

PROGRESSIVE PLANNING

The Magazine of Planners Network

ISSN 1559-9736

Water and Social Justice



Photo credit: Jennifer Lemire, Grassroots International

Israel's Separation Wall in the West Bank doesn't follow recognized international borders. It cuts through Palestinian territory, separating farmers from the water and land they need to grow food.

Resource Rights and Wrongs

By Nikhil Aziz

Water and other natural resources are at the center of conflicts worldwide, in large part due to their unequal distribution. These conflicts are both paradigmatic and traditional, involving a fundamental difference over whether water is a human right or a marketable commodity.

For rural small producers from the Middle East to Latin America, there is no question that access to and control of water is essential to their very survival. The source of the water challenges these producers face vary across the globe, from occupying powers to a state of war, and from government-sponsored, top-down development models to corporate interests that promote private gain over public good. When viewed through the lens of resource rights, globalization is shrinking the global commons through the concentration and privatization of natural resources. Social change movements of small producers are at the forefront of envisioning and realizing more sustainable alternatives.

[Cont. on page 7]

INSIDE:

**ISRAEL'S WAR
FOR WATER**

**BOLIVIA, MEXICO,
ONTARIO, INDIA,
AND U.S.
WATER PLANNING**

MORE...

The Seventh Generation

"In our every deliberation, we must consider the impact of our decisions on the next seven generations."

- From the Great Law of the Iroquois Confederacy

Israel's War for Water

By Marie Kennedy

In South Africa, residents of Soweto are smashing water meters and taking Johannesburg Water to court in protest against prepayment meters, which they claim are unconstitutional (the South African constitution guarantees water as a human right).

In Michigan, activists striving to prevent bottling companies from further water takings are seeking legislative oversight and a constitutional amendment to protect against Great Lakes water diversions or exports.

In Plachimada, Kerala, India, Adivasi women started their years-long *dharna*, or sit-in, in 2002 to prevent the local Coca-Cola bottling plant from stealing and polluting their water. This year, Kerala banned colas, and Coke Pepsi Free Zones are spreading across the country.

From Atlanta to Cochabamba to Buenos Aires, people outraged at steeply rising water rates coupled with lousy service are driving out private water companies and insisting on public accountability for the management of this most precious resource. In practically every country in the world today there are clashes over water—who owns it, who controls it, who needs it.

But you don't hear much about the role of water in the Mideast, particularly in the context of the armed confrontations between Israel and their Arab neighbors. Yet Israel's expansionist program is as much about water as it is about a clash of religion or security, except in the sense that control of sufficient water *is* security for Israel and the other countries of this arid region

the location of the apartheid wall (security fence in Israeli terminology) has more to do with continued Israeli control of the Western Mountain Aquifer than with security. The possibility has been raised that a major reason for the removal of the settlements in Gaza was that the Coastal Aquifer upon which these settlements and all of Gaza have depended became almost useless due to over-pumping and pollution. With the exception of the Litani River, Israel now controls all these areas.

So, what is the basis for these speculations?

Water has been a key element of local and regional politics in the Middle East for centuries. The early Zionists recognized that water was critical to the realization of their dreams. In a proposal to the League of Nations in 1919, the World Zionist Organization delineated borders for the future Jewish homeland based on watershed boundaries so as to include the headwaters of the Jordan River, the lower Litani River in Lebanon and the lower reaches of the Yarmouk River. In the 1947 partition plan, none of these areas were included in the new state of Israel. With the exception of the Litani River, Israel now controls all these areas. In 1973, Israel's former prime minister, David Ben-Gurion, reiterated the importance of expanding Israel's borders based on access to water: "It is necessary that the water sources upon which the future of the Land depends should not be outside the borders of the future Jewish homeland. For this reason we have always demanded that the Land of Israel include the southern banks of the Litani River, the headwaters of the Jordan and the Hauran Region from the El Auja spring south of Damascus." [Cont. on page 4]

Water, Israel's History and the Occupation

Many believe that water was the underlying reason for the invasion and occupation of the West Bank in 1967. Among Palestinians, it is understood that

The photos on pages 8 and 10 of the last issue (No. 168, Summer 2006) were incorrectly attributed to Tom Angotti. These photos were taken by Julian Rodriguez.

PROGRESSIVE PLANNING

EDITORIAL OFFICE

Hunter College
Dept of Urban Planning,
695 Park Ave.
New York, NY 10021
email: tangotti@hunter.cuny.edu
Ph: 212-650-3130
Fx: 212-772-5593

MEMBERSHIP OFFICE

1 Rapson Hall
89 Church Street SE
Minneapolis, MN 55455-0109
Ph: 612-624-3596
Fx: 612-626-0600
Email: pnmail@umn.edu

WEBSITE

www.plannersnetwork.org

EDITORS

Tom Angotti and Ann Forsyth

EDITORIAL BOARD

Eve Baron, Jason Blackman,
Kara Heffernan, Chester Hartman,
Marie Kennedy, Norma Rantisi,

CONTRIBUTING EDITORS

Guillaume Neault, Katharine
Rankin, Norma Rantisi,
Alejandro Rofman

LAYOUT

Donovan Finn

Progressive Planning is published quarterly by Planners Network, Inc., a non-profit corporation in the State of New York. Copyright 2005 by Planners Network. Reprinting and distribution of portions of this magazine for non-commercial purposes are encouraged. Reprints for commercial purposes require written permission from the publisher. Progressive Planning is indexed in the Alternative Press Index.

STEERING COMMITTEE

Tom Angotti, Lee Deuben, Josh Lerner, Richard Milgrom, Norma Rantisi, Alex Schafran, Amy Siciliano

ADVISORY COMMITTEE

Chester Hartman, *Chair*,
Teresa Córdova, Dana R. Driskell,
Ann Forsyth, Marie Kennedy,
Patricia Nolan, Arturo Sanchez,
Peg Seip, Ruth Yabes, Ayse Yonder

PROGRESSIVE PLANNING

The Magazine of Planners Network

ISSN 1559-9736

No. 169

www.plannersnetwork.org

Fall 2006

SPECIAL SECTION ON WATER AND SOCIAL JUSTICE

Resource Rights and Wrongs

By Nikhil Aziz

1

7th Generation - Israel's War for Water

By Marie Kennedy

2

Water is Life! Cochabamba, Bolivia against Privatization

By Don Leonard

10

Urban Water Management in Mexico

By David Barkin

15

A Bottom-Up Planning Model for a Safe and Accessible Water Supply in Malawi

By K. Tyler Miller

19

Water Planning for the Future

By Jonathan Leavitt

23

Water, Environmental Justice and Land Use Planning: Richmond, California

By Amy Vandervarker

26

When the Water Privatizers Go Local, Locals Go Public: Ontario, India and the United States

By Leigh Thomson

30

FEATURES

Heating Up Isn't Hard to Do: Global Warming from a Planner's Window

By John Nettleton

36

DEPARTMENTS

Letters to the Editor

39

PN Resources

40

How To Join, Purchase Back Issues, etc.

43

STATEMENT OF PRINCIPLES: The Planners Network is an association of professionals, activists, academics, and students involved in physical, social, economic, and environmental planning in urban and rural areas, who promote fundamental change in our political and economic systems. We believe that planning should be a tool for allocating resources and developing the environment to eliminate the great inequalities of wealth and power in our society, rather than to maintain and justify the status quo. We are committed to opposing racial, economic, and environmental injustice, and discrimination by gender and sexual orientation. We believe that planning should be used to assure adequate food, clothing, housing, medical care, jobs, safe working conditions, and a healthful environment. We advocate public responsibility for meeting these needs, because the private market has proven incapable of doing so.

GUIDELINES FOR AUTHORS: Progressive Planning seeks articles that describe and analyze progressive physical, social, economic and environmental planning in urban and rural areas. Articles may be up to 2,000 words. They should be addressed to PN's broad audience of professionals, activists, students and academics, and be straightforward and jargon-free. Following a journalistic style, the first paragraph should summarize the main ideas in the article. A few suggested readings may be mentioned in the text, but do not submit footnotes or a bibliography. The editors may make minor style changes, but any substantial rewriting or changes will be checked with the author. A photograph or illustration may be included. Submissions on disk or by email are greatly appreciated. Send to the Editor at tangotti@hunter.cuny.edu or Planners Network, c/o Hunter College Dept of Urban Planning, 695 Park Ave., New York, NY 10021. Fax: 212-772-5593. Deadlines are January 1, April 1, July 1 and October 1.

7th Generation cont'd from page 2

The National Water Carrier, designed to irrigate the Negev Desert in the south of the country with the water from the Sea of Galilee and the Jordan River, was completed in 1964. Israel began to withdraw water from the Jordan, soon taking more than its previously agreed-upon share. Syria and Jordan responded by starting construction of diversion schemes of their own. In 1965, Israel attacked the

is the official date. But, in reality, it started two-and-a-half years earlier, on the day Israel decided to act against the diversion of the Jordan.” Whether or not water was the primary cause of the Six-Day War, the result of the war for Israel was control of and direct access to significantly increased water resources—estimated to be a 50 percent increase in freshwater supplies. As Vandana Shiva writes in her book *Water Wars*, the result of the war “was in effect an occupation of the freshwater resources from the Golan Heights, the Sea of Galilee, the Jordan River and the West Bank.”

Israeli-Palestinian Water Inequities

Confiscation of almost all West Bank wells was one of the first military orders of the occupation and, until 1982, the military controlled West Bank waters. Now the Israel water company Mekorot is in charge. Management has deeply discriminated against Palestinians and has been wasteful of water when it concerns Jewish settlements. No new Palestinian wells have been permitted for agricultural purposes since 1967 and very few have been permitted for domestic purposes. Israel has set quotas based on 1968 usage of how much water can be drawn by Palestinians from existing wells. When supplies are low in the summer, Mekorot closes the supply valves to Palestinian towns and villages, but not to illegal Israeli settlements. Settlers continue to fill swimming pools and water lawns while Palestinians lack water for drinking and cooking. Furthermore, settlers receive heavy subsidies for water to promote agriculture while Palestinian farmers pay the same amount for irrigation water as for drinking water. Twenty-five percent of West Bank Palestinian villages are not connected to water service. When tensions are high and closures common, it is almost impossible for water tankers to enter Palestinian areas and for villagers to get to nearby wells.



When completed, the apartheid wall will divide the West Bank into a northern and southern section with water resources “conveniently located on the Israeli side” along with more than half of the West Bank land.

Arab construction sites and the ensuing border conflicts culminated in a full-scale war in June 1967. Ariel Sharon, the general in charge of the war, later commented, “People generally regard 5 June 1967 as the day the Six-Day War began. That

According to most estimates, Israel uses 73 percent of the water available from West Bank aquifers and West Bank Jewish settlers another 10 percent, leaving West Bank Palestinians with 17 percent. Israelis get about 350 liters of water per person per day while Palestinians get just seventy liters—less than the 100 liter minimum standard of the World Health Organization. About a quarter of all of Israel’s water comes from the Western Aquifer and over a third comes from the Jordan Basin.

The occupied West Bank sits on top of 90 percent of the replenishment area feeding the Western Aquifer, which flows underground from the highlands of the West Bank to the lowlands of Israel. A separate Palestinian state on top of the Western Aquifer would give the Palestinians upstream claims to the lion's share of this water. Israel would have downstream water rights, but those rights would be limited, like Mexico's water rights to the Colorado River. And if the eastern border of a Palestinian state were to be along the Jordan River, Palestine would have downstream water rights to the Jordan. Such considerations no doubt led former Agriculture Minister Rafael Eitan to declare that relinquishing control over water supplies in the Occupied Palestinian Territories would "threaten the Jewish state."

Water and the Wall

This concern about water may explain the route of the apartheid wall. As Noam Chomsky points out, if the wall were really a security wall it would be built "inside Israel, within the internationally recognized border, the Green Line established after the 1948-1949 war." But, the wall that is being built follows quite a different path. Elisabeth Sime, a director of CARE International in the Gaza Strip and West Bank, put it succinctly: "The route of the wall matches that of water resources, the latter being conveniently located on the Israeli side."

When completed, the wall will divide the West Bank into a northern and a southern section. Writing in *Stop the Wall in Palestine*, Abdel Rahman Al Tamimi, an engineer with the Palestinian Hydrology Group, notes that the wall "will make the upstream of the aquifer inaccessible to Palestinians ensuring that Israel will control both the quantity and the quality of the water." He goes on to speculate about what this will mean to any final status negotiations.

The aquifer is under the most fertile lands in the West Bank, thus water usage in the area is closely tied to agriculture. Inaccessibility to the lands because of the Wall will deem these lands dried and useless in just a few seasons; the agricultural sector will first diminish and then wholly disappear.

This major creation of facts on the ground will make the lands, by force, unused and then the request by Palestinians in any negotiations for water for the area will be argued by Israel as baseless.

Water Crisis in Gaza

The Coastal Aquifer, Gaza's only natural freshwater supply, was at one time providing about 18 percent of Israel's water. Serious over-pumping from this rather shallow aquifer has allowed salt from the Mediterranean and other nearby saline aquifers to be introduced. Salting, along with pollution from pesticides, fertilizers and fecal matter (the latter mainly from the refugee camps, most of which have no proper sewage control) have rendered this water unfit for drinking in many



Photo © Skip Schiel, <http://teeksaphoto.org>

Boys carry water in jugs away from the municipal desalination facility in Khan Yunis, Gaza. Because of the Israeli destruction of the sole electrical plant in Gaza in June 2006, facilities such as this, relying on electrical power, either are not functioning or function minimally.

areas and people must haul water from expensive and unreliable desalination plants. Citrus, the traditional main crop of Gaza, is highly salt-intolerant and is becoming obsolete. One wonders to what extent the lack of potable water figured in Israel's decision to pull out of Gaza.

Israel's Growing Water Shortage and Lebanon

In fact, in spite of controlling the Jordan Basin and the Western Aquifer, Israel is once more running out of water. The Coastal Aquifer is gone and ⇒

the flow of the Jordan River has dropped 90 percent over the last fifty years, primarily due to over-extraction. Some observers speculate that Israel is once more turning eyes toward the Litani River in Lebanon, the only country in the region with a water surplus.

After the 1967 war, Moshe Dayan, Israel's defense minister during the war, said that Israel had achieved "provisionally satisfying frontiers, with the exception of those with Lebanon." Both David Ben-Gurion and Moshe Dayan at various times advocated Israeli occupation of southern Lebanon and the Litani. Over the years, the Litani River has continued to be in Israel's sights. It's difficult to know what role water played in Israel's invasion of Lebanon in 1978, 1982 and again this year.

During the Israeli occupation of southern Lebanon between 1982 and 2000, rumors abounded but were never substantiated that Israel was diverting water from the Litani River. What is known is that Israel prohibited the sinking of new wells, seized all technical documents relating to the Litani and, in the barrage of 1993, drove hundreds of thousands from their homes in southern Lebanon. And in 2006? In a final hard push, the day before the cease-fire went into effect, Israeli ground forces advanced to the banks of the Litani. Again, hundreds of thousands of refugees were driven from their homes.

Israel destroyed vast portions of the water infrastructure of southern Lebanon, including the Litani Dam, the major pumping station on the Wazzani River and the irrigation systems for the farmland along the coastal plains and parts of the Bekaa Valley. As quoted in the *LA Times* (22 August

2006), UNICEF water and sanitation specialist Branislav Jekic said, "I have never seen destruction like this.... Wherever we go, we ask people what they need most and the answer is always the same: water. People want to move back to their communities. But whether they stay or not will depend on the availability of water."

In this issue of *Progressive Planning* you will read of other struggles for safe, affordable, accessible water in many parts of the world. Nearly 2.2 billion people, one-third of the world's population, are thirsting for water. In Haiti, Gambia and Cambodia, people are subsisting on less than six liters of water per day. Millions die every year from water-related diseases. The story of Israel is only one among many of the powerful taking water from those with less power. It is only one among many stories of environmental degradation and wasteful uses of water.

In the United States we only have to look to the High Plains Ogallala aquifer, which runs 1,300 miles from Texas to South Dakota and supplies the breadbasket of this country with its water, to find an even more egregious example of over-pumping: The aquifer is being drawn down eight times faster than nature refills it. And we only have to look to Las Vegas, with its green lawns, swimming pools and golf courses in the middle of a desert, to find a culture even more wasteful of this precious resource. Let us hope that throughout the world, more and more people will look and then act before it is too late.

