to watersheds, however, it is necessary to actually set up a project to restore watershed health. Watershed protection means governance of water along watershed lines, rather than on than along the lines of traditional political boundaries, through which the water Commons flows. The province of Ontario is home to a much-respected watershed protection program that transcends geopolitical boundaries through its thirty-six Conservation Authorities – agencies made up of citizens, landowners, and elected representatives of the watershed who ensure the safekeeping and restoration, when necessary, of Ontario's lakes, rivers and streams, and provide opportunities for the public to enjoy, learn from and respect nature and the natural environment.

Everywhere in the world, people and their governments must create the conditions that allow rainwater to remain in local watersheds. This means restoring the natural spaces and water retentive landscapes where rainwater can fall and water can return. It also means harvesting the natural flow of the water cycle in a myriad of ways, in cisterns, for agriculture, on roof gardens, in greenspaces surrounding our cities, and in revitalized parks, wetlands and forests.

5) Assert community control over local water sources

Another defining feature of water as a Commons is that its sustainable and equitable allocation depends on cooperation among community members. As a common good, water is managed with the community's solidarity and full democratic participation. This is very different from a corporate model of water distribution, which is based on individual ability to pay, not need. Local stewardship, not private business, expensive technology or even government, is the best guardian of the water Commons. Local citizens and communities are the front-line "keepers" of the rivers, lakes, and groundwater supplies upon which they depend for life. If reclamation projects or water delivery systems are not guided by the common sense and lived experience of the local community, they will not be sustained. The management models of Indigenous populations and rural communities must be enhanced, as they have proved to be the real preserver of the water Commons. States must not only recognize these local rights, but also protect them in law, and provide the authority to local communities to exercise their stewardship effectively. University of British Columbia professor Karen Bakker says that there are three arguments for community control over water. First, many states and most water corporations have failed to deliver water successfully to their citizens. Second, water has special cultural and spiritual dimensions that are usually local. And finally, water is a local flow resource, always needed by local communities.



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All over the world, local, sustainable systems of managing the water Commons evolved and were passed from one generation to the next. The “investment” involved was the hard labor of the people, who knew that a sound water ecosystem meant life. Ignorance of local conditions and a lack of respect for local knowledge has been behind the failure of many mega-engineering and water systems imposed on communities from the outside. In communities around the world, traditional, local water protection and allocation practices are being revisited. In some areas, local people have assumed complete responsibility for water distribution facilities, and established funds to which water-users must contribute. Examples abound of community management of the water Commons. In India, Shiva reminds us, the system is called kudimaramath, or self-repair. Peasants pay in grain into a public account that funds the maintenance of Commons works, such as water systems. In New Mexico, water is equitably and sustainably distributed through acequias, which are both irrigation systems and democratic social institutions, distributing limited water supplies based on human need, ecosystem health and community values.

6) **Maintain water sovereignty for both communities and nation**

Adopting (or re-adopting) the notion of a water Commons does not mean a free-for-all, or that anyone can help themselves to the water in others’ territories. A basic principle of the water Commons (that is compatible with both watershed protection and local control) is that water is a sovereign good and cannot be taken from another country or community by force or by using economic dominance. Many countries are running out of water and the race is on to secure new water supplies. Before the new government of Evo Morales put a stop to it, the former government of Bolivia was planning to sell water to the foreign-based mining companies in Chile, a move strongly opposed by the majority of Bolivians. Israelis, who are supposed to share water resources with Palestinians, have access to five times as much water. Libya used its regional super-power status to build the biggest pipeline in the world to date to remove water from an aquifer under the Sahara Desert, water that should equally belong to Chad, Sudan and Egypt. A plan to build a water pipeline from southern Nevada in the United States to Las Vegas has people in Nevada up in arms.

