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The Coming Hydrocracy **Arid Africa as the Water Runs Out**

By James G. Workman

[Transcript of a speech delivered at the Members and Trustees meeting of the Institute of Current World Affairs, Cosmos Club, December 6, 2003 in Washington, DC]

Let me thank the team ICWA triumvirate—Peter, Ellen and Brent, who respectively made me sound smarter, look better, and feel richer than I am. ICWA Trustees and Donors demand only three things of Fellows: that they demonstrate 'character,' and 'promise'... and be 'young.' I thank you for making an exception in my case. In the name of Franco-American détente, Vanessa left Paris to help me navigate on the road and off, and find our way 'home,' for which I am grateful. Thanks too go to my family, for not taking it personally as I fled from home as far as possible, and for raising me with an ICWA-style '*benign neglect*.'



I use that phrase advisedly and favorably. 'Benign' as in caring; and 'neglect' as in no one ever said "don't go there," or "don't do that." They just cut and sent me endless bleak articles about Africa and water, with a note: "Jamie, thought this might interest you."

As a result of those articles I stand here today. They only made me curious about the politics of water scarcity, to ask, more specifically, *What do Africans do as their water runs out?*

This question provokes a range of responses. The most succinct came from an old truck driver in Namibia. He heard about my research, thought a bit, nodded and said: "I tell you what happens. We are all *veeerrry* suffering. And then we die."

Let's call that a worst-case scenario. But he's not the first to predict something like it. Doomsday warnings go way back to the Ancient Mariner's "Water, water everywhere, nor any drop to drink." Malthus: "As populations expand, humanity will consume the resources required to feed ourselves, and starve." Ben Franklin, in 1746 writing: "When the well's dry, we know the worth of water." Mark Twain's provocative: "Whisky's for drinkin.' Water's for fightin' over."

Often coined in rich and rainy lands, those pithy warnings cut open dry places with a sharp, serrated edge. Today 2.3 billion people seek 70 percent more fresh water from rivers that are very nearly dry. Scarcity for many is no longer a hypothetical possibility. It has become a brutal and relentless force of daily living and hits the poor the hardest.

So what happens next in poor, modern, arid, Africa, where the well already

is, in fact, dry? The news clippings in my mailbox painted three ugly pictures.

In one article sent me, water scarcity pits man against nature. In March 2000, prolonged drought hit the Kenya-Sudan border. Relief workers rushed a water tanker up to rescue the parched villagers. When they arrived, a large troop of usually harmless Vervet monkeys emerged thirstily from their dry habitat, descended from the trees, and attacked *homo sapiens*. Try to imagine that reportedly "fierce two-hour melee" that killed eight monkeys and injured 10 humans, where two primate species fought each other over the last precious drops.



In a second article, water scarcity pits man against man. Urban riots broke out in Cape Town, Durban and Johannesburg. Whites, Coloureds, Xhosas and Zulus erupted in violence. Crowds burned tires at barricades. Police fired rubber bullets into the mob. Innocent kids got shot. But these uprisings had nothing to do with race; apartheid died a decade ago. The new nonracial democratic state appeared to be fighting its multi-tribal citizens over diminishing supplies of water.

In the third article, water scarcity pits man against



Fighting the Current: *Water is not scarce for local inhabitants on the Zambezi River, but the seven nations who share it are scrambling for every drop.*

Kneeling In Water Prayer: *Throughout southern Africa millions of women from every denomination still fall prostrate to the higher God of dirty wells, grateful for a bucket to fill every half hour.*

the state. It was an unforgettable essay in the *Atlantic Monthly*, by the renowned journalist Robert Kaplan, titled: "The Coming Anarchy." Kaplan rubbed your face in a bleak, accurate portrait: armed orphans, imploding states, ruthless and superstitious tribalism, rising crime and rampant epidemics: Your average African holiday from Hell. So what elevated his essay to become a seminal doctrine on foreign policy?

For the first time, Kaplan indelibly linked warfare with nature.