Marie Kennedy is professor emerita of community planning at the University of Massachusetts Boston. She is on the Planners Network advisory committee and the editorial board of Progressive Planning and edited this special issue on water.

Student Disorientation Guide

The how-to guide for a progressive planning education
can be downloaded in PDF format at

<http://www.plannersnetwork.org/publications/disorientation.html>

Aziz cont'd from page 1

Water Wars

Indian author, scientist and activist Vandana Shiva, a member of the Resource Rights Advisory Council of Grassroots International (GRI), a human rights and international development organization, writes in *Water Wars: Privatization, Pollution and Profit* that the wars now being fought over water are both paradigmatic and actual. In the first instance, the dispute is over how we see water—as a natural resource and public good that is enshrined in international conventions and laws as a basic human right, or as a commodity that is privately owned, traded and marketed for profit by corporations to those who can afford to purchase it. While the second, which is more commonly portrayed and perceived as ethnic conflicts, separatist rebellions or anti-government insurgencies, camouflages the root causes of highly inequitable distributions of natural resources such as water and land

GRI has launched a three-year Resource Rights Initiative combining grantmaking in the Global South with education and advocacy in the United States to address these issues. Our partners, social change movements and organizations engaged in the struggle for resource rights, are in the cross fire of both kinds of wars. Many of them are rural organizations of small producers, including the peasants, fishers, landless workers and indigenous peoples that constitute the majority of the world's population. Water, and access to and control of it for agriculture, is a fundamental human right essential for these producer's very survival—whether they are in Pernambuco, Brazil, Chiapas, Mexico or the West Bank, Palestine.

While these conflicts are not limited by geography, neoliberal globalization, as manifest in free trade treaties like the North American Free Trade Agreement (NAFTA) or multilateral institutions like the World Trade Organization (WTO), has only exacerbated their intensity and impact around the world. The United Nations estimates that over a billion people do not have adequate access to water. At the same time, 70 percent of the world's water usage goes towards large-scale, heavily subsidized, export-oriented agricultural production. The model of agriculture, water use

and privatization of resources promoted through NAFTA and the WTO enables food dumping and increases costs for basic services such as water delivery.

Watering Down Ethnic Conflict

Many in the United States see the Palestine-Israel conflict as a clash of civilizations, an unending battle between Muslims and Jews or Israelis and Arabs. GRI and our Palestinian partners, such as the Palestinian Agricultural Relief Committees



Photo credit: Jake Miller, Grassroots International

Manoel Batista Leite of Rasa da Catarina, Bahia in the semi-arid interior of Brazil's northeast, has been a leader and educator for small-scale water projects, including underground dams and hand-dug wells for more than 20 years. Local, community-level expertise like his is invaluable in negotiating the particular challenges of helping people live in harmony with the conditions of the semi-arid region.

(PARC), recognize it at its very core to be a conflict over land and water, arising out of the unjust control and distribution of these resources. Existing in many parts of the world, such conflicts often have more to do with access to or ownership and control of scarce or unequal resources rather than with the particular religion, language or ethnicity of the opponents.

Since its 1967 occupation of the West Bank, the Gaza Strip and East Jerusalem, Israel has con- ➞

trolled Palestinian water through its military and its national water authority, Mekorot. Vandana Shiva notes that Israel consumes over 80 percent of the West Bank's water, which amounts

much water individual Palestinian farmers (the majority of Palestine's population is rural) can use for growing their crops; whether and how deep they are permitted to dig wells on their own lands (while illegal Israeli settlers can build swimming pools); or whether they can repair water infrastructure that is destroyed by the Israeli military. At a macro level, controlling water access is the foundational building block of Israel's unilateral redrawing of boundaries through its separation wall in the West Bank, effectively annexing not just land but also water by blocking Palestinian access to the Jordan valley and various underground aquifers. Both the continuing occupation and the wall are a violation of Palestinian human rights and illegal under international law.

The Palestinian Hydrology Group (PHG), a member of the Stop the Wall Campaign, a GRI partner, monitors and disseminates information on the impact of Israel's occupation and annexation of the Palestinian Territories' resources, such as water, on Palestinian civil society. PARC, the PHG and other organizations like the Union of Agricultural Work Committees and the Land Research Center also work with Palestinian farmers to ensure their access to and control of water by creating, maintaining and rebuilding their water infrastructure. For them, their work is a means of resisting the occupation and is part of the struggle for liberation in the form of Palestinian statehood within the 1967 borders.

Water under the Bridge: Big Business and Big Government

Resource rights violations are not limited to occupying powers or to disputes between nations or between states and provinces within countries. Multinational corporations and governments pursuing neoliberal economic policies and top-down development models are regular violators of these fundamental human rights as well. War on Want's *Coca-Cola: The Alternative Report* documents one such example of a multinational that, in its quest for profit, is at the front and center of the water wars in many parts of the Global South.

The report cites an article written by GRI grantee Centro de Investigaciones Económicas y Políticas Acción Comunitaria (CIEPAC, or the Center for Economic and Political Research and

Photo credit: Jake Miller, Grassroots International



Jose Barbosa uses a hand-dug, 100 meter-deep artesian well to water livestock in the dry season in the interior of Bahia, in north-eastern Brazil. Polo Sindical's community-led, small scale projects like this can deliver water more efficiently where it is most needed.

to between 25 to 40 percent of Israel's water consumption. In a land-scarce and water-stressed climate, lack of access to or control of both resources is extremely devastating to the survival of Palestinians as a people.

At a micro level, Israeli control of Palestinian water includes determining if, when and how

Community Action). This article, “La Coca-Cola en México: El Agua Tiembla,” draws attention to the soft drink giant’s pressuring of local government officials in Mexico’s Chiapas state to use zoning laws in its favor and allow for the privatization of communal or state-owned water resources, even as indigenous peoples and campesino communities are frequently denied access to water. Chiapas, where CIEPAC is based, has Mexico’s largest rivers, but according to Counterpunch columnist John Ross, 68 percent of its 1.3 million indigenous people do not have safe drinking water. Furthermore, while almost 25 percent of Mexico’s water is located on or under indigenous lands, many indigenous communities do not have access to it.

The World Commission on Dams report issued in 2000, *Dams and Development: A New Framework for Decision-Making*, suggests that at least 40 to 80 million people have been displaced globally by mega water projects, including large dams and reservoirs, hydroelectric power plants, flood control schemes and irrigation canals. The overwhelming majority of those forcibly displaced have not been adequately resettled, rehabilitated or compensated. Governments (both Global South and western), international financial institutions (like the World Bank) and multinational corporations (including agribusiness, mining, power and construction companies) are firmly joined at the hip in pursuing these mega projects implemented in the name of the very people they displace, and whose rights they violate or deny.

GRI partner Pólo Sindical dos Trabalhadores Rurais do Submédio São Francisco (Union Pole of Rural Workers of the Lower-Middle São Francisco River Valley) works with displaced rural communities along the border of Brazil’s Pernambuco and Bahia states. It formed in 1979 in response to the displacement of 40,000 to 70,000 Brazilian peasants by the Itaparica Dam. A lead player in Brazil’s Movimento dos Atingidos por Barragens (MAB, or Movement of Dam Affected Peoples), Pólo has raised issues around the proposed redirection of the São Francisco River. Touted by Brazil’s federal government as a magic bullet that would irrigate the semi-arid northeast, provide drinking water and benefit 18 million people, the project, like many others of its kind around the world, will more likely displace people in the tens of thousands, benefit

a few industries and agribusinesses and further degrade an already heavily damaged ecosystem.

Food Sovereignty and the Right to Water

Shiva disagrees with some analysts who claim that in the future conflicts over water will replace current ones over oil. She argues that water wars are taking place now and, in fact, have been going on for some time. Resistance, including posing sustainable alternatives to the dominant paradigm, has been part and parcel of the strategies of social justice movements around the globe. Peasant organizations are working with indigenous groups, women’s movements and environmental justice activists on multiple fronts, from the very local to the national and international levels. For example, movements like La Via Campesina, a global network of hundreds of organizations representing 150 to 200 million small farmers, farmworkers, fishers and foresters, are promoting “food sovereignty” and demanding equitable access to land, water and other resources within a universal human rights framework. For the Via Campesina:

Food sovereignty is the right of peoples to define their own food and agriculture; to protect and regulate domestic agricultural production and trade in order to achieve sustainable development objectives; to determine the extent to which they want to be self-reliant; to restrict the dumping of products in their markets; and to provide local fisheries-based communities the priority in managing the use of and the rights to aquatic resources. Food sovereignty does not negate trade, but rather, it promotes the formulation of trade policies and practices that serve the rights of peoples to safe, healthy and ecologically sustainable production.

Water, in this view, is clearly a human right.

Nikhil Aziz is executive director of Grassroots International (GRI), a human rights and international development organization in Boston, MA that works on resource rights issues through grantmaking, education and advocacy. More information about GRI is available at www.grassrootsonline.org.

Water is Life!

De-Privatization and the Search for Alternatives in Cochabamba, Bolivia

By Don Leonard

Water is life! This was the battle cry for a coalition of labor unions, activists, *cocaleros* (coca producers), students, professionals, small farmers and community groups that gathered in the city of Cochabamba, Bolivia in January of 2000. They organized to take back control of the water resources that had been sold to a subsidiary of the U.S.-based Bechtel Corporation. In this, the poorest country in South America, where nearly one child in ten will never reach the age of five because of illnesses largely related to this precious resource, water means both life and death.

The Cochabamba water works was privatized in 1999 as part of the Bolivian government's 15 year-old experiment in neoliberal structural adjustment. Commonly known as the Cochabamba Water War, the ousting of Bechtel subsidiary Aguas del Tunari (AdT) has become a symbol of hope to citizens and activists worldwide who reject the premise of economic opportunity offered by the neoliberal model of globalization. In April of 2000 a diverse coalition of Bolivian and international activists succeeded in winning a decisive battle in the war to derail the orthodox economic policies adopted by Bolivia's political elites.

Yet six years after the Water War, Cochabamba is still searching for alternatives that will deliver services to the poorest half of the city, which lacks access to a basic sanitation infrastructure. Ultimately, the ability of the movement to deliver on the promise of "Cochabamba's water for Cochabambinos" has been hindered by the dynamics of globalization that continue to displace Bolivian families to urban areas with finite water resources, as well as by the failure of the social movement to provide alternative approaches to the often mismanaged and always underfinanced public operation of those resources.

Globalization Fallout

For the city of Cochabamba, located in a semi-arid

valley at the heart of the Bolivian Andes, the challenge of providing water services increased dramatically during the 1970s and 1980s, as ongoing but relatively slow urban migration from surrounding rural areas increased to dramatic new levels of migration from the altiplano (highlands). A faltering mining industry and successive droughts during this period began eroding the economic base of rural peasants in the altiplano, and between 1976 and 1992 Cochabamba expanded from 184,000 inhabitants to 397,000.

Beginning in 1986, successive waves of liberal economic reforms were implemented by the Bolivian government under an executive order (Supreme Decree 21060) in an effort to curb the hyperinflation that by August 1985 had reached 23,500 percent. State subsidies of gas and mining were cut overnight and over the course of the next fourteen years, nearly all state-owned enterprises were privatized. Consequent layoffs and liquidation of assets caused unemployment rates to triple and had the immediate effect of displacing thousands of workers and their families. While inflation was brought under control, the resulting increase in urban migration caused annual population growth in Cochabamba to jump from 3.4 percent during the previous period (1976-1992) to over 5.4 percent between 1992 and 2001, causing the population to nearly double.

Expanding basic sanitation services to this growing population has been the job of Julio Rodríguez. He is planning director of the Municipal Service for Potable Water and Sewage (SEMAPA), the municipality-owned company that returned to assume responsibility for providing basic sanitation services to Cochabamba's sprawling urban area after the expulsion of Aguas del Tunari. Looking out the south window of Rodríguez's office in the distance, beyond the wealthier residential and commercial

centers of the city that enjoy at least intermittent services from the water works, lie the improvised houses of the largely migrant neighborhoods collectively known as the Zona Sur. For the civil engineer, delivering quality sanitation to the 58,000 households and businesses that currently receive municipal water and sewage services is a formidable challenge; extending coverage to the 470,000 and growing population of the Zona Sur that currently lacks access to the municipal water works is a task that borders on science fiction.

Resistance is not Futile

The coalition that came together in January of 2000 to protest the concession of Cochabamba's water resources to the Bechtel subsidiary Aguas del Tunari was united by a common recognition of the failure of orthodox neoliberal reforms to deliver greater opportunity. Fifteen years after the Bolivian government accepted *carte blanche* reforms that have come to be known of as the Washington Consensus, 70 percent of the population remained below the poverty line.

In the fall of 1999 the Bolivian government announced the conclusion of closed-door negotiations for the concession contract with AdT and the Water Services Law that made the privatization move possible. AdT took control of Cochabamba water works on November 1, 1999. Local opposition to privatization quickly emerged when rural neighborhoods with locally-built wells and irrigation systems discovered that the law conceded control to AdT of all water resources within the municipality, including private wells and pre-existing irrigation systems.

The protests that developed received little support from Cochabamba residents already connected to the water works, as many still held hope that privatization would lead to better water services at lower costs. Initially it was only activists and the Federation of Factory Workers who took a political position against privatization and expressed solidarity with these neighborhoods. Organizing community meetings to inform citizens about the details of the privatization concessions, union leader Oscar Olivera observed, "We used to own the railways, the airlines, the gas; now they want to lease the rain."

AdT implemented an overnight rate hike of 35 percent in January of 2000. Due to AdT improvements to the water system that increased the hours of water availability, consumption also increased. AdT also implemented aggressive water billing practices. As a result, many families experienced net increases in their water bills far beyond the 35 percent target. For families hovering at the edge of poverty and for middle-class Cochabambinos alike, these rate increases triggered a wave of anger that forged a unique solidarity between the activists, students, professionals, small farmers and community groups

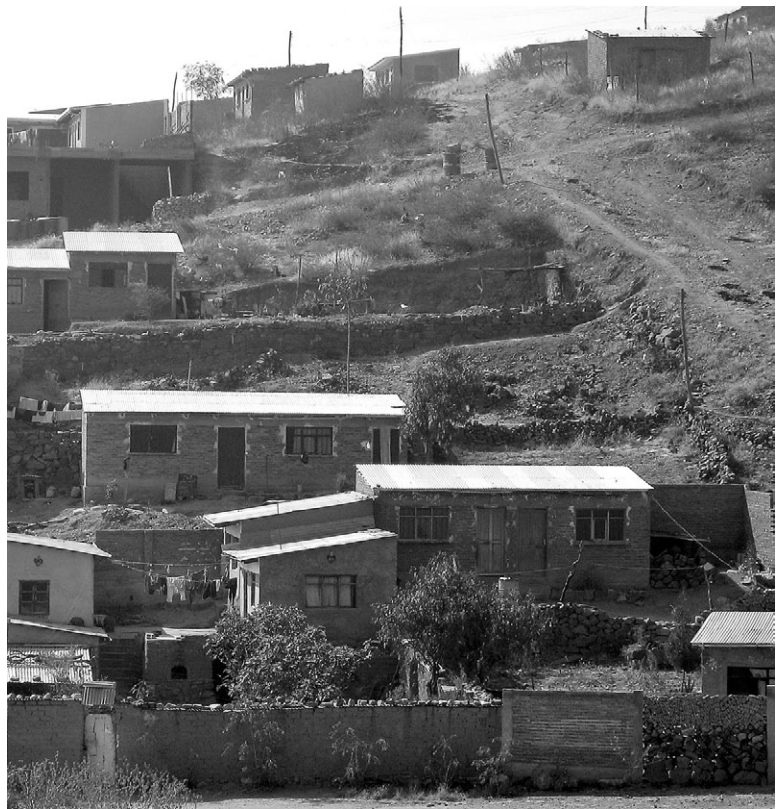


Photo credit: Don Leonard

Ch'aqui Mayu, a typical settlement of the Zona Sur, is dependent on water trucks to provide for their basic needs.

of all economic strata. During this time, Oscar Olivera of the factory workers union joined forces with Evo Morales of the *cocalero* syndicate, Felipe Quispe of the peasant trade union confederation (CTUSB) and various grassroots organizations to consolidate the Coalition for the Defense of Water and Life, or Coordinadora.