Water has become a key strategic issue of foreign policy and national security in the major centers of power – the United States, Europe and China in particular. Finding and securing new sources of water has become paramount. China is planning to pipe 17 billion cubic meters of water a year from the Tibetan Himalayas into China’s heartland, water that feeds all of the great rivers of Asia. Russians are very concerned about China’s plan to build a huge irrigation canal and siphon off huge amounts of water from the shared Irtysh River. In the United States, a consortium of groups has formed Global Water Futures to advise the White House and the Pentagon both on the issue of water as a national security concern, as well as how to build superior water technologies so that U.S. companies can dominate the sector. Key member groups of Global Water Futures include the Center for Strategic and International Studies, a right-wing think tank closely associated with the current administration, several giant water technology companies, Coca-Cola, and Sandia National Laboratories, a research lab

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closely connected to the Pentagon currently run by Lockheed Martin, the world's largest weapons manufacturer. Several nearby countries with water resources, including Canada, Brazil and Paraguay, are nervous about this sudden increase in interest in their water by the U. S. government. Water is a sovereign Commons that must be entrusted to the local people to steward into the future, not taken in the quest for super-power status.

7) Adopt a model of water justice, not charity

The water Commons narrative is based on a belief in justice, not charity. While it is admirable that many people and groups from the global North assist the poor of the global South by building wells to link them up to groundwater sources, this is only a stop-gap measure. Billions of people live in countries that cannot provide clean water to their citizens not only because they are water poor, but because they are burdened by their debts to the North through loans from the World Bank and the International Monetary Fund. As a result, poor countries are forced to exploit both their people and their water resources. At least 62 countries currently need deep debt relief if the daily deaths of thousands of children are to end. Further, foreign aid in many wealthy countries is well below the recommended 0.7 percent of GDP. If the World Bank, the United Nations and northern countries were serious about providing clean water for all, they would cancel or deeply cut the global South debt, substantively increase foreign aid, fund public, instead of private services, tell their big bottling companies to stop draining poor countries dry, and invest in water reclamation programs to protect source water. They would also tell the water companies that they no longer have any say in which countries and communities receive water funding.

Citizens of First World countries need to recognize and challenge the hypocrisy of their governments, many of which would never permit foreign corporations to run and profit from their water supplies, but that continue to support the global financial and trade institutions that commodify water in the Third World. A good example is that Norway (thanks to its wonderful citizen's movement) recently told the World Bank that it will no longer fund any water development projects in the global South that involve privatization. Many in the water justice movement work with fair trade groups to create a whole new set of rules for global trade based on sustainability, cooperation, environmental stewardship and fair labor standards. They also promote a tax on financial speculation; even a modest tax could pay for every public water utility in the global South.

Special mention must be made of two groups feeling the brunt of water inequity: women and Indigenous people. Women carry out 80 percent of water-related work throughout the world and therefore carry the greatest burden of water inequity. Ensuring water for all is a critical component of gender equality and women's empowerment, along with environmental security and poverty eradication. The more policy-making about water is moved from local communities to a global level (the World Bank for instance), the less power women have to determine who gets it and under what circumstances. As the primary collectors of water throughout the world, women must be recognized as major stakeholders in the decision-making process. Indigenous people are particularly vulnerable to water theft and appropriation, and their proprietary rights to their



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land and water must be protected by governments. In a call to action on World Water Day 2007 called *Honour the Water, Respect the Water, Be Thankful for the Water, Protect the Water*, the Indigenous Environmental Network points out that many of the resources being plundered by governments and corporations of the global North lie on ancestral lands. The ensuing exploitation, privatization and contamination upset the balance of cultural resources and sacred sites and destroy the notion of water as a Commons for people and nature.

8) Restore public delivery and fair pricing

A new water narrative must establish once and for all that water is a public Commons to be delivered as a public service by governments at a fair and accessible price. This means that the international financial agencies responsible for providing aid to poor countries for water development must shift their focus from public/private/partnerships, (PPPs), which promote the big, private water utilities, to public/public/partnerships (PUPs), which transfer funding and expertise from successful public systems in the global North to provide local management and workers in the global South with the necessary funds and skills to deliver water on a not-for-profit basis to all their citizens. PUPs are a mechanism for providing capacity building for these countries, either through Water Operator Partnerships, whereby established public systems transfer expertise and skills to those in need, or through projects whereby public institutions such as public sector unions or public pension fund boards, use their resources to support public water services in developing countries. The objective is to provide local management and workers with the necessary skills to deliver water and provide wastewater services to the public.