He wrote, "Nature has become a hostile force," where "democracy is problematic; scarcity is more certain." Only in America was eco-violence a luxury reserved for trust-fund tree-huggers infatuated with the spotted owl. Elsewhere, billions of poor are fiercely clawing at the land and at each other simply to survive. By unraveling nature's web of life these men and women would stress domestic calm, endanger life, terrorize liberty and risk global security.

Of the many diverse threats to nature, one stress stressed Kaplan most. Water scarcity. Of all the shriveling regions in the world, one terrified him in particular: Secular, sub-Saharan Africa.

With no glue to bond society, water scarcity here meant all hell would break loose...within the African family, between African tribes, and across the borders of African nations.

His prophesy resonated from World Bank echelons to suburban cocktail parties right down to late-night student bull sessions. It united buzz-cut

Pentagon officials with longhaired ecologists.

Soon everyone from Greenpeace to the Green Berets got busy preparing for this future filled with 'water wars.'

ICWA was no exception. Based on my proposal, Trustees dispatched me to the frontlines of driest Africa to watch, write, and wonder when and where these wars would erupt. But ICWA *is* an exception in one important way. It encourages us to look past sensational news stories, even past dispassionate and well-argued essays. It told us: take your time. When I did I discovered a complex current flowing beneath the surface, equally turbulent but far more interesting.

I found that water scarcity rarely if ever tends to cause violence or anarchy. Instead it becomes a peaceful catalyst. That catalyst transforms African society into something new and, to me, something terribly exciting, albeit a form that is still defining itself. Today I'd like to take you to a few places where I began to see this profound transformation take place.

I'll start with the 'undeveloped' and 'apolitical' no-man's-land of the Central Kalahari. Then I'll try to show you 'developed' southern Africa's stress points over water — man against woman, rich against poor, black against white, man against nature, and state against state — where water scarcity is disturbing the status quo order, but not in the way many thought it would.

I will conclude with thoughts about where these new, emerging waterless orders are heading.

And once I've managed to hopelessly confuse you,

we'll throw open the floor to questions.

Lost & Found

In the grand old ICWA tradition, I only began to revise my focus on Africa and water through two unlikely lenses: serendipity ... and stupidity. I was smuggling a Land Rover full of contraband water to the last dissident aboriginal clans, called Bushmen, who lived 14 hours' drive away from civilization in the middle of the Central Kalahari Game Reserve.

Well ... I got lost. Then my car had a breakdown. Then I realized I had no tools to fix it. (Don't worry. I've been duly scolded; there are limits to ICWA's benign neglect.) Like that proverbial prisoner facing execution in a fortnight, my ordeal concentrated the mind immensely.

For the two days I was stuck there, I looked hard at that surrounding, vast, harsh force of nature. The Kalahari's sands insolently overlap borders of seven southern African nations. Its heat shapes the region's climate. Its aridity defines patterns of settlement.

The Kalahari is often described as 'extremely hostile.' But that implies it gives a damn. To me it felt utterly indifferent. Its 350 millimeters of rains fall erratically: Drought or deluge, nothing in between. Even Botswana's single river, the Okavango, rushes to this desert only to die.

Consider the Kalahari's sand: too flat for dams to store any water; too loose for aquifers to hold much water; and too thin for many boreholes to pump water. In most of these conditions the Kalahari reflects the surrounding subcontinent. South Africa can use only eight percent of its rainfall, which already is less than half the world average. Zimbabwe can't grow crops along the populated Limpopo River. Desert-struck Namibia has no permanent rivers of its own.

You've heard of that futuristic movie, *Waterworld*? Call this the current *Waterlessworld*.

Yet despite limits of aridity, (or perhaps because of it) diverse indigenous life not only survives there; it thrives. Over millennia, plants and animals evolved in the Kalahari, including the earliest humans. Indeed geneticists now trace every person, including all of us in this room, back to a southern African 'Adam and Eve' whose