By April of 2000 the Coordinadora had mobilized over 100,000 citizens drawn from the wealthiest to the most impoverished neighborhoods to fight what had become an often violent battle against ➡

unresponsive local, state and national governments and their top-down imposition of privatization. After months of protest, intermittent sieges and much spilt blood, the government conceded. On 10 April 2000, AdT was informed by the Bolivian government that its contract was being cancelled. A movement that began with no real expectation of victory succeeded in returning the Cochabamba water works to public ownership.

The success of the Coordinadora contains several lessons concerning how public interests can be organized to achieve their objectives. The Bolivian vice president Alvaro García Linera has likened the coalition of social forces mobilized by the Coordinadora to a modern-day example of sociologist Charles Tilly's classification of power transitions from local to national levels that occurred in

of directing civil demands and institutionalizing other forms of exercising democratic rights." The Coordinadora leadership, though groomed in the union tradition of clear divisions between members and non-members, adapted to the individualistic ordering of modern urban society to create a new, horizontally organized coalition that for a time proved cohesive enough to unite the most diverse cross section of social actors in the history of Bolivian social movements.

Despite the success of the Coordinadora in orchestrating a social movement to return management of Cochabamba's water resources to public control, six years later half of the city still lacks access to basic sanitation services. Coordinadora member Marcela Olivera observes that while it was fine to criticize the commodification of water, the movement failed to create new alternatives. To her, the challenge to organizers remains: "What do we do after we put down the stones?"

Cochabamba Water Six Years Later

According to planning scholar John Friedmann, the practice of planning involves both technical and political aspects. For the organizers who coordinated the Cochabamba Water War, planning assumes profoundly political dimensions. The social movements they separately assembled in the form of Oscar Olivera's Coordinadora and Evo Morales' socialist/indigenous MAS political party quickly moved beyond the question of water. They viewed their accumulated political capital as an opportunity to confront the Bolivian political elites who suffered from a democratic deficit by failing to understand the relationship between the logic of macroeconomic shock therapy and the traumatic consequences these reforms had on the Bolivian people. For these movements, the de-privatization of Cochabamba's water represents one battle in a war that now extends beyond water to gas, land reform and the call for a constitutional convention to roll back two decades of neoliberalism.

In the eyes of SEMAPA's Julio Rodríguez, however, the practice of planning is strictly business. His job is to draw up the technical plans and find the financing to turn the noble ambitions of the water war into a reality. The difference between success and failure in Rodríguez's planning world is mea-

Photo credit: Don Leonard



The only source of water for this Zona Sur family is brought to them by truck and stored in large barrels.

eighteenth century Europe. On the one hand, traditional Bolivian social groupings, such as associations of irrigators and worker unions, were indeed "reacting" to impositions by modern, national powers. But at the same time the Coordinadora "proactively" assembled a new coalition of civil society, one that forged a powerful popular consciousness concerning the ownership of water that achieved, as García remarked, "recognition for its forms of assembly-style democracy as a technique

sured in liters per second, kilometers of pipe, leakage and contamination indicators and a spectrum of ratios that tell him (and the international financial institutions on which future projects depend) whether SEMAPA is getting it right or not.

For the Ríos family, which lives in the migrant community of Ch'aqui Mayu in the heart of the Zona Sur, getting it right is measured by a more basic indicator—the portion of its three dollar daily income that must be spent on filling the barrel of water needed each day. While comparable families that live within the SEMAPA service area pay approximately four dollars per month to receive water, the Ríos family pays about twelve dollars per month to the tanquero water trucks that provide a lifeline to communities like Ch'aqui Mayu. The Ríos family doesn't know what the term structural adjustment means, but it was families like these that took to the streets in 2000 to fight for access to safe, affordable water and sewage services. They joined a social movement to end the privatization of Cochabamba's water resources based on the belief that publicly-owned water works would give poor communities greater social control and deliver the basic sanitation services they so desperately needed. More than six years later, they are still waiting.

Technical and Financial Problems

The water company inherited by the reformed SEMAPA in 2000 was riddled with both technical and financial problems. First, the grid of pipes that connect central and northern Cochabamba is over twenty-five years old. Replacing the 400 kilometers of failing pipes that provide water and sewage services to the existing grid would cost approximately \$48 million. Second, the existing grid was designed to service central and northern Cochabamba. Piping water into the Zona Sur would require the construction of five expensive pump stations to move the water uphill to a network of tanks that would then disperse water throughout the south of the city. Additionally, the urban area under SEMAPA's jurisdiction increased by 40 percent in August of 2004 as boundary lines were redrawn to reflect the increasing urban sprawl to the south of the city. The total cost of completing an Inter-American Development Bank (IDB)-funded expansion that would connect 120,000 residents

(approximately 25 percent of the Zona Sur) to the water grid comes to \$24 million. Finally, when SEMAPA was reformed in 2000 it assumed \$30 million in accumulated debt from the previous public administration of the water works, a debt it is required to service. The financial implications of these technical issues are formidable, and in the absence of national government subsidies or foreign direct investment, SEMAPA is truly at the mercy of the international financial institutions (IFIs) and their conditional loans.

In order to fulfill the conditions of the IFIs, SEMAPA must demonstrate that it has income to sustain itself. SEMAPA finds itself in a difficult situation, whereby the funds to improve services require either expanding the service area to increase the number of users, a strategy that requires initial capital that the water works cannot raise without the assistance of IFIs, or increasing rates, a politically sensitive issue. Between April of 2000 and October of 2005, political constraints prevented the company from raising rates. This has had the practical impact of hindering SEMAPA's ability to meet the conditions for Phase I of the IDB expansion project, which were due in August 2005 and as of July 2006 were still unmet. Since October 2005 SEMAPA has gradually raised rates 12.5 percent in an effort to improve its bottom line. The revenues, however, are just beginning to arrive. Meanwhile the Ríos family and the Zona Sur wait.

Contributing to the already formidable obstacles of infrastructure and finance facing Rodríguez's Department of Planning, SEMAPA's organizational structure has been unable to escape its reputation for highly politicized and unresponsive decision-making that is so typical of state bureaucracies in South America. Previous to the AdT privatization move, the SEMAPA board of directors had no provision for social control beyond the symbolic representation offered by the participation of the mayor. The goal of the social movement following the Water War was to create social spaces for a more democratic administration of the water works.

While the negotiations between the government and the Coordinadora following the cancellation of the AdT contract resulted in the creation of three elected "citizen director" positions to the SEMAPA ⇒

water board (out of a total of seven directors), these changes did not reflect the kind of horizontal, open and responsive social control that activists sought. With only one representative for each of Cochabamba's three major zones (North, Center and South), each citizen director represents approximately 20,000 users. There are several problems with this arrangement. First, citizen directors do not receive a salary. The positions have attracted more aspiring politicians than qualified representatives. Second, the excessively vertical distribution of power means that citizen directors have not proved capable of representing the full spectrum of civic groups, especially the water committees, which hold a stake in the management of SEMAPA. Finally, the communities that lie within SEMAPA's nominal service area but lack service have no voice on the board.

In addition to organizational weaknesses, the board of directors also suffers from a deficit of technical input. Nominally the engineers of SEMAPA are represented by a director appointed through the Federation of Professionals. In practice, however, there is a near-total disconnect between the water engineers and the Federation representative. The current representative is an architect, and anecdotal evidence suggests that her secondary role as a political advisor to the state governor influenced her appointment as a director. While the general manager appointed by the board to direct day-to-day operations of the company could be the focal point of consensus among the engineers of SEMAPA, in practice previous managers have proved unwilling to press controversial issues that run counter to the political current of the board.

The net effect of these organizational deficiencies is a politically charged environment at SEMAPA whereby neither the input of company engineers nor the petitions of citizen stakeholders are involved to any major degree in the decision-making processes of the board of directors. For Rodríguez, the practical impact of the political maneuverings of the board is a less efficient company for him to sell to international donors. For the general public, perceptions that the publicly-owned company is less than transparent translates to voter participation for water board elections that hover in the single digits.

As it exists today, the nominal social control over Cochabamba's water resources won by the Coordinadora has not reflected the principles of

horizontal, assembly-style consensus-building it demonstrated during the conflict. The speed by which the Coordinadora shifted its focus after the expulsion of Bechtel to new fights such as gas nationalization, airline labor issues and constitutional reform has meant that the social capital that once focused a movement and carried it to victory has since dissipated. In the meantime, SEMAPA continues to win small battles as coverage is expanded incrementally and improvements to services are realized through the technical and financial help of a network of international organizations that continue to search for avenues to support the struggling public water works.

The families of the Zona Sur also continue to work towards a future with safe and affordable water, enjoying the counsel of one organizer who has not lost his focus on water in the years following the rejection of the Bechtel model. Rosalio Tinta, the son of an altiplano miner who brought his family to the Zona Sur in 1986 after losing his livelihood to the shock reforms of the Washington Consensus, works as organizer and technical advisor for the Association of Water Committees of the Zona Sur. Inspired by the ability of these communities to organize on the grassroots level to find locally appropriate solutions for their shared need for basic sanitation, he sees the debate not as one of privatization versus municipal management—where one vertical structure of unresponsive, hierarchical decision-making is traded for another. He looks to a future, rather, where municipal water systems are owned by the communities and managed through the horizontal democratic processes he learned from the Coordinadora as an activist during the Water War. For Rosalio Tinta, the key to delivering basic sanitation services to the developing world is to produce a direct conversation between the two most important actors in the real water war: citizens like members of the Ríos family who organize to define their vision for the distribution of water, and planners like SEMAPA's Julio Rodríguez who are charged with turning that vision into reality.

Don Leonard is a returned U.S. Peace Corps volunteer who served in the Department of Cochabamba from 2004-2006. He received a master's degree from the Department of Regional Economic and Social Development at the University of Massachusetts Lowell in 2003.

Urban Water Management in Mexico

By David Barkin

The Mexican government has failed miserably to regulate water and sewer systems. At the same time, it promotes private sector participation and overtly stifles public debate.

Mexico's National Water Commission (CNA) has become a powerful organization, controlling the design, operation and oversight of the water system. Most of the 2,500 local urban water administrations do not have the resources and skills to meet the environmental, sanitary, economic and social standards for adequate service. They tend to be small organizations staffed by political appointees with little expertise and high turnover. Their directors dole out political patronage and use their posts as stepping stones to more important positions.

There are about 435 semi-autonomous water systems, operated either as part of municipal government or as concessions. Several dozen of these are wholly managed by private companies; are joint ventures between public and private parties; or have let out concessions for the management of some part of their system. Many of the major international water companies—Suez (Ondeo), Aguas de Barcelona, Veolia—along with smaller international firms and some domestic enterprises, participate in the management of one or more local water or sewage systems.

Mexican authorities are unable to rein in the large water users that control their own water sources and ensure compliance with national standards. Although under the constitution water is owned by the nation and subject to political control, long-term private concessions of wells have generated a lucrative “parallel” market to transfer these concessions to commercial and industrial users. Exacerbating the problem, a large number of unregistered consumers—often medium-sized commercial and industrial enterprises—are illegally connected or don't pay their water bills. Very little attention has been devoted to the problem of the “culture of water,” which

requires a discussion of how to allocate water among sectors and ensure its frugal use.

Private Water

The privatization of water service in Mexico is still relatively minimal. There are only four metropolitan areas where the major international players in the sector are participating. Rather surprisingly, even the few systems that are managed by private companies are not subject to effective oversight.

The first privatization occurred in 1993 in Aguascalientes, a burgeoning industrial center in semi-arid north-central Mexico, reflecting the reorganization of public policy in the neoliberal tradition. The operating partner is Veolia, a French company with important international interests in water. Water service has deteriorated as traditional sources have literally “dried up,” causing sinking of the soil and cracks that have compromised the structural integrity of homes in poorer communities on the city's periphery. Rates are among the highest in Mexico and the aquifer on which the city depends is being dangerously depleted with no effective measures to either reduce consumption or change watershed management practices. Regulatory institutions have proved unresponsive to local protests and are considered to have been “captured” by the private company. Knowledgeable experts generally anticipate that the region will be one of the first to suffer a water crisis that will force a dramatic curtailment in plans for economic expansion, though this view has not been accepted by local authorities

In 1993 the US giant Enron was part of a consortium that won a twenty-year concession to manage Cancun's water system. Enron entered bankruptcy in 2001 and brokered a deal with Ondeo, which purchased the local water company with financing from the National Bank for Public Works and Services, extending the concession for an additional ten years. The state water agency lacks regula- ➔

tory capacity and the company has been unable to service the rapidly growing fringes of the urban area, where people must resort to tank trucks for their supplies. (In Mexico, the “irregular” land tenure situation complicates efforts to provide water service, since the water company may not invoice water service to people who do not have a valid title.) Commercial users (some 65 percent of the billed volume) complain of high costs; for example,

Photo credit: Marie Kennedy



Sign in Janitzio, Mexico: “**DRINK CHLORINATED WATER.**
Sweep in front of your house!”

two hotels have installed desalination plants as an alternative. Individual consumers enjoy relatively inexpensive service as a result of cross subsidies mandated by state government.

The Saltillo water company is controlled by the municipal water company (51 percent) and Aguas de Barcelona (49 percent) through a Mexican affiliate. Its local board of directors has been powerless to rein in the foreign administration and a knowledgeable local citizen watchdog group has proved ineffective. During Saltillo’s first two years of operation, water rates rose more than three times the contractual terms and a congressional investigation revealed substantial irregularities in financial transactions. In spite of these problems, the company boasts significant improvements in collections, quality of service and proportion of the population served. Its flagrant violation of the terms of its concession, however, has provoked energetic protests.

The largest private sector experience with water management is in Mexico City. Four different ten-year contracts were awarded in 1994 to manage billing and fee collection as well as minor maintenance tasks. Each group has a majority holding of a Mexican construction company and a foreign partner with experience in the water sector. Contract terms and oversight is the responsibility of the semi-autonomous Mexico City Water Commission, while water tariffs and fees for services and connections are set by the legislature. As meter readings and analysis were computerized and electronic identification of leaks initiated in the secondary distribution system, technical efficiency increased and collection rates improved markedly. The only public discussion of this process is being advanced by the workers’ union in the water system.

Public Water

Elsewhere water services are provided by decentralized public agencies. These para-municipal organizations have widely varying technical, commercial, financial and administrative competencies, with some outstanding examples. The best managed public system in Mexico is in Monterrey, Mexico’s second largest city. The large infrastructure investments required in this desert region are paid for by other agencies. León, Guanajuato, a leather tanning and shoe manufacturing center, was the first large municipal water system that was decentralized without being privatized—this in the 1980s. These cities, and several others, provide quality service while reducing water loss and increasing fee collections. Unlike most public systems, however, water costs in these areas are substantially higher than the national average, and their autonomy enables a more effective collection process. This in turn allows them to operate without subsidies, although public monies are used for expanding services for marginal communities.

In much of the rest of the country, water services are deficient, unequally distributed and grossly inefficient. Political patronage, obsolete administrative procedures, poorly trained personnel, aging and poorly designed infrastructures and lack of resources have created a virtually impenetrable web of secrecy and lack of information that makes it impossible to undertake effective diagnoses or oversight. Unfortunately, the problem is not one of hiding or distorting information, but rather the lack

of information about fundamental operating questions that would facilitate evaluation and planning.

The overall efficiency of urban water service nationally is generally estimated to be about 30 percent. Customers are billed for only about 60 percent of the water distributed, and only about half of the billed amount is collected. The quality of the water is generally unacceptable.

From a social perspective, the poor pay more (per cubic meter) for their water and receive poorer quality service than other social groups. Although in some parts of the country these groups get their water from tank trucks or neighborhood hydrants, in other public sector systems they are forced to buy it from private suppliers at prices as high “as the market will bear,” reflecting corruption at the local level. In other parts of the country people still fetch water from nearby streams and even irrigation canals, forcing women—who are generally responsible for water management in the household—to spend up to one-third of their work day on water management chores.

Underground water aquifers are also badly managed. An illegal market has emerged that allows the few with permits to drill wells and transfer their concessions to large farmers as well as commercial and industrial users, all of whom exploit the water for their private profit. In many cases these wells heighten local water crises by drawing from the same aquifers that supply urban areas.

In general, then, public water management places a disproportionate burden on the poor and the working classes, while the benefits are captured by the largest water users. Water is distributed inequitably and inefficiently and without effective mechanisms for participation to correct these problems.