Examples of successful PUPs include partnerships between Stockholm and Helsinki water authorities and the former Soviet Union countries of Estonia, Latvia and Lithuania and between Amsterdam Water and cities in Indonesia and Egypt. Public Services International asserts that if each effectively functioning public water utility in the world were to “adopt” just three cities in need, public-public-partnerships could operate on a global basis, and provide water to all those in need at a fraction of the cost now encountered supporting the private companies. This would also become a concrete example of how cooperation over water could be a unifying force for humanity. Financing public water in poor countries will need a combination of progressive central government taxation, micro-financing and cooperatives to run the systems on a day-to-day basis.

The issue of water pricing is fraught with conflict. On one hand, it is clear that many societies and the wealthier class in all societies waste water because it is free or very cheap and often subsidized by government. On the other hand, water metering has been used in the global South to deny water to millions of poor people. The price of water is increasing – sometimes dramatically – all over the world. Over the past five years, municipal water rates have increased by an average of 27 percent in the United States, 32 percent in the United Kingdom, 45 percent in Australia, and 50 percent in South Africa. Yet even these prices do not reflect the real costs of cleaning and delivering water. The problem is, if the real cost of water is passed on to consumers, how will the poor afford water? Some municipalities are charging rates closer to the real cost of water services and

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then subsidizing the poor; Bogotá Colombia subsidizes the poor 78 percent of their water costs and the middle class 24 percent. The preferred way however, as these subsidies will always be subject to political challenge, is to use a block rate pricing system where a low level of consumption – that required to satisfy basic needs – is very cheap, while prices increase with higher levels of consumption; the more you use, the more you pay. This system has several advantages: it acts as a conservation measure for higher water consumption while protecting the poor from price gouging by private vendors by providing them with a secure water supply.

Many countries and communities – from Osaka, Japan, to Athens, Georgia – are moving to a block fee to encourage water conservation. To ensure water justice, however, there are three conditions to be met if a fee for water is to be levied. First, the fee must not be for the water itself, because water is a Commons, but rather for the service needed and the infrastructure required to provide that water to households, industries and communities. Second, the unit price for basic water needs must be sufficiently cheap that no one is doing without. No family or community must ever have its water cut off because of inability to pay. Third, the fees must be paid to a government or not-for-profit government agency so that the money goes back into the system to upgrade infrastructure, protect source water and improve service, and never to a for-profit corporation and its investors.

9) Enshrine the right to water in nation-state constitutions and a UN Covenant

All of the “Commons pioneers” cited in this paper have agreed on the need for a way to protect the Commons in law and with new policy structures. The new water narrative described here must be codified in law. It is finally time for the world to agree that water is not “need,” but a “right,” codified at every level of government, from local municipal by-laws and nation-state constitutions, to a binding United Nations Covenant. The global water crisis cries out for good governance, and good governance needs a legal basis that rests on universally applicable human rights. A UN Covenant would set the framework for water as a social and cultural asset, not an economic commodity. It would establish the indispensable legal groundwork for a just system of distribution of the water Commons. It would serve as a common, coherent body of rules for all nations, rich and poor, and clarify that it is the role of the state to provide clean affordable water to all of its citizens. Such a Covenant would also safeguard already accepted human rights and environmental principles in other UN treaties and conventions. A UN Covenant would bind nations to an agreement not only to refrain from any action or policy that interferes with the right to water, but also would obligate them to prevent third parties, such as corporations, from interfering in that right. It would give ordinary citizens a powerful tool with which to argue their right to clean affordable water and put the spotlight on governments refusing to fulfil their obligations. There has been some progress at the United Nations toward a full Covenant, most notably with the passage of the 2002 General Comment Number 15 by the Committee on Economic, Social and Cultural Rights. But the Comment is an “interpretation” by a committee of the UN, not a full binding UN Covenant.