Water Pollution and Treatment

Lack of knowledge and concern about environmental and wastewater management is another serious problem. Water harvesting and recycling strategies are virtually unknown, even in Mexico’s driest regions, and public service campaigns are especially weak. Centuries of mining and decades of industrial and commercial agricultural production have resulted in large volumes of poisonous substances

(e.g., mercury, DDT, organochlorides) seeping into aquifers. Naturally-occurring arsenic contaminates water in severely depleted aquifers in Guanajuato and is present in 20 percent of the nation’s milk supply. In La Laguna, Coahuila, fodder is irrigated with contaminated water. And the leather tanning industry in León deposits deadly residues in the aquifers, poisoning water supplies.

Less than one-quarter of all drinking water is treated. Local agencies have neither the required operational and maintenance skills nor can they afford

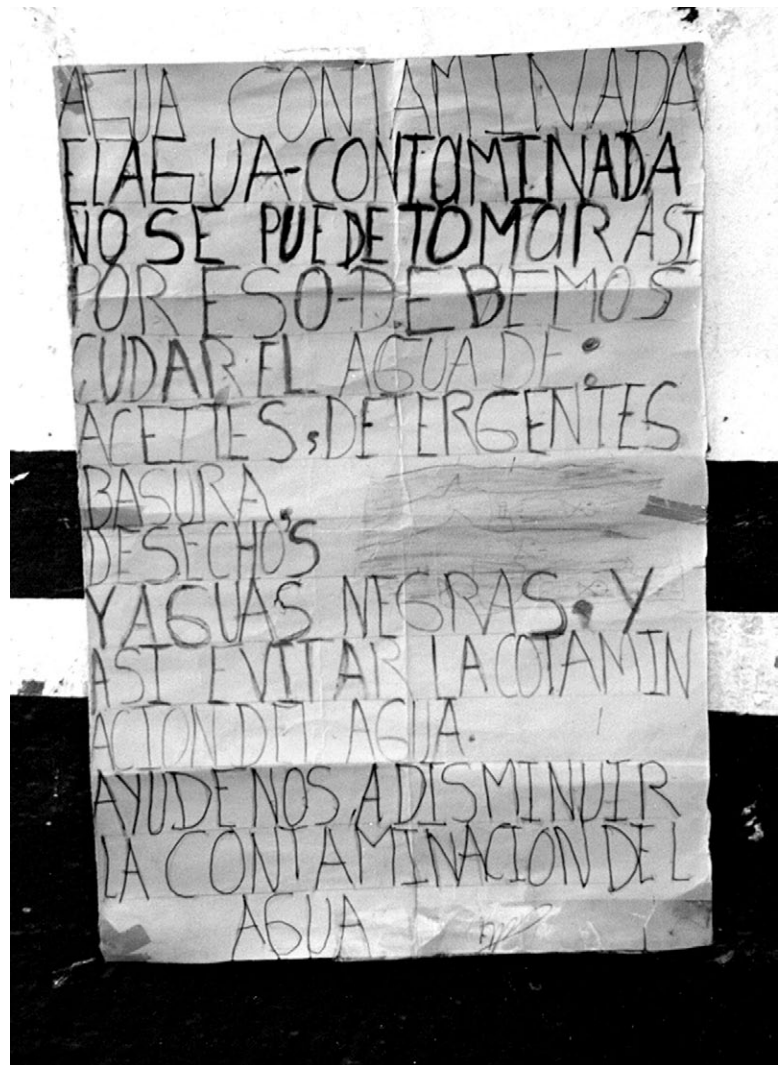


Photo credit: Chris Tilly

Sign in the Plaza of Zirahuén, Mexico, urging people to avoid polluting the water.

the operating costs, inflated by poor technology choices and inadequate maintenance and modernization programs. Although private companies are vying for profitable contracts to treat wastewater, local farmers are struggling to continue using ⇨

untreated water for irrigation. A notable exception is the large sewage plant near Villahermosa, Tabasco, which was constructed in response to local pressures using passive biological processing in artificial wetlands to treat municipal wastewater.

And the People?

Public participation in discussions about water management and the environmental impact of present institutional trends is energetically discouraged. Crucial decisions are said to be too complex for ordinary citizens to participate. Government agencies frequently make impossible promises of compensation, exaggerated claims of benefits and assurances of high standards of responsibility, should there be any damages. When the state fails to honor its pledges and people mobilize, local leaders are jailed, tortured or assassinated. Decisions are made in an ad hoc and uninformed manner, resources are wasted and people are expendable. As a result, everyone is the worse for the experience, although some opportunists become short-term beneficiaries.

Although centralized in the CNA, important decisions about water management are in fact made by other groups. The Federal Electricity Commission determines the fate of waterways likely to be harnessed for hydroelectricity generation. The Secretary of Agriculture allocates Mexico's freshwater for irrigation. Local water agencies attempt to operate as if they were sovereign with regard to commandeering water for urban-industrial users. Finally, corporate owners of the rights to exploit "private" wells often flaunt governmental regulations designed to

stabilize aquifers. In its own way, each stakeholder actively excludes local groups from participation in the major decisions that affect water allocation and management and social welfare.

Mexico's experience confirms the need for independent regulation and oversight of both public and private operators. Foreign management of local water service offers little solace; while this has resulted in important improvements in decisive service indicators, such as number of clients served and the proportion who pay their bills, there are serious questions about financial practices. On the other hand, the exceptional examples of independent public sector agencies operating efficient service organizations provide evidence that government can be reorganized productively. Unfortunately, neither public nor private companies address unresolved ecosystem management problems. In most of the country, water service does not meet local demands and the present decentralized scheme offers a ripe incubator in which ambitious politicians can seize control of large parts of the system for their personal enrichment, without any effective mechanism for delivering benefits to the people.

*David Barkin is professor of economics, Universidad Autónoma Metropolitana, Xochimilco Campus, Mexico City. David can be contacted at barkin@correo.xoc.uam.mx. His recent book in Spanish on this subject is *La Gestión del Agua Urbana en México* (Mexico City, 2006). This is summarized in the working paper "Water Management Strategies in Urban Mexico: Limitations of the Privatization Debate" at www.cas.usf.edu/globalresearch/PDFs/UrbanWater-Mexico.pdf.*

The PN e-newsletter

The PN e-letter has member updates, jobs, conferences and other announcements. Often PNers in the same city ask us how they can get in touch with other PNers, and the best we can do is send them names and addresses. Email is also the best way to let you know when your membership/subscription has to be renewed. If you don't want to receive the e-letter, we can keep you off that list, but please send us your email address so we can contact you when we need to.

Send to our NEW email address: pnmail@umn.edu
and in the subject line put "subscribe to e-newsletter."

A Bottom-Up Planning Model for a Safe and Accessible Water Supply in Malawi

By K. Tyler Miller

People who live in Mindanti, a village in a remote section of southern Malawi, face serious health problems due to a lack of clean water. This has been changing, however, given recent progress toward providing clean and accessible water sources. The changes in Mindanti can be a jumping off point for a progressive and sustainable planning model based on local village involvement.

Freshwater Project, a non-governmental organization (NGO) in Malawi that is committed to improving health “by reducing the incidence of waterborne diseases through the provision of water and sanitation development projects,” has been working with Mindanti residents and will be installing a second well in the village. The project involves the villagers in all aspects of developing new well systems. Water for People, Freshwater’s international partner, collaborates with local NGOs in countries across the globe to help poor people improve their quality of life by supporting locally sustainable drinking water, sanitation and hygiene education projects.

The landlocked country of Malawi in sub-Saharan Africa is among the poorest and least developed countries in the world. According to the 2006 edition of the Pocket World in Figures, Malawi ranks eighth in the world for HIV/AIDS prevalence among those aged 15 to 49, seventh in lowest life expectancy (41.1 years) and last in physicians per capita (1 for every 88,321 residents). As is the case in many undeveloped countries, in rural regions of Malawi people often lack adequate clean water sources in or close to their villages.

Limited Water Supply in Mindanti

Unpaved roads that may be flooded during the rainy season serve Mindanti, a village of about 1,200 people. The cost of “conventional” electric service is prohibitive, well beyond the means of most remote rural villages in Malawi, including

Mindanti. There is no conventional telephone service. And like many villages in rural Malawi, villagers sustain themselves by subsistence agriculture. Crops include maize and millet, but sometimes the food grown does not last the year.

In 1985, the first hand-pump well was constructed in Mindanti. The water was salty and people used it only for washing. Soon it was abandoned. Some time later, a single hand-pump well from a “clean water source” was installed. This is still being used today for drinking, cooking and washing, but the problem with this well is that its capacity to serve approximately 250 persons is about one-fifth of what is needed to meet the daily water needs of the villagers.

In Mindanti and elsewhere in Africa, when water is not piped into the house, getting it is women’s work. Some women walk over 1.5 miles (2.5 km) one way to the well. Lines can be long, with waits of a few hours. Women line up as early as 3:00 A.M. to get the day’s water from the one spigot connected to the hand pump. If a woman needs to do something else, she will pull a girl from her family out of school to get the water. Not only is this an inefficient use of time, but conflicts among the women can occur while they are waiting in line. The women often carry water containers that weigh thirty or more pounds on their head, and while they may adapt physically to carrying water this way, neck and back injuries can occur.

Health Problems

The Mwanza River is an alternative water source about 1.25 miles (2 km) from the village. In order to avoid long waits in line, some women use this source. When no water flows during the dry season, women will dig a hole or “pit” near the river until they hit water. This water source becomes contaminated, leading to cholera, diarrhea and ⇨

other potentially lethal waterborne diseases. These conditions—cholera can be fatal in a day or two due to dehydration—can be very serious without medical treatment.

Dr. J. Donald Thomas, a retired emergency room physician from California, in his capacity as a board member of Global Aids Interfaith Alliance, has been to Malawi on several occasions to work in hospitals and medical clinics. While acknowledging the importance of a range of health measures for decreasing mortality rates, such as immunizations, mosquito nets and improved nutrition, Dr. Thomas particularly emphasizes the importance of clean water: “It is extremely vital to the health of the village-

A complicating factor is what Dr. Thomas refers to as the “unbelievable poverty of Malawi’s health system.” Hospitals may be several miles from a remote village, therefore requiring long walks, and laboratory procedures are all but nonexistent outside of private pay hospitals serving the small upper-middle class.

Freshwater Wells, Latrines and Education

Mindanti is one of many Malawi villages that needs an additional accessible source of clean water. In connection with a maternity clinic now under construction, the Freshwater Project will soon be constructing a new windmill-powered well with several spigots in Mindanti. A water tank atop a tower will store approximately one day’s worth of water. A water committee composed of women from Mindanti will be charged with maintaining the well. The new well is being constructed primarily for the maternity clinic, but initially the clinic and the villagers will share the well until a second well, planned to be built within two years, exclusively serves the villager’s needs.

When Freshwater first started operations, it focused on drilling wells and related pump maintenance and providing training in good hygiene practices. Seeing the importance of sound pit latrine construction and good siting for the reduction of waterborne diseases, Freshwater expanded its operations to include the construction of latrines. This health and sanitation education component is of equal importance to the provision of safe water. Through education, residents are empowered to improve the health and quality of life in their villages.

Programs focusing on health and sanitary practices aimed at reducing fecal contamination of drinking water can easily lead to further discussions about where cholera and other waterborne diseases come from and how they are transmitted. Knowing that a river can carry cholera can open up a discussion of sources of contamination, including a lack of or improperly sited latrines. Learning that animals using open pits of water or dying in them can lead to waterborne diseases can pave the way for a discussion of the danger of using standing water for drinking and bathing. Training in proper hand washing techniques may lead to discussions

Photo credit: Thomas Gebhard



Long lines of women and girls at the existing handpump and well in Mindanti, Malawi.

ers, especially those that are infected with the HIV virus, that they have water that is free of pathogens.... People living with HIV/AIDS are susceptible to becoming ill or dying from organisms that are less powerful pathogens or even non-pathogens.”

Children under the age of five are also especially vulnerable to waterborne diseases that can quickly prove fatal. In February 2006 the Australia Nursing Journal reported on projects to provide safe drinking water to orphanages in Uganda. As a result of these projects, there was “a near 100 percent reduction in diarrhoeal diseases in two orphanages” in 2004.

about how cholera and other waterborne diseases are spread through fecal contamination of hands, leading in turn to a discussion of how a container of water collected from a clean and reliable well can later become contaminated. Using the maternity clinic as a community center, broader public health education is planned for the future, including prenatal care involving both the mother and the father, as well as health care for infants and small children.

Bottom-Up Planning Model

A big problem arising from well installations in Malawi and other undeveloped countries is that some wells are installed only to break down later and become useless. Without spare parts and the knowledge of how to fix the well, villagers can be back to square one, using contaminated water sources.

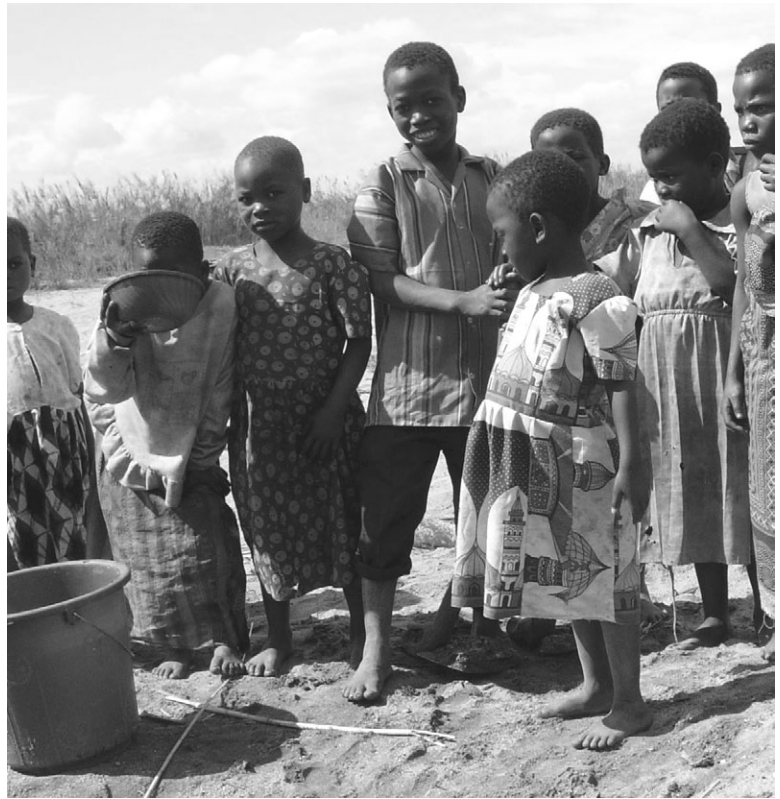
Water for People and the Freshwater Project address these problems through their approach to development. As John Kaysar, communications manager for Water for People states:

Water for People is committed to helping communities take a critical first step out of poverty. Our greatest resources are the very people we serve. We know that to create lasting change, people must be at the center of their own water and sanitation solutions. Water for People's role is that of catalyst—bringing people together to improve their quality of life through water and sanitation solutions that are supported, built and maintained by the community. Our fifteen years in international development have taught us that this involvement and community-centered focus is what makes projects work. Most important, it's what makes them work for the long-term.

The Freshwater Project starts with what it calls a "bottom-up approach to community development." Freshwater says this "... responds to the needs of the communities while promoting community empowerment and project ownership. Requests for water, for the most part, come from communities themselves. Communities (particularly women) take an active role in planning, implementation and management of the project. This ... contributes to the sustainability of the project."

Villagers are instructed in well operation and repairs—wells are designed so they can be easily repaired—and are left with spare parts kits. Training is provided by both the Freshwater Project and Water for People. Villagers are involved in all aspects of the water project from start to finish. Freshwater does not "abandon" the village once the well is installed, but rather maintains regular contact.

One problem with many international development projects is that foreign donors and experts impose inappropriate technologies on local communities. This problem has been avoided in



Local children drinking water from a pit in the Mwanza River near Mindanti, Malawi.

Mindanti through the wise counsel of Dr. Tom Gebhard, a member of St. David's Episcopal Church in Austin, Texas which, through the non-profit organization Warm Hearts International, has raised funds for the Mindanti well and is planning other water projects in Malawi. Despite being a water resources engineer with over forty years of experience in hydrological and water utility management, Dr. Gebhard understands the importance of basing decisions on local knowledge. In speaking about the Freshwater ⇨

Project and its executive director, Charles Banda, he commented:

Charles Banda and the staff of the Freshwater Project should make the choices between windmills, solar pumps and hand pumps. Their opinion is that the wind is a more reliable source of energy than solar, particularly during the rainy season. I respect their decision-making capabilities and their local operations experience. Western engineers who don't know the local issues or don't have local experience should not do micro-management of projects from afar. I do feel a responsibility to ask questions, but I believe that it's healthy and appropriate for them to make decisions and learn from the consequences of their decisions.

will ask questions after careful study and evaluation of the situation. Outside funders, however, will not dictate the details of the project. Local empowerment comes from local decision-making and from learning from the results of these decisions. In taking leadership on the project, local residents learn skills and gain confidence to further develop their communities.

After the new well is up and running, a critical first step will have been taken to improve the health and quality of life for the people of Mindanti. In addition, the women of the village will have more time to pursue other income-producing activities and girls will be able to stay in school. Although a modest intervention, providing a source of safe accessible water in combination with public health education in a process that is controlled by the community can be an effective tool for broader community development.

Under the model presented here, experts such as Dr. Gebhard, who represent outside funders,

K. Tyler Miller is a writer, independent scholar and progressive planner in Flemington, NJ.



The Rebuilding Alliance

Urgent Need: Human Rights Watch found the Israeli Defense Forces made 16,000 people homeless in Gaza since September 2000, regardless of whether their homes posed a genuine military threat (see Oct 2004 report, *Raising Rafah: Mass Home Demolitions in the Gaza Strip*). In observations confirmed by B'Tselem (an Israeli human rights organization) and the UN Of-

fice for the Coordination of Humanitarian Affairs, the pattern of destruction strongly suggests that Israeli forces demolished homes wholesale, regardless of whether they posed a specific threat, in violation of international law. In most of the cases Human Rights Watch found the destruction was carried out in the absence of military necessity.

Our Mission: The Rebuilding Alliance, a nonprofit organization, rebuilds homes and communities in regions of war and occupation. We advocate for government policies towards these regions based on human rights and international law. Through a mutual commitment to justice, we create alliances among our supporters, partners, and those who suffer injustice and violence, yet resist through rebuilding. Our projects are symbols of hope that help rebuild shattered communities and offer people around the world immediate ways to make peace, starting with the tangible support of a family's right to a home.

The Rebuilding Alliance, 457 Kingsley Avenue, Palo Alto, CA 94301

Phone: (650) 325-4663 Fax: (650) 325-4667 www.rebuildingalliance.org

Water Planning for the Future

By Jonathan Leavitt

“Water is the oil of the twenty-first century,” according to *Fortune* magazine. “Wars of the twenty-first century will be fought over water,” predicts a World Bank vice president.

Multinational corporations are rushing to invest in the new get-rich economy of water. Control over water is being handed over to corporations whose purpose is to maximize profits rather than serve the public good. The profits are enormous—the World Bank estimates that by 2021, private water management could be worth 1 trillion dollars.

Why should we be concerned? As water privatization expands, hundreds of millions of people could lose access to safe water and powerful international corporate interests could utilize this precious resource as a means of control in international conflicts.

Today in the United States roughly 85 percent of people get water from public municipalities. For more than a hundred years, we have relied on the public sector to efficiently provide us with safe and affordable water. This could change, however, if water remains off the radar screen of most U.S. community activists.

Over the last twenty-five years, advocates of the privatization ideology have made significant inroads in privatizing essential public services like health care and education. They have caused drastic cuts to be made to the U.S. budget and seen that the International Monetary Fund (IMF) and World Bank be used to force austerity measures on non-industrialized countries. Now, after years of plundering countries in the Global South, multinational water services corporations like Suez, Veolia, and RWE/Thames are knocking on the doors of U.S. mayors to sell their privatization wares and suggesting to deficit-shocked members of Congress that federal funding is no longer needed to improve water infrastructure in cash-strapped cities and towns.

As a result, many communities are now considering entering into contracts with multinational corpora-

tions based on promises of lower rates and better service. Yet as case study after case study shows, once these contracts are signed, rates go up and quality goes down. Shareholders and corporate executives benefit, not ratepayers.

The primary question that planners and community leaders from all parts of civil society must ask is whether we will allow a “theft of the commons” and sit back as corporations turn a basic element of life into an opportunity for profit. If we conclude that preventative measures must be taken to retain control, then we must figure out what the pressure points are and provide a framework for maintaining water under public and democratic control.

The Federal Government as Enabler

Historically, the federal government has helped cities and towns fund major improvements to their water infrastructure. Over the past twelve years, however, federal funding for municipal water projects has been reduced dramatically and, as a result of corporate lobbying, federal agencies have begun encouraging communities to consider partially or fully privatizing their water systems.

In 1972 Congress passed the Clean Water Act, which established uniform, nationwide water quality standards and put in place a mechanism for the federal government to help communities meet the standards set by the act. The Environmental Protection Agency (EPA) gave construction grants to help cities and towns build or improve water and sewage treatment plants. During the 1970s and 1980s, this program provided more than \$60 billion for the construction of publicly owned wastewater treatment facilities. These projects included sewage treatment plants, pumping stations and collection and interceptor sewers, as well as rehabilitation of sewer systems and control of combined sewer overflows.

This all changed under the Reagan administration, when spending for environmental clean-up and restoration was cut drastically. Despite the success of ➡

the program, Congress amended the Clean Water Act in 1987, phasing out the grants and replacing them with low-interest loans from a new Clean Water State Revolving Fund (CWSRF). Borrowers were encouraged to supplement the loans with additional financing from state governments and private banks.

The EPA admits that the loan fund isn't sufficient to meet most communities' needs. The EPA's website says that "even with continued capitalization, the CWSRF program will not address all local government water pollution infrastructure needs, which have been estimated to be about \$200 billion. This estimate excludes the costs required to replace aging pipes and plants. As a result, it is important to fully explore other approaches to meet funding needs at the state and local level."

Corporate lobbying and a lack of viable options for public financing have led the EPA to actually begin promoting privatization of municipal water/sewer systems. The EPA's website suggests that cities and towns consider at least partially privatizing their water systems:

One approach to consider is the use of public-private partnerships that utilize private sector resources to finance wastewater treatment needs. The private sector has historically been involved in providing wastewater treatment-related services to local governments. Whether providing basic wastewater treatment supplies (e.g., chemicals), maintaining a portion of the collection or treatment system under a contract or providing contract operation and maintenance for all of a municipality's facilities, the private sector has served an important role in the effort to control water pollution across the country...

Privatization Fiascos

While the federal government has essentially become an enabler for multinational water barons that seek to make a tidy profit from privatizing water services in the U.S., a trail of failures lies in the wake of this alliance.

All across the U.S. there are examples of privatization fiascos. Cities such as Atlanta, Georgia,

Chattanooga, Tennessee, Indianapolis, Indiana and Felton, California have seen increases in water rates, decreases in water quality and severe problems with service and maintenance after privatizing their water systems. Internationally, there has been an abundance of failures, from Cochabamba, Bolivia to the bankrupt privatized systems in Argentina. Two examples taken from the U.S. experience, in Atlanta and Detroit, illustrate the dangers of water privatization for local communities.

Atlanta was supposed to be the foremost U.S. example of the benefits of privatizing water services. After four years, however, Atlanta was forced to cancel its twenty-year, \$420 million contract with United Water (the U.S. subsidiary of the French corporation Suez), the biggest such contract in the U.S. Atlantans had had enough of countless days of brown, sediment-laden water, boil alerts, periods with no residential water, useless fire hydrants and leaking water mains that went unrepaired for weeks. Suez, one of the two largest water privateers in the world, in a pattern repeated around the world, had slashed the workforce to dangerously low levels, failed to fulfill its maintenance and repair duties, didn't produce the projected savings it forecast for the city, broke its promise to keep rates stable and billed the city for millions more than the annual contract fee.

The situation in Detroit was a nightmare for the 40,000 low-income residents whose water was shut off due to their inability to pay their water bills. After Detroit elected officials decided that the way to rehabilitate their dilapidated water system was to sell it to someone who would make a profit, they set out to make it attractive to the water privateers. Rates were hiked and an aggressive plan of debt collection was implemented. Residents who were unable to pay the charges had their services disconnected. Water shut-off valves were actually cemented to prevent residents from turning their water back on. In the middle of winter, this also meant a loss of heat for many households.

Organizing for Control of Local Water Systems

Opposition to water privatization is too often reactive. Activists and planners begin to educate and mobilize local communities only after the water barons attempt to take control of this precious resource.

Groups such as Alliance for Democracy and Food & Water Watch are working to stimulate discussions about water services in local communities before privatization is on the horizon. Massachusetts Global Action (MGA) has put the issue on the agenda of a wide range of community and educational groups via activities like screenings of the movie "THIRST" for hundreds of community groups, churches and schools; region-wide conferences on the dangers of water privatization and the successes of opposition groups; the publication and distribution of "Our Communities, Our Water;" and the organization of a legislative campaign for a bill that would prevent water privatization in Massachusetts.

Groups such as MGA are seeking out and publicizing examples where people have taken control of their water and/or wastewater system, with an eye to organizing local groups in the U.S. to make their own municipal systems more accountable to the people they serve. The water issue can also stimulate broader discussions and activism around participatory democracy at the local level. In the global south, among a number of examples, one stands out, that of Porto Alegre in Brazil.

In Porto Alegre, Brazil water is under the management of DMAE (Departamento Municipal do Agua e Esgoto). The DMAE is an efficiently run public system where priorities are set by a citywide system of participatory budgeting. This means that neighborhoods get direct input into the setting of priorities for the expansion and upgrading of the water and sewer systems, and can hold DMAE directly accountable for carrying out the priority projects. Since the DMAE revenue stream is separate from the city's general revenues, community members are assured that their utility bill payments will go towards water and sewer

services. And with cross-subsidization, the poor are assured of affordable water.

This is only one of many examples from throughout the global south where, after decades of development subject to the whims and dictates of the IMF and the World Bank, people are finding a new voice that challenges the imposition of neoliberal economics.

Where to Go from Here

As long as federal funding for water projects remains inadequate, cities and towns will feel increased pressure to privatize their water systems in an attempt to defray the rising cost of complying with clean water regulations. Federal funding will not be expanded or restored unless municipal officials and residents step up their involvement in water policy to counter the influence of corporate lobbyists. Broad-based participation is the determining factor in the health of a local water system, not the false choice of public-versus-private that is too often presented as the question at hand. U.S.-based community planners and activists need to raise the profile of this issue and work with people at the local level to reach creative solutions such as those initiated in the Global South.

Jonathan Leavitt directs the "Our Communities, Our Water" project of Massachusetts Global Action. To get a copy of "Our Communities, Our Water," a report on water privatization in Massachusetts, visit www.massglobalaction.org, call 978.683.3967 or email water@massglobalaction.org. The author thanks Ruth Caplan from the Alliance for Democracy for her feedback on early drafts of this article, as well as the book Reclaiming Public Water from the Corporate Europe Observatory for concrete information on case studies.

The Progressive Planning Reader

Reminder: Bulk discounts are available on *The 2004 Progressive Planning Reader*, with over 100 pages of the best from *Planners Network Newsletter* and *Progressive Planning Magazine*.

See the *Planners Network* website for more information.

Water, Environmental Justice and Land Use Planning: *Richmond, California*

By Amy Vanderwarker

Although land use planning and water policy have disparate histories, they have been shaped by similar social and political forces. Both have systematically excluded low-income communities and communities of color and both have failed to recognize the intimate connections to the other.

tice explores the parallel histories of racism, discrimination and unsustainable development within land use planning and water policy. It lies at the intersection of exclusionary water policy and exclusionary land use planning. While water justice is often ignored, the cumulative impact of discriminatory practices in land use planning has led to severe water-related impacts among low-income communities and communities of color. This fact was brought into stark reality by Hurricane Katrina, when poor water policy and land use planning coincided to wreak havoc on the lives of the Gulf Coast's poor communities, also predominately communities of color.

What Is Water Justice?

In California, water, including the infrastructure necessary to move it and the agencies and utilities assembled to govern it, has mostly served to enrich privileged sectors of society while limiting the economic prosperity and political power of people of color and low-income communities. Institutionalized racism in water policy began when white settlers stripped Native American and Mexican communities of their land to establish logging, mining, transportation and agricultural empires. Racism and greed among and within California's elite power brokers excluded public interests.

Furthermore, in both land use planning and water policy, environmental racism has profoundly limited the ability of marginalized communities to participate in decision-making processes regarding the environment, leading to severe health and quality-of-life issues for these same communities.

Water justice refers to the ability of low-income communities and communities of color to access safe, affordable, clean water for all its many beneficial uses, including drinking, subsistence, recreation and cultural practices. Water jus-

Given the single-minded focus on extraction of and control over water resources, a host of water-related health, quality-of-life and environmental issues have arisen for communities who have been excluded from California water policy. The water needs of workers have been overlooked. Decision-makers have not been bothered by toxic wastewater running through hastily constructed factory housing. And descendants of the largely Latino, Asian and African-American labor force that worked the fields, built the dams, aqueducts and levees and labored in the factories and industries

Photo credit: Robin Freeman



Community members participate in a hands-on watershed restoration design process.

throughout California's growing cities have been systematically cut out of water decision-making.

Water Justice and Land Use Planning

One of the most unsustainable aspects of California water policy and land use has been the destruction of the natural "infrastructure" of watersheds. A watershed is the land area where rainwater collects and drains into a river, ocean, lake or other body of water. It includes everything on the land: vegetation, biological systems and human communities. Healthy watersheds protect communities from flooding, recharge and filter groundwater supplies, maintain year-round stream flow and reduce fire hazards. They also provide open space and healthy plant and animal communities, important for aesthetic, educational and subsistence reasons.

Ultimately, water justice will require healthy watersheds, and one of the biggest challenges to healthy watersheds is local land use and development patterns. Cities throughout the U.S. have long concentrated industrial facilities and created zoning laws to ensure unwanted land uses be confined to one area. Ignored have been the impacts of these land use decisions on local water resources. From San Francisco's earliest tanneries to San Diego's vast shipyards and military installations to Long Beach's port, the largest in the U.S., industrial development has contaminated local water bodies; created stormwater run-off laden with heavy metals, pesticides and other contaminants; and released toxins that accumulate in the flesh of local wildlife. Many industrial areas were constructed in low-lying flatlands adjacent to the coastline, the end point for all drainage in the local watershed, exacerbating flooding and overflow problems in these areas. Many were also surrounded by vast expanses of pavement, stymieing water absorption and cleansing.

While land use planning decisions were made in a water-free vacuum, the overwhelming social and political forces of racism, discrimination and classism flooded in. The segregating consequences of redlining, racial housing covenants and the neighborhood slice-and-dice effect of freeway construction contributed to water

injustices. While many are familiar with the ways in which low-income communities and communities of color have been forced to live near factories on marginal land, water injustices are often ignored.

Land Use Planning, Healthy Watersheds and Environmental Justice in Richmond, California

Richmond, California serves as an example of the ways land use planning and water policy conspire to perpetuate environmental injustices in urban areas. Richmond, a cash-strapped city with a rich history and diverse community networks, is located along the east side of the San Francisco Bay. It is predominately African American but has grow-



Photo credit: Robin Freeman

New suburban developments throughout Richmond threaten to price out older communities and block shoreline views.

ing Latino and Asian communities, all plagued by poverty and unemployment. It is home to over 300 toxic facilities, including the largest and oldest refinery on the West Coast, a Chevron mini-city situated along the North Richmond shoreline.

Richmond came of age during World War II, when many African Americans migrated from the South to work in the city's vast shipyards. Workers faced discrimination not only in the workplace but in housing. As the shipyards closed after the war and heavy industry in general declined, residents have since been left with the legacy of poor housing and industrial toxins. Another legacy of Richmond's land use planning decisions was the loss of coastal access. Slowly but surely, ⇨

Richmond residents have been priced out of access to the waterfront while affluent areas watch the sunset over the Richmond harbor.

But the Richmond coastline is not only an industrial skyline. It is also interspersed with some of the last remaining wetlands and tidal marshes along the San Francisco Bay, which has lost 90 percent of its wetlands to development. These marshes are critical ecosystems that clean stormwater runoff before it empties into the Bay, remove organic and inorganic nutrients and toxins, protect upland areas from storms and flooding and trap silt, thus

This promise was made verbally by city staff, but never codified on paper. Parchester Village today is full of one-story bungalows, dating back to the 1950s, that have some of the best views in town. The orderly streets all bear names of the ministers who helped establish the community.