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There are those in the water Commons community who question the value of working on the right to water, particularly at the level of the UN. One concern is that the UN, like the powerful governments that control it, has adopted a Western-style, individualist approach to rights that is contrary to the notion of collective rights embodied in the Commons. A second is that it is too human-centered and not rooted in an ecosystem framework. While both of these concerns are valid (and apparent in the reflections of some countries' UN delegations), a right to water Covenant does not have to reflect this worldview, but could be written to promote a more holistic one. Well constructed, it could enshrine the sovereignty of local communities over their natural heritage and therefore the management of their water Commons, including watersheds and aquifers. As Friends of the Earth Paraguay explains, "The very mention of the supposed conflict, water for human use versus water for nature, reflects a lack of consciousness of the essential fact that the very existence of water depends on the sustainable management and conservation of ecosystems." A third concern is that the right to water is not practical on a day-to-day basis for communities, particularly in the global South, struggling for water survival. But the citizen movements in many communities and countries in the South have already adopted, or are working to adopt constitutional amendments to guarantee water as a right, with specific and immediately noticeable ramifications. The definition of the right to water need not belong to the same people who created economic globalization, but could be integral to the struggle of local people everywhere fighting for their water Commons.

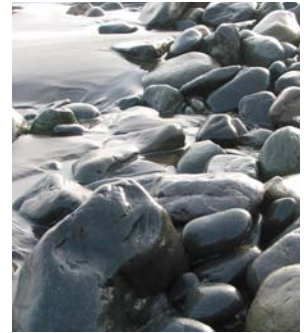
10) Use and expand the public trust doctrine to protect water

Finally, the notion of a water Commons could be profoundly advanced if we had a body of law that recognized the inherent rights of the environment, other species and water itself outside of their usefulness to humans. The move to create "wild law" comes to some extent out of the Public Trust Doctrine, first codified in 529 A.D. as Codex Justinianus, after the emperor of that period who said, "By the laws of nature, these things are common to all mankind: the air, running water, the sea and consequently the shores of the sea." This "common law" was repeated many ways and in many jurisdictions, including the Magna Carta, and has been a powerful legislative tool in the United States to provide for public access to seashores, lakeshores and fisheries. It is being used currently in an attempt to protect the California Delta from commercial exploitation and overuse. However, the Public Trust Doctrine is limited to fighting for equal access by the public to certain Commons, but does not extend to the concept that the Commons themselves have the inherent right to protection. In the eyes of most Western law today, most of the community of life on earth remains mere property, natural "resources" to be exploited. Where there is challenge to this exploitation, it is usually to protect a natural Commons so that it can still be of use to humans.

South African environmental lawyer Cormac Cullinan first coined the term "wild law" and has written a book of the same title. A wild law is a law to regulate human behaviour in order to protect the integrity of the earth and all species on it. It requires a change in the human relationship with the natural world from one of exploitation to a democracy with other beings. If we are members of the earth's community, then our rights must be balanced against those of plants,

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animals, rivers and ecosystems. In a world governed by wild law, the destructive, human-centered exploitation of the natural world would be unlawful. In wild law, a suit could be brought in the name of an aspect of nature, such as a lake and a polluter punished for harming a river. Humans would be prohibited from deliberately destroying the functioning of ecosystems, or driving other species to extinction. Cullinan points out the irony that in some countries, corporations are legal entities in the eyes of the law and have rights not extended to whole species. As Aldo Leopold said, "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." Wild law was the inspiration behind a 2006 ordinance in Tamaqua Borough, Pennsylvania that recognized natural ecosystems and natural communities within the borough as "legal persons" for the purposes of stopping the dumping of sewage sludge on wild land. (Wild Law would not entertain the idea of corporations as "legal persons.")