Over the course of the next fifty years, residents in Parchester Village fought off numerous private development schemes. Point Pinole, one of the jewels of the regional park system, was borne of local community organizing to stave off a small airport. But despite this strong vein of community activism to preserve the waterfront, African-American residents were never truly given the chance to enjoy and take ownership of the shoreline. Not only have Richmond city planning policies favored industrial development, but private landowners have continually undercut community uses of the shoreline. For years, landowners illegally dumped thousands of pounds of landfill in the wetlands in order to build.

Zoning along the shoreline, originally industrial, shifted over the years to reflect changes in land use patterns. In the 1970s, the City of Richmond finally realized that a precious resource was being handed over to the twinkling lights of factories and changed the zoning to preservation. But in the 1980s, industrial landowners succeeded in reversing much of the open space protections. As the need for industrial land uses continues to decline, landowners have been approaching the city and county to change the zoning along the shoreline again, this time to residential. This has resulted in acres of subdivisions spanning the Richmond hillsides, shutting off the mixed-use shoreline not far away.

The most recent battle, which began in 2001, was fought over a technology park, first, and then a private development scheme to build over 1,000 units of high-rise housing. A volunteer alliance of community members, environmental groups and community advocates called the North Richmond Shoreline Open Space Alliance (Alliance) fought off the proposal. Throughout the organizing process, the Alliance came to develop a profound sense of what was at stake. The initial vision to save the marsh morphed into a vision to create a corridor of open space along the North Richmond

Photo credit: Amy Vanderwarker



Much of the North Richmond shoreline is shut off from public access because of private ownership and industrial development.

protecting the integrity of the shoreline. The wetlands also provide critical habitat for a wide array of biodiversity, from the endangered salt marsh mouse to some of the largest eel grass beds left in the Bay.

Many of the communities which made Richmond home were aware of the beauty of the shoreline. Parchester Village in North Richmond was built in 1954 as one of the first subdivisions specifically for African-American homebuyers. Mr. Parr, the developer and namesake, approached several of the black ministers and community leaders in the area to gauge their interest in the project. The ministers, many of whom had recently migrated from rural Louisiana, committed their support to the project on one condition: the marshland surrounding the village would remain open space.

shoreline, with restored wetlands and neighborhoods integrated into it. Fueling this vision was Richmond's General Plan Update. This blueprint for how Richmond was to develop over the next fifty years presented an opportunity to make a community vision part of city protocol.

In June of 2006, the Alliance hosted a "Public Agency Forum." This innocuously titled forum had an ambitious agenda: to present government agencies with the community vision for the North Richmond shoreline and convince them to assist with community organizing efforts. Working with local non-profits, community members presented a full inventory of all the parcels along the North Richmond shoreline they would like to see acquired for protection and a set of guidelines for fostering neighborhood development linked with shoreline restoration. As the agencies then presented their vision for the shoreline, it became increasingly clear that the community was doing the far-reaching, coordinated and holistic planning that one might expect of those in decision-making positions.

The Alliance faced the dual realities of exclusive land use planning and water decision-making head on. Operating in isolated worlds, agency representatives continually failed to coordinate coastal development proposals with conservation decisions being made at the same time for the same area. Agencies repeatedly told community members to "attend public hearings" about the General Plan Update, failing to realize that many community members had attended agency-led public meetings for years, only to see their comments duly noted in the documentation and then shoved aside.

Environmental Justice and Planning for Richmond

Saving the North Richmond shoreline has become a campaign about many things. From an environmental justice perspective, it has been about fulfilling a long-standing promise to a community. It has been about giving a shoreline back to its people and giving poor urban communities the same access to parks and Bay vistas that affluent communities get. It has been about providing something positive and forward-thinking to a battered city that is in need of uplifting—but uplifting in a way

that utilizes the strengths and diversity of current residents. And it has been about recognizing the important ecological functions wetlands can play in creating healthy, sustainable communities, and that these functions can go hand-in-hand with community development.



Photo credit: Amy Vanderwarker

North Richmond youth learn about watersheds at a local park.

The battle to address the water and development needs of marginalized communities is a common theme throughout land use planning and water policy. Communities such as North Richmond are struggling to achieve this goal by simultaneously addressing environmental justice issues along their shoreline and proactively working towards a vision of sustainable environmental and people-centered land use planning and water policy.

Amy Vanderwarker is the outreach coordinator for the Environmental Justice Coalition for Water (EJCW). EJCW is a coalition of community groups and advocacy organizations that addresses local water injustices in communities throughout California and works to eradicate environmental racism in California water policy. EJCW has worked closely with the North Richmond Shoreline Open Space Alliance for the past six years. Much of this article was excerpted from the EJCW's report Thirsty for Justice. To read more about these issues, particularly the history of water development in California, visit www.ejcw.org.

When the Water Privatizers Go Local, Locals Go Public: *Ontario, India and the United States*

By Leigh Thomson

When news broke in the fall of 2003 that Artemesia Waters Ltd. was abandoning its battle against local residents in rural Ontario, Canada, residents and water activists celebrated. Through their Grey County Association for Better Planning, residents had been fighting for years to stop the bottled water company from diverting local groundwater and selling it far and wide. In November of 2002, the Divisional Court of the Ontario Superior Court of Justice wrote: "We are satisfied...that the installation of piping and pumps and other apparatus on land for the purpose of extracting water is a 'use of land' not only in common parlance but under the Planning Act as well." In layperson's terms this meant that communities across Ontario could control commercial water through their land use plans.

But the battle over water in Ontario didn't stop with this victory for local planners. It has become more nuanced. Through a variety of tactics, private companies that want to profit from water sales are "going local." Local groups in turn are responding by demanding that water be universally recognized as a public and environmental trust and a human right, based upon principles as old as the hills.

The Ontario Clean Water Act

In Ontario, environmental groups, seeking once and for all to protect groundwater sources from rapacious bottling companies, promoted the development of an Ontario "Water Source Protection Act." Due to the influence of corporate stakeholders on the advisory committees of this process, however, the act that is likely to be passed will be a much-condensed version, called the Ontario "Clean Water Act." Residents are grappling with some of its implications.

First of all, the Ontario Clean Water Act downgrades responsibility for watershed planning from the province to local Conservation Authorities

(CAs). This, on the surface, sounds like a good idea to promote community-based planning as the boards of the CAs are made up of elected municipal councillors. The actual watershed planning, however, is to take place at the level of sub-committees, called Source Protection Committees, made up of appointed representatives, including corporate interests, according to a formula developed by the province in a parallel implementation plan to the act. Therein lies the rub. Before "signing off" on the act, residents want assurance that their water will be fully managed as a public and environmental trust. They want to know how committee members will be appointed, how many actual residents will be on the committees and how many representatives of water mining and infrastructure companies will be sitting across the table from them, "helping" to plan water use. Furthermore, residents want to know who will be doing the "appointing," i.e., will this be a task of the separate proposed Ontario Water Board and its corporatized regional utility boards?

Second, the act is no longer about water source protection, in the sense of protecting the quality and quantity of natural watershed ground and surface waters. Instead it only would ensure that intake pipes receive adequate filtration and volume at their wellhead point. Furthermore, the act is focused on implementation only in southern Ontario cities and towns; northern and rural Ontario—where there are no Conservation Authorities, or where lands lie beyond a particular municipal wellhead—are projected for regulation "later." What began as an effort to establish public measurements of water quality and quantity in each sub-watershed across the province has been reduced to the condensed Clean Water Act.

Corporate Free-For-All

This *Reader's Digest* version of water protection will only function to allow a corporate free-for-all

in hydro-electric dam activity, bottling and other industrial water diversions in northern and rural areas, effectively diverting rural water to heavy users in urban centers, whose wellheads are the focus of quality and quantity protection. The act thus is to provide clean water only for certain users. In concert with the funding formula, discussed below, the so-called Clean Water Act functions primarily to channel public money to water infrastructure and mega-engineering projects contracted out to the private sector.

Residents want to know why their elected representatives or accountable public employees aren't going to be getting federal or provincial money to do the planning work. In rural Ontario, municipalities must access funds for water infrastructure through the Canada-Ontario Municipal Rural Infrastructure Fund (COMRIF), which explicitly states that funds provided cannot be used by public employees for planning, engineering, architecture, supervision, management or financing. A separate infrastructure guide published by the federal government directs all municipalities, rural and urban, to finance projects through deals with the private sector (via public-private partnerships or private finance initiatives), through increased municipal taxes, property taxes or raised water fees for residents.

In other words, higher-level governments are abdicating their responsibility to provide good public water governance and funding, directing municipalities to "go private" and to charge residents higher fees and taxes. What is not said is that these fees will be higher than necessary so they can cover the 15 percent profit expected by private sector entities, despite the notoriety private firms have gained for degrading water systems the world over.

Assuming that the Clean Water Act passes, some Conservation Authorities are already hiring non-permanent contractors to do the planning studies and hydrogeology. Speaking of recently announced monies from the province to accomplish ground-water studies, one CA representative stated, "We won't need any further staff for this... but it will allow more detailed scientific analysis by consultants and private laboratories on some spot municipal water sources."

During the "lengthy" public hearing process (five days in August 2006), a number of water activists in Ontario submitted concerns to the province regarding the problems associated with the proposed Clean Water Act. They called for explicit recognition of water as a public trust within the Act, explicit elimination of loopholes for the water bottling industry and the full provision of water management, planning, testing and funding by the public sector. Water—a human right, a public trust and a source of life for the planet's ecosystems—is simply too precious to hand over to private profiteers.

More Steps towards Privatization

A recent provincial panel report raised more concerns about water privatization in Ontario. The report, *Watertight: The Case for Change in Ontario's Water and Wastewater Sector*, recommended that counties, single-tier municipalities and regional municipalities prepare business plans on how they will amalgamate water systems within their boundaries (and beyond) to theoretically achieve greater "cost-efficiencies." An Ontario Water Board would be created with authority to approve the plans or demand changes. According to the panel report, under this unit, separate and heavily corporatized boards would take over the management and operations of regional, clustered water utilities. The outgoing chair of the Ontario Municipal Water Association (OMWA) condemned the panel report as a step toward dismantling public ownership. The Canadian Union of Public Employees critiqued the "arms-length" nature of the regional infrastructure boards, which are public in name only and function entirely within a separate corporate cost recovery framework that includes profit for contracted private consortiums.

Private interests seeking profits from water have shifted to new tactics to achieve their goals. They don't emphasize explicit ownership, but focus on "partnerships" with communities, involving lengthy and complex contracts. For municipalities intimidated by detailed contracts with consortiums, some infrastructure companies have set up "one-stop shopping" consulting services that can advise municipalities on entire packages. In the help wanted sections of some online career centers, ecologists are being hired by private firms that ⇒

provide comprehensive planning functions based on GIS and statistical modeling. Few or none of the models offered are based upon accountable measurements provided by public employees.

Collection of data on industrial water use across Canada was discontinued in 1995 when the federal government made draconian cuts to all levels of public service programs, in compliance with International Monetary Fund advice. Public sector staff numbers were reduced by 12,000 across the country. The last available data on industrial water use was published in 1996 by Statistics Canada. All studies since have relied on that old data, supplemented by estimates and computerized modeling,

is that there is neither consistent oversight nor accountable replication of findings. No peer review process is in place regarding piecemeal private sector reports unless isolated groups of citizens pay to hire their own consultants. No one is minding the store. Ontario's Permit To Take Water program now requires all who use more than 50,000 liters per day to submit reports of the quantities taken, but for many large industrial users, this reporting isn't required until 2008, and even then, there is insufficient public staff to check for reliability and compliance.

Water management is becoming a private free-for-all, subsidized by the public purse. In effect, residents pay several times over: in their federal, provincial and municipal taxes, which are funneled through government grant programs to the private sector; in their household water rates; and in costs to directly challenge private companies when their abuses become insupportable.

Privateers Versus Community Planning in India

While corporate representatives at the Fourth World Water Forum held in Mexico City in early 2006 were bemoaning the failure of globalized water privatization, they borrowed the language of eco-justice groups, promoting local level partnerships and participatory planning. Yet in practice, private versions of community planning in the Global South and North do just the opposite. As in Ontario, decentralization of infrastructure is imposed on developing countries, and lower levels of government are given more responsibilities but not the matching capacity—neither adequate funds nor the technical resources needed. Corporations seeking to profit step into the gap. Often these corporations work through a non-profit group to achieve their goals.

Coca-Cola is a case in point. In the fall of 2005, Coca-Cola worked with USAID and the Global Environment and Technology Foundation to, in its words, “reduce the impacts of water-related problems in priority countries... By combining local experience, community involvement, technical knowledge and funding, the partners will work to find positive and long-lasting solutions to local water problems...” Coke's press release continued: “And in Mali, this new alliance will support com-

Photo credit: Polaris Institute



International water activists at the 2002 World Social Forum in Porto Alegre, Brazil, where they declared that water is a human right and public trust.

which have questionable validity and reliability. Even the International Joint Commission on the Great Lakes based its 2005 decision to support a loophole for bottled water exporters on a “study” by Hidell-Eyster International. That brief report was prepared by an industry consultant, himself a bottled water profiteer, who admitted he based his conclusions upon estimates.

Private Planners, No Public Oversight

Today's private planners are engaged in proposal writing, field data collection, data analysis, impact assessment, model building, report writing and even liaising with the public. The only problem

munity water supply and sanitation as well as small-scale agriculture activities using recycled wastewater from a local Coca-Cola bottling plant.”

Behind this greenwash image are well-documented cases where Coca-Cola faces global condemnation for its abuse of the environment and human rights. From a press release from 10 August 2006 at www.IndiaResource.org:

In various parts of India, from Plachimada in south India to Mehdiganj in north India, communities living around Coca-Cola bottling plants are experiencing severe water shortages. The communities accuse the Coca-Cola company of creating water shortages because of over-extraction of water and pollution of the scarce remaining water...And the communities have the numbers to back it up. Tests conducted by the Central Pollution Control Board (CPCB), for example, found excessive levels of lead and cadmium in all of the Coca-Cola waste it surveyed in bottling plants across the country, leading the CPCB to order the Coca-Cola company to treat its waste as hazardous waste. Prior to the CPCB study, the Coca-Cola company was distributing its toxic waste to farmers around its bottling plants, as fertilizer! Test results released just two weeks ago have confirmed that the water is also polluted, making it unfit for human consumption.

And on 22 August, the protests spread to Rajasthan. “A study by the Central Ground Water Board found that water tables had dropped 10 meters in just five years since Coca-Cola began its bottling operations in Kala Dera in 2000.” Furthermore, a study of Coca-Cola and PepsiCo products by the Delhi-based Centre for Science and Environment found excessively high levels of pesticides in the bottles themselves, including lindane, malathion and heptachlor.

Now, following years of local marches and hunger strikes opposing the abuses of Coca-Cola, and

together with regional public water quality and quantity testing programs, at least seven Indian states have imposed bans on the soft drinks, and the southern state of Kerala has banned the sale and production of both Coca-Cola and Pepsi in the state. While US officials threaten trade and investment retaliation, the village of Mehdiganj has celebrated its public rights to the water and established a community reservoir.

And in January of 2006, the World Bank issued its Water Supply and Sanitation Working Notes, encouraging water “cooperatives” in developing countries. The World Bank has nuanced its water privatization approach. In a section entitled, “How to Transform a Utility into a Cooperative,” the report states that “transforming a public utility into a cooperative is similar to directed privatization.” The notes highlight a “cooperative” in Santa Cruz, Bolivia called SAGUAPAC, the service area of which encompasses only about 66 percent of the population living in the five inner rings of the city. This “model cooperative” does not serve the poorer outer rings of the city at all. Its paying customers subsidize private construction contractors using World Bank procurement rules, and there is a profit rate of 13 percent.

Many in Bolivia’s social movements have said “we can do better than this” and have called instead for public-public partnerships between governments and local constituent assemblies that avoid costly private interest and profit charges and directly involve the poor in decision-making. People’s movements such as the Bolivian Coalition in Defense of Water and Life have stayed firm in ousting global water profiteers like Bechtel, and seek truly participatory water management that is directed by community members and financed within the public domain

Privatizing in the United States

Finally, we turn to the United States. A case currently before the Michigan Supreme Court has important implications that extend far beyond the state to global trade law.

The Michigan Citizens for Water Conservation (MCWC) has been fighting for years to protect the waters of Sanctuary Springs, an aquifer that ⇨

feeds regional streams and lakes, from the water bottling operations of Nestlé Waters North America (see the MCWC website at www.savemewater.org). Nestlé Waters has been taking millions of gallons of water from the vulnerable springs and selling it for profit while area water levels drop. Citizens have consistently appealed each affront of the company using a variety of approaches and now Nestlé has attempted to block even their legal right to appeal.

Courts in Michigan had determined that Nestlé's water takings would result in harm to the watershed and to the rights of downstream users. The courts ruled that the removal and export of water from a watershed could not interfere with these established common law property rights. Yet Nestlé Waters pushed for, and the Court of Appeals recently adopted, a "reasonable use balancing test" for all water uses anywhere, regardless of existing laws. This balancing test would override the public's rights to the water, in favor of private profiteers who want to divert and export water without regard to harm.

MCWC and their lawyer Jim Olson are challenging the reasonable use balancing test and further efforts by Nestlé Waters to block their appeal. Groups and individuals across the continent have joined to support the citizens by upholding traditional public trust laws that protect water in watersheds against diversion for private profit. See www.polarisinstitute.org for the joint letter signed by groups and individuals across North America.

Nestlé's balancing test is an example of legal language that global corporations have been trying for years to insert into international trade law. Corporate interests tried again this past summer, at World Trade Organization meetings, to insert balancing tests into language governing the global General Agreement on Trade in Services (GATS.) These clauses effectively give corporate "rights" to profit a higher level of protection than human, public or ecosystem rights. Ostensibly, diverse demands of private and public entities in public service areas, like water provision, are to be "balanced" and given an equal level of priority with public interests. In reality, global corporate profiteers are given a new level of legitimacy in the provision of essential services. Worse, in the context of other clauses in trade agreements and global finance, balancing

tests effectively give profiteers preeminence over public entities seeking to uphold human rights and ecosystem integrity.

The Global Assault on the Right to Water

The Polaris Institute and the Institute for Agriculture and Trade Policy put out a joint statement at the end of June 2006 alerting groups worldwide and asking that letters be written to GATS negotiators in Geneva, Switzerland. At stake was the regulation of all public services, including water delivery, energy (gas and electric), health care, education and waste management, by any level of government—local, regional or national. Balancing tests, along with "necessities tests," were being pushed by corporate privateers. Necessities tests force governments to ensure that their laws or regulations cannot limit the ability of companies to profit, even if harm to persons or the environment occurs. Balancing tests and necessities tests would severely restrict public planning, limiting it to promotion of corporate profit.

In August the organization Focus on the Global South reported that negotiations at the World Trade Organization meetings in Geneva had come to an impasse: Developing country representatives, supported by citizens around the world, had stood firm in saying 'no' to clauses in the trade agreements which would have eroded their ability to serve the needs of their peoples. Popular movements count this as a victory, but corporate privatizers continue to push their agenda.

Corporations continue to push water privatization through international channels and national governments, and are seeking to directly insert themselves in areas previously under regional or municipal control. Hence the attempt to insert a balancing test into Michigan water law, which would not only give Nestlé access to Michigan aquifers, but set a precedent and trigger the North American Free Trade Agreement provisions that would open up Great Lakes watersheds, and other shared continental waters, to private exploitation.

Our governments would find it very difficult to constantly battle these large corporations once the tap is opened. Large corporations have the financial muscle to bleed lower-level governments, and

they know it. This is why global corporations are lobbying higher-level governments to decentralize regulation. For example, in the fall of 2005, the Great Lakes Annex Charter Compact and Agreement were signed, stipulating that decisions regarding diversions of water for bottling purposes were to be left up to individual states and provinces. On 1 June 2006, the U.S. Environmental Protection Agency (EPA) proposed that permits no longer be required for transfers or diversions of water from one body of water to another. At the end of June, the U.S. Supreme Court ruled that the U.S. Clean Water Act pertained only to navigable waterways, and left conflicts over other waters and proposed corporate development up to regional bodies, essentially subject to balancing tests and other clauses that serve private interests, should such clauses become established in law.

At every level, and through their own democratically elected representatives, citizens are fighting to regain public control of their water: seeking to eliminate exemptions for water bottlers, demanding more stringent permitting programs and upholding the preeminence of the public trust in all laws pertaining to water. Corporations like Nestlé, through the Grocery Manufacturers of America, are suing the state of Maine over its proposed stringent labeling requirements on bottled water. And, Nestlé Waters sued the town of Fryeburg in Maine when the local council voted down a trucking operation for a new bottling facility under its own planning regulations.

In the face of these evolving corporate strategies, citizens working for economic and environmental justice are joining together across the continent and across the globe to demand that all levels of government—local, regional and national—live up to their duties to protect the public trust in water. People's movements around the world have

successfully resisted and continue to resist water diversion for profit. In Ontario, local coalitions involving unions and residents have successfully fought off an arms-length water board in Toronto, and re-publicized a water system that had been privatized in Hamilton. In June 2006, the residents of Whistler, British Columbia, home of the 2010 Winter Olympics, successfully prevented a “public-private partnership” privatization of their water sewage system. Groups like the Polaris Institute examine how private corporations move around the globe, and, together with residents, counteract privatization by fully promoting public water management and delivery in a way that ensures resident involvement, particularly of low-income residents and aboriginal peoples.

Communities in South Africa, India and North, South and Central America have stood firm on a range of local legal and ethical principles that respect water as a public trust, a source of life, a human right and an ecological commons. Indigenous spiritual understandings, traditional legal and ethical principles, common law and standards protective of water retained in watersheds have been the foundation of declarations developed over many years. These principles hold that water cannot be owned by anyone, only used within a watershed, and common law standards strictly limit use for private profit. Groups have been successful to date in stopping a number of outrageous water privatization plans, and the movement is growing to address issues in each locality.

Leigh Thomson is engaged in participatory water research and activism with the Polaris Institute and allied community groups through Polaris' Inside the Bottle project. At the intersection of the social justice and environmental movements, Polaris seeks to support citizens working for democratic change. Visit www.polarisinstitute.org or www.insidethebottle.org.

Upcoming Special Issues of Progressive Planning Magazine:

Progressive Planning History
Philadelphia

Submissions welcome. See page 3 for details.

Heating Up Isn't Hard to Do: *Global Warming from a Planner's Window*

By John Nettleton

"..if you can get them asking the wrong question, you won't have to worry about the answers."

--Thomas Pynchon in *Gravity's Rainbow*

Global warming is often framed as a problem we either have adequate means to address and resolve or no time at all to deal with. But if we're to alter the path we're currently treading, the reality of global warming requires that we adopt radically different practices. Paradoxically, resolution of this issue is both further away and closer at hand than we imagine.

We in the U.S. need to use the term "reality" when referring to global warming, as is customary in the European Union and most venues around the world, but not inside our own Beltway. Global warming is an increase in the average temperature of oceans and atmosphere. Much of the recently observed and projected global warming is human-induced, the result of increased volumes of greenhouse gases (primarily carbon dioxide) released from burning fossil fuels and other human activities (such as agriculture). Broad scientific opinion from the United Nations Panel on Climate Change (IPCC) and most academies of science is that the average global temperature has risen 0.6 ± 0.2 °C since the late 1800s, with, according to the IPCC, "most warming observed over the last fifty years attributed to human activities." Increasingly fine-tuned models indicate further increases (1.4 to 5.8 °C) from 1990 to 2100, leading to sea level rise, extreme weather (floods, droughts, heat waves), shifts in disease vectors (malaria, etc.) and reduced crop productivity and plant and animal diversity (i.e., extinction).

Global warming can be viewed as the ultimate exercise in full planetary democracy, where daily ballots are cast by each and every sentient being (and their domesticated animals) and counted impartially according to fixed and inviolable laws

of thermodynamics. No hanging chads, no disenfranchised former felons, just straight voting of a most basic kind on the basis of carbon and greenhouse gas content. Every taxi driver in Manila, every Iowa farmer, every Hummer driver heading to 7-11 and every building owner in Milan turning up the heat—each votes in the same election every day. In some economies, annual votes are "weighted" by per capita consumption. An American votes thirty times each resident in India or Ceylon, for example. This daily activity, we'll call it daily practice, occurs within a closed system with fairly close tolerances. Global warming involves the interaction and loading of greenhouse gases in the earth's troposphere, the eight to eighteen kilometers (this depth changes or "breathes" seasonally) closest to the earth's surface. This layer of atmosphere is to the earth (our "home") as fingernail polish is to a medium-sized orange. We are in effect "performing a chemistry experiment on our own house," says the IPCC, within an environment of extremely close tolerances.

Change Planning Practice

To understand global warming and take effective action, planners need to adopt an entirely different perspective on our daily practice, and an altered pedagogy for planning education. Whether a teacher, student or practitioner of planning, we must each understand that resolving the problems we've created and charting a course to a different path for the economy and society aren't about technology or consumer selection. Our drawdown of ecological capital requires that we grasp how, as a society, we move around (primarily to and from work), grow our food, heat and light our homes and structures and make and consume goods. We need to make sustainable decisions at the scale of both policy and practice. Sustainable development can be defined in many ways, but the phrase "if you keep on doing what you're doing, you can keep on doing what you're doing" not only fits on a wallet-sized card, it has

the evaluation built in. Look at your transportation practice, your community's transportation policy, utility policy or other area of public administration. Measured by the increasing evidence of global warming, the answer to the question posed by this definition in many if not most cases will be "not likely." Nationally, the answer is quite obvious.

Change Planning Education

What should we do now? Teachers of planning need to address issues of sustainable development at the most basic level, distinct from the oft-cited UN Brundtland Report and its 1987 call for a tenfold increase in world industrial output. The fallacies of growth-oriented economics (both neoclassical and Marxian) must be addressed, with the Second Law of Thermodynamics viewed as the umpire of economic activity. "Green city" or sustainable design classes can't continue to be sidelined as one-day survey courses, or offered in place of "historical redevelopment in the former republic of ... (add your name here)." And one shouldn't have to enroll at University of Wisconsin-Madison to understand the role and impact of agriculture and food in planning and development, or at the University of British Columbia to gain a thorough grounding in the "ecological footprint" or sustainable development or the ecological limits to material growth. With each campus functioning as a small to mid-sized town within an often larger community, the potential for a planning program to transform the campus and community into a learning laboratory and center of sustainable development and teaching must expand beyond current levels.

Students need to drive the process, demand new offerings and generate projects highlighting the potential for action in their college settings. Simple daily actions or practices can be highlighted as patterns with large, demonstrable effects. At Carnegie-Mellon University last year, for example, students used as a jumping off point that 20 percent of all tires in the U.S. are underinflated (each year wasting the total amount of gas to be found - hopefully - on Alaska's North Slope) to survey one campus parking garage. They found that 20 percent of the eighty-one cars in the garage had underinflated tires, and that those cars wasted an annual total of 1.5 tons of carbon. Students

estimated that they and faculty would save a projected \$1.3 million a year by tending to this condition campus-wide!

Planning studios need to include housing design and energy management, working with (and learning the language of) fellow architectural students. How does each college power its own campus fleet? Where does the school's food, heat and electricity come from? Does the fresh produce you buy come from a local farmers' market, or are your organic lemons air-freighted from the Mideast? These are questions that can inform and frame a new approach to sustainable development, and address global warming in both school and community.

Planning practitioners (aka world citizens) have a universe of opportunities to move these issues and demonstrate the potential for transforming our society and economy. While awaiting positive "regime change" at the national level and an energy policy not driven by the demands of current foreign policy adventures, incubation and field testing of new models of planning and development can move to the forefront of our work. Transportation policy can and should be a primary focus of this effort, as over half of our societal substance abuse problem (petroleum dependence) is transportation-driven. Mass transit innovation is clearly critical, with planning for housing density at the threshold that supports transit (about 22-24 units/hectare, or 10-12 units/acre) becoming the norm. Rebuilding high-speed intercity rail should also be a priority, not just in the Northeast but between Houston and Dallas and many other regional corridors. It's doable: Rail travel time from Chicago to Boston is now over four hours longer than in the mid-1960s.

The False Promises of New Fuel Supplies

The noise emanating from Washington has long been all about supply—how and whether new fuels will rescue us by allowing American ingenuity to once again save the day. The bad news for this noisemaking is that our umpire, the Second Law of Thermodynamics, has ruled that growing our way out of a finite (and foreign) oil supply isn't a real option. To supply 10 percent of fleet vehicle fuel demand in the U.S., fully one-sixth of all arable land would have to be planted in fuel crops. Current ⇒

experience in Brazil has already demonstrated that a rapid increase in “flex-fuel” cars has helped drive the price of sugar to a 20-year high. These biofield crops (corn, soybeans, etc.) are themselves grown with measurable fuel and energy. Our agricultural economy has long substituted fuel for labor, as witnessed by a landscape of emptied-out Midwest communities. Such fuels, especially biodiesel, can emerge as significant niche crops and provide local producers with added income, but the real benefits of biofuels will be environmental, from reduced pollution (less particulates, sulphur and carbon dioxide). Certainly institutions should follow the lead of Denver’s school system, Cincinnati’s municipal bus fleet, and the Harvard campus by requiring that all diesel engines use B20 (20 percent plant product). But supply is one of a pair, and the whole solution requires equal attention to demand reduction across the economy.

Policy and user changes in practice must go hand-in-hand with new approaches to efficiency. Gradual consumer acceptance of hybrids, for example, isn’t the answer to our larger problems, and this confuses product with policy. Many top-line diesel cars already get the same mileage as hybrids without the extra cost, and diesel engines are 25 percent more efficient to start. The use of HOV (High Occupancy Vehicle) lanes by single-occupancy hybrid vehicles is a suburban practice that uses a green(er) product but at a lower mpg per person than a carpool of three people in a Chevy Suburban. A more sustainable pattern and policy is Austin Energy’s “Plug in Austin,” where hybrid drivers are driving their hybrids—charged overnight with wind power—to work, then plugging in and returning the electricity to the peak hour grid.

The current controversy over the fuel inputs and lifecycle costs for ethanol remind one of the debate over disposable diapers versus laundered cloth that at one time raged. Let’s face it, the kid’s not wearing them for eighty-eight years, but she is going to live in a community either with or without a transportation infrastructure that minimizes fossil fuel use. It’s about the practice, the pattern and the policies, not the product. Do professors and students walk across campus instead of driving to their assigned parking space? If you have two cars, do you take the one with higher mpg on the

trip to the store? As transportation expert Charles Komanoff points out, cutting out just one of every fourteen van and car trips would save the U.S. over 500,000 barrels of oil a day!

Change Policies and Individual Practice

Regardless of our station, role or situation, there’s a clear and pressing need for all planners to demand and promote policies that offer options and set the stage for the coming decades of American population growth and the newly built environment. A public arena with successive national election campaigns where the word “urban” is never uttered does not point the way forward to a radiant future. Our tax and development policies must begin to reflect the true costs of production of goods, including the erosion factors inherent in fuel production and the carbon content in the fuels we use and the housing and schools we inhabit. Such discussions require both high tolerance for ambiguity and the interdisciplinary bent that runs like a thread through planning from Patrick Geddes to the present. As planners, to foster our long-term mental resilience, we need to read outside our field, commune with those outside our discipline and limit the ratio of close friends from remotely similar fields to under 10 percent.

Does individual practice matter? Should convenience be our highest priority? Look around. Producing convenient single-use water bottles to meet U.S. demand requires 1.5 million barrels of oil annually, enough to power 100,000 cars for a year. When you look up from this always engaging *Progressive Planning Magazine*, what do you see? Accept that we have to take responsibility for what we do. When we blame, avoid or deny, we are removed from the realm of possibility where we can do something about our lives or the planet that is our home.