Says Cullinan, "The day will come when the failure of our laws to recognize the right of a river to flow, to prohibit acts that destabilize the Earth's climate, or to impose a duty to respect the intrinsic value and right to exist of all life will be as reprehensible as allowing people to be bought and sold. We will only flourish by changing these systems and claiming our identity, as well as assuming our responsibilities, as members of the Earth community."

If we are members of the earth's community, then our rights must be balanced against those of plants, animals, rivers and ecosystems. In a world governed by wild law, the destructive, human-centered exploitation of the natural world would be unlawful.



Conclusion

This paper, and the process of which it is a part, is an attempt to promote the Commons narrative in our collective work on water. A Commons approach and analysis could improve the quality of our research, communication, campaigning and collaboration as well as promote alliance building with other Commons movements. A Commons approach would serve as an “umbrella discourse,” revealing the shared strategic interests of diverse groups that are now operating in narrow issue silos. To adopt and use the language of the Commons would give activists and writers a way of asserting common cause with allies in adjacent fields of action. Just as Rachel Carson’s *Silent Spring* launched an environmental movement that changed the world, so too does the notion of the Commons have the capacity to move us forward in the next phase of our human journey. The world is crying out for new vision and hope. This lens of the Commons, with its ancient beginnings and its infinite possibilities, could provide that vision and hope, as well as a way forward in these precarious times.



About the Author

Maude Barlow is the National Chairperson of the Council of Canadians, Canada's largest public advocacy organization, and the founder of the Blue Planet Project, working internationally for the right to water. She serves on the boards of the San Francisco-based International Forum on Globalization and Washington-based Food and Water Watch, and is a Councillor with the Hamburg-based World Future Council. Maude is the recipient of seven honorary doctorates, the 2005/2006 Lannan Cultural Freedom Fellowship Award, the 2005 Right Livelihood Award (known as the "Alternative Nobel") for her global water justice work, and is the Citation of Lifetime Achievement winner of the 2008 Canadian Environment Awards. She is also the best selling author or co-author of 16 books, including *Blue Gold, The Fight to Stop Corporate Theft of the World's Water* and the recently released *Blue Covenant: The Global Water Crisis and The Coming Battle for the Right to Water*.

Sources and Further Reading

This paper owes a great deal to the Commons “pioneers” who have forged a movement to reclaim the notion of the Commons and give it voice in our modern world. Most helpful have been Vandana Shiva’s writings, particularly *Monocultures of the Mind*, 1993, and *The Seed Keepers*, 1995; Jonathan Rowe’s articles and reports for a variety of journals, including *Yes Magazine* and *Utne Reader*, where *Fanfare for the Commons* first appeared; David Bollier’s many books, especially *Silent Theft, The Private Plunder of our Common Wealth*, 2002; Richard Bocking’s 2003 paper *Reclaiming the Commons* for the First Unitarian Church of Victoria; and Peter Barne’s *Capitalism 3.0: A Guide to Reclaiming the Commons*, 2006. Harriet Barlow shepherded the production of the influential 2003/2004 report *The State of the Commons* for the Friends of the Commons. I used their collective work as a backdrop against which to apply my knowledge of the global water crisis to an analysis of the Commons.

For a greater examination of the global water crisis, there are many sources, including my 2007 book *Blue Covenant, The Global Water Crisis and the Coming Battle for the Right to Water*. Several other books are helpful in describing the crisis, including: *The Water Atlas*, a book of facts and maps about water by Robin Clarke and Jannet King (2004); *Deep Water*, on the global struggle against large dams by Jacques Leslie (2005); *Liquid Assets* on the need to protect freshwater ecosystems by Sandra Postel (2005); and *When the Rivers Run Dry* on the ecological water crisis, by Fred Pearce (2006). The United Nations monitors the global water crisis in a number of its agencies. Through its World Water Assessment Programme, which coordinates the work of 24 agencies, every three years the UN publishes a groundbreaking assessment of the world’s water. Its 2006 World Water Development Report is called *Water, A Shared Responsibility*. As well, every year, the United Nations publishes a Human Development Report. Its 2006 report was devoted (for the first time) to the world water crisis. *Beyond Scarcity: Power, Poverty and the Global Water Crisis*, cites a form of “water apartheid” that divides those with access to too much clean water and those with little or no access at all.

Every two years, the Pacific Institute for Studies in Development, Environment and Security, led by the noted water expert Peter Gleick, publishes a comprehensive study called *The World’s Water: The Biennial Report on Freshwater Resources*, with massive data on the most significant trends in water and water management. The Pacific Institute maintains a website devoted to continuous publication of new information and studies on all aspects of the world water crisis. Sandra Postel’s Global Water Policy Project is dedicated to the preservation of the world’s’ water resources and puts out a steady stream of excellent research and documentation, especially on the desertification of the planet. The World Watch Institute, whose website declares that “Water scarcity may be the most underappreciated global environmental challenge of our time,” has an extensive water program and turns out huge volumes of research on the state of the world’s water.

Several books helped to chronicle the history of the campaign to enforce a private model of water delivery and its failure. These include *Water Wars* by Vandana Shiva (2001); *Whose Water is it?*, a 2003 collection edited by Bernadette McDonald and Douglas Jehl for the National Geographic; *The Water Barons* by the International Consortium of Investigative Journalists (2003); and *The Water Business* by Ann-Christin Holland (2005). Others are good sources on the fight back around the world to reclaim the water Commons. They include *Aqua Para Todos*, 2003, by Dieter Wartchow, formerly head of Corsan, the public water company of Porto Alegre Brazil; *Cochabamaba! Water War in Bolivia*, 2004, by Oscar Olivera; *Reclaiming Public Water* by Corporate Europe Observatory and the Transnational Institute (2005); and *Thirst, Fighting the Corporate Theft of Our Water*, 2007, by Alan Snitow, Deborah Kaufman and Michael Fox. Also very helpful on the Bolivia situation is Jim Shultz’s Democracy Center website. His April 2005 report, *Deadly Consequences, the International Monetary Fund and Bolivia’s “Black February,”* gives historic background of the eventual win in that country.

Other excellent sources for information on the fight to protect the world's water commons include, Public Services International and Public Services International Research Unit in Geneva, who have done groundbreaking research on alternatives to private water delivery; Blue Planet Project in Canada; the World Development Movement in Great Britain; FIVAS in Norway; Food and Water Watch in Washington, which has done extensive research on the funding agencies around the world; Alliance Sud in Switzerland; Corporate Europe Observatory in Paris; IBON in the Philippines; RED Vida, a Latin American network of water allies; COMDA in Mexico; Ecofundo in Colombia; Friends of the Earth Uruguay; and the African Water Network, representing activists from 40 African countries.

Ashfaq Khalfan of the Right to Water Program at the UN Centre for Housing Rights and Evictions (COHRE) has written extensively on the right to water. In March 2004, he wrote *Legal Resources for the Right to Water: International and National Standards*. John Scanlon, Angela Cassar and Noemi Nemes of the World Conservation Union wrote *Water as a Human Right?* on the legal ramifications of a UN instrument. Henri Smets of the European Council on Environmental Law and the French Academy of Water compiled a catalogue of all current domestic legislation in his 2006 report, *The Right to Water in National Legislatures*. Rodrigo Gutierrez Rivas of the Legal Resource Institute at the University of Mexico wrote a March 2007 paper called *Privatization and the Right to Water: A View From the South*.

Michal Kravcik has written extensively on his concerns about the hydrologic cycle and how to protect it. He lays out a plan in *Blue Alternative, Water for the Third Millennium*, 2002. Cormac Cullinan wrote the powerful 2003 book, *Wild Law: A Manifesto for Earth Justice*.