*John Nettleton directs program incubation efforts at Cornell Coop Extension in New York City and has presented on sustainable development at conferences throughout the U.S. and in Germany, Canada and Russia. His course *Global Climate Change: Urban & Public Policy Impacts* at Manhattan College in 1989 was among the first on the topic in New York. He worked on the innovative New Jersey Pinelands Plan, and has an MCP from Penn. He can be reached at jsn10@cornell.edu.*

Letters to the Editor

Jane Jacobs, Also a Toronto Rebel

Jane Jacobs chose to be Canadian. She was not just a New York rebel; she was a Toronto rebel. While *The Death and Life of Great American Cities* (1961) was Jane's first and most widely known book among American readers, she wrote six more critically acclaimed books on cities, the role of cities in the creation of wealth, and the need for cities and humans to be acknowledged as within, rather than distinct from, nature. She wrote these from her chosen home base in Toronto:

- *The Economy of Cities* (1969)
- *The Question of Separatism: Quebec and the Struggle over Separation* (1980)
- *Cities and the Wealth of Nations* (1984)
- *Systems of Survival: A Dialogue on the Moral Foundations of Commerce and Politics* (1992)
- *The Nature of Economies* (2000)
- *Dark Age Ahead* (2004)

After fighting to preserve neighbourhoods and stop expressways in New York City, she moved to Toronto in 1968 and did the same thing. She was the acknowledged leader of the movement that stopped the proposed Spadina Expressway. The expressway would have cut through the Annex neighbourhood, where she lived, and in the process would have destroyed one of the liveliest and loveliest neighbourhoods in the city.

But her activism didn't stop with expressways either. Jane once said that Toronto was "the most hopeful and healthy city in North America, still unmangled, still with options." She chided Torontonians planners and politicians, year in and year out for more than 30 years, to reflect on the consequences of bureaucratic thinking, to be creative and thoughtful about urban form, and to promote intellectual leadership and progressive social and environmental change. She was a firebrand—outspoken, irreverent, and unafraid of the powerful real estate interests (and frequently planners) she so often opposed.

In 1996, Jane Jacobs was awarded the Order of Canada, the country's top honour. As recognition

of her contributions to Canadian cities and society, the Canadian government stated:

Her seminal writings and thought-provoking commentaries on urban development have had a tremendous effect on city dwellers, planners and architects. A social activist and a proponent of the principle of thinking globally and acting locally, she has left her indelible mark on the Toronto landscape. By stimulating discussion, change and action, she has helped to make Canadian city streets and neighbourhoods vibrant, liveable and workable for all.

She was one of a kind.

Barbara Rabder is a Professor in the Faculty of Environmental Studies at York University in Toronto.

The many obituaries of Jane Jacobs fascinate me. While not disagreeing with all the accolades to her, there is one aspect no one ever mentioned.

Jane Jacobs was a woman, and her analysis and contribution deeply reflect the lived experiences shared by women. We all feel vulnerable and aware of our street environments, as we are young, old or responsible for our children getting to their schools, friends and destinations. We travel more frequently than men on foot or transit and without cars. Human scale development, human activity at street level, interesting facades and store windows and eyes on the street are therefore crucially important to us. When feminist planners started documenting their concerns in the late '70s, they echoed many of Jacob's issues, the importance of mixed use, medium rise, street oriented development, allowing women easier and safer access to jobs, goods and services.

Is it perhaps because developers and transportation planners are still overwhelmingly male and planners now are more gender balanced, that Jacobs ideas while praised everywhere are still relatively little implemented? Had Jacobs included the "f" word or this gender link, would she have received such wide acclaim - I wonder?

Reggie Modlich

RESOURCES

PN NEWS

PN Manitoba co-sponsored a Winnipeg Community Roundtable, September 21, 2006. Other partners included the Social Planning Council, Winnipeg Labour Council, Canadian Federation of Students, Canadian Labour Congress, Canadian Centre for Policy Alternatives, and Canadian Union of Public Employees. The event attracted about 150 participants (including municipal election candidates). A report will be available soon at www.wcrt.org.

PN Manitoba is co-sponsoring a mayoral candidates' debate about planning issues, October 19th, 2006 at the Eckhart-Grammatte Hall, University of Winnipeg. Other sponsors include the Institute for Urban Studies, University of Manitoba's Department of City Planning, the Social Planning Council, Architects without Borders, and the Canadian Green Building Council.

PN Manitoba is co-sponsoring a Winnipeg visit of Cathy Crowe, Toronto-based street nurse and homelessness activist (www.tdrc.net/CathyCrowe.htm), October 16th-18th, 2006. Other sponsors include the School of Nursing and Department of City Planning at the University of Manitoba and the Social Planning Council. The visit includes three public lectures.

PN MEMBER UPDATES

From Josh Lerner: I recently published an article in Shelterforce magazine: "Let the People Decide: Transformative Community Development through Participatory Budgeting in Canada." The summer issue of Shelterforce focuses on participatory budgeting and planning in North America, and it's now available online at www.nhi.org/ or www.nhi.org/online/issues/sf146.html

Peter Hall is now Assistant Professor of Urban Studies and Associate Director of the Center for Sustainable Community Development at Simon Fraser University, Vancouver. He can be reached at pvhall@sfu.ca.

Jung Won Sonn is now a lecturer in Urban Economic Development at the Bartlett School of Planning, University College London, University of London. His new e-mail address is j.son@ucl.ac.uk

PUBLICATIONS

"In the Eye of the Storm: How the Government and Private Responses to Hurricane Katrina Failed Latinos" (2006) is available from National Council of La Raza, 1126 16th St. NW, Wash., DC 20036, 202-785-1670, jmurguia@nclr.org, www.nclr.org

"Freedom's Call", a 2006 documentary directed by Professor Richard Breyer of Syracuse University, "revisits the civil rights struggle through the eyes of two veteran journalists [Dorothy Gilliam of The Washington Post and photographer Ernest Withers.] Information from 202-726-4515, www.whartongroupinc.com

"Stalling the Dream", is a May 2006 report from United for a Fair Economy, on the low car ownership rate for people — particularly, African Americans and Latinos/Hispanics — living in hurricane zones. The focus is on 11 major cities hit by 5+ hurricanes in the last 100 years: New Orleans, Houston, Miami, Ft. Lauderdale, Orlando, Jacksonville, St. Petersburg, Tampa, NYC, Providence, Boston. www.faireconomy.org/Stalling/index.html

"American Higher Education: How Does It Measure Up for the 21st Century?," by James B.

Hunt, Jr. and Thomas J. Tierney (13 pp., May 2006), is available from the National Center for Public Policy and Higher Education, 152 N. 3rd St., #705, San Jose, CA 95112, 408-271-2699, center@highereducation.org, www.highereducation.org

“Is There a Right Way to Collect Racial and Ethnic Data?” by David W. Baker, Kenzie A. Cameron and Joseph Feinglass (Jan. 2006), is available (possibly free) from The Commonwealth Foundation., 1 E. 75 St., NYC, NY 10021, 212-606-3800, cmwf@cmwf.org

“The Rental Housing Affordability Gap: Comparison of 2001 and 2003 American Housing Surveys,” by Danilo Pelletiere (19 pp., March 2006), is available (\$10) from the National Low Income Housing Coalition, 727 15th St. NW, 6th floor, Washington, DC. 20005, 202-662-1530, info@nlihc.org, www.nlihc.org

“More Than a ‘Temporary’ Fix: The Role of Permanent Immigration in Comprehensive Reform,” by Walter A. Ewing (8 pp., 2006), published by the American Immigration Law

Foundation’s Immigration Policy Center, is available at www.aifl.org/ipc/infocus/2006_morethantemporary.shtml

“Bringing Buildings Back: Turning Abandoned Properties into Community Assets?” by Allan Mallach. Focusing on the need for sustainable reuse and revitalization of America’s cities and neighborhoods, Bringing Buildings Back shows how finding solutions for individual buildings can and must be tied to the larger process of making our cities economically stronger and environmentally sounder places to live and work. Free shipping on all web site orders. For more details please visit: rutgerspress.rutgers.edu

EVENTS

Thru December 15, 2006. “URBAN EYES” - High school students from the Academy of Urban Planning in Bushwick, considered public art in subways, street graffiti & other unique aspects of their communities in projects investigating the relationship between art & the urban environment. The Brooklyn Center for the Urban Environment, one of the school’s sponsors, paired the stu- ➔

The Progressive Planning Reader

Reminder: Bulk discounts are available on *The 2004 Progressive Planning Reader*, with over 100 pages of the best from *Planners Network Newsletter* and *Progressive Planning Magazine*, covering topics including:

Politics and Planning • Urban Design
Planning Education • Race, Gender and Diversity
Community Planning
Sustainability, Environment and Health
Globalization and International Issues
Transportation and Information
Regional Planning

See the Planners Network website for more information.

dents' texts & everyday images, encouraging viewers to look at them anew, at the Urban Center, 457 Madison Ave & 51st St in Midtown Manhattan. For details about the school, click www.aupnyc.org/community/index.php?community=bushwick.

March 1-2, 2007. "Imagining Communities--Plan, Design, Implement", the 2007 Planning Institute sponsored by the Department of Urban and Regional Planning, University of Illinois, Urbana-Champaign, to be held on the campus. For more information, visit: www.urban.uiuc.edu/ce. Check often as updates are added to the web site. Also check the archives for video streamed featured institute talks and educational materials. Questions? Patti Petrie, patti@uiuc.edu

June 10-14, 2007. 45th International Making Cities Livable Conference on "True Urbanism: Designing for Social & Physical Health" & Exhibit on "New Designs for Mixed-Use Urban Fabric" will be held in Portland, OR. Co-sponsored by The City of Portland & Portland Metro Planning Council. Co-organized with the University of Notre Dame School of Architecture. For more information, visit: www.LivableCities.org

AWARDS

The Rudy Bruner Award is given to urban places that demonstrate the successful integration of effective process, meaningful values and good design. RBA winners are distinguished by their social, economic and contextual contributions to the urban environment, and often provide innovative solutions to our cities' most challenging problems.

The RBA awards one Gold Medal of \$50,000 and four Silver Medals of \$10,000 each. Case studies of winners are published on line at www.brunerfoundation.org and in a book distributed by the Bruner Foundation.

For more information or to receive an application, contact: Bruner Foundation, 130 Prospect Street, Cambridge, MA 02139, Ph. 617-492-8401, Ext. 184, Fax 617-876-4002, email: application@brunerfoundation.org. Download the application: www.brunerfoundation.org. The application deadline is December 18, 2006.

Please provide your name, title, company or organization, full address and daytime phone and/or

fax number on all application requests. Please let us know how you learned about the Award.

CALL FOR PAPERS

Critical Planning, the Journal of the UCLA Department of Urban Planning, Volume 14, Summer 2007: Spatial Justice.

Volume 14 will bring together articles from academics and practitioners to theorize and examine the application of spatial justice as a framework for action. We intend to publish a combination of case studies, theoretical analyses, research and policy briefs, design conceptualizations and personal accounts; feel free to contact us by email to discuss your ideas. Manuscripts should be submitted in triplicate to: Critical Planning, C/O Gregory Morrow, Deirdre Pfeiffer and Ava Bromberg, Managing Editors, UCLA Department of Urban Planning, School of Public Affairs, 3250 Public Policy Building, Los Angeles, CA 90095-1656, Email: critplan@ucla.edu, Website: <http://www.sppsr.ucla.edu/critplan/>. Applications will be accepted on a rolling basis. Early submissions are encouraged. The deadline for submission is December 15, 2006.

"Symposium: Urban Management in the 21st Century: Lingerin Issues and New Challenges" As with many areas of administration, the landscape of urban management has grown increasingly complex. This symposium seeks quality manuscripts that deal with specific contemporary challenges or more broad historical problems related to the practice of urban management. Authors are encouraged to contact the symposium editor for review of paper topics. For information about the journal and formatting guidelines for Public Administration and Management, go to <http://www.pamij.com/index.html>. Final Manuscripts Due: 1 April, 2007 (2 hardcopy, 1 electronic). Authors are strongly encouraged to send a sample abstract for review prior to formal manuscript submission. Send all inquiries and correspondence to: Michael Howell-Moroney, Assistant Professor, Department of Government, The University of Alabama at Birmingham, U238, 1530 3rd Ave S, Birmingham, AL 35294, mhowellm@uab.edu

Join Planners Network

For three decades, Planners Network has been a voice for progressive professionals and activists concerned with urban planning, social and environmental justice. PN's 1,000 members receive the Progressive Planning magazine, communicate on-line with PN-NET and the E-Newsletter, and take part in the annual conference. PN also gives progressive ideas a voice in the mainstream planning profession by organizing sessions at annual conferences of the American Planning Association, the Canadian Institute of Planners, and the Association of Collegiate Schools of Planning.

The PN Conference has been held annually almost every summer since 1994. These gatherings combine speakers and workshops with exchanges involving local communities. PN conferences engage in discussions that help inform political strategies at the local, national, and international levels. Recent conferences have been held in Holyoke, MA; Rochester, NY; Toronto, Ontario; Lowell, MA; East St. Louis, IL; Brooklyn, NY; and Pomona, CA.

Join Planners Network and make a difference while sharing your ideas and enthusiasm with others!

All members must pay annual dues. The minimum dues for Planners Network members are as follows:

- \$25** Students and income under \$25,000
- \$25** Subscription to Progressive Planning only
- \$35** Income between \$25,000 and \$50,000
- \$50** Income over \$50,000, organizations and libraries
- \$100** Sustaining Members -- if you earn over \$50,000, won't you consider helping at this level?

Canadian members see column at right.

Dues are deductible to the extent permitted by law.

PN MEMBERS IN CANADA

Membership fees by Canadian members may be paid in Canadian funds:

- \$30 for students, unemployed, and those with incomes under \$30,000
- \$40 for those with incomes between \$30,000 and \$60,000
- \$60 for those with incomes over \$60,000
- \$120 for sustaining members

Make cheques in Canadian funds payable to: "Planners Network" and send w/ membership form to:
Amy Siciliano
Dept of Geography, Room 5047
100 St. George St, University of Toronto, M5S 3G3

Please use the form below and include your email address.

PURCHASING A SINGLE ISSUE

Progressive Planning is a benefit of membership. If non-members wish to purchase a single issue of the magazine, please mail a check for \$10 or credit card information to Planners Network at 1 Rapson Hall, 89 Church Street SE, Minneapolis, MN, 55455-0109. Please specify the issue and provide your email address or a phone number for queries. Multiple back issues are \$8 each

Back issues of the former Planners Network newsletters are for sale at \$2 per copy. Contact the PN office at pnmail@umn.edu to check for availability and for pricing of bulk orders.

Copies of the PN Reader are also available. The single issue price for the Reader is \$12 but there are discounts available for bulk orders.

See ordering and content information at <http://www.plannersnetwork.org/html/pub/pn-reader/index.html>

PLANNERS NETWORK ON LINE

The PN WEB SITE is at: www.plannersnetwork.org

You can join PN or renew your membership, and pay dues via PayPal, from the website.

The PN LISTSERV: Planners Network maintains an on-line mailing list for members to post and respond to queries, list job postings, conference announcements, etc. To join, send an email message to majordomo@list.pratt.edu with "subscribe pn-net" (without the quotes) in the body of the message (not the subject line). You'll be sent instructions on how to use the list.

Progressive Planning ADVERTISING RATES:

Full page	\$250
Half page	\$175
1/4 page	\$75
1/8 page	\$40

Send file via email to pnmail@umn.edu, or mail camera-ready copy, by January 1, April 1, July 1 and October 1.

☐

Yes! I want to join progressive planners and work towards fundamental change.

- ☐ I'm a renewing member — Keep the faith!
- ☐ Just send me a subscription to Progressive Planning.
- ☐ I'm a student member.

My contribution is \$ _____ Make checks payable to **PLANNERS NETWORK**.

My credit card is Visa _____ MC _____ Amex _____ Card No. _____ Exp. date _____

Billing address (if different from below) _____

Name _____

Organization _____

Street _____

City _____ State _____ Zip _____

Telephone _____ Fax _____

Email _____

Mail This Form To:

Planners Network

1 Rapson Hall

89 Church Street SE

Minneapolis, MN 55455-0109

INTERNATIONAL MEMBERS: Please send U.S. funds.
We are unable to accept payment in other currencies. Thanks.

In This Issue

Water Rights
and Wrongs

•

Privatization and
Water Planning

•

Global Warming

PLANNERS NETWORK
1 Rapson Hall
89 Church Street
Minneapolis, MN 55455-0109
Address Correction Requested

Your Last Issue?

Please check the date on your mailing label. If the date is **more than one year ago** this will be your last issue unless we receive your annual dues **RIGHT AWAY!** See page 35 for minimum dues amounts.

And while you're at it send us an UPDATE on what you're doing.

M O V I N G ?

Please send us your new address.

Non-Profit
Organization
U.S. Postage
PAID
New Haven, CT
PERMIT NO. 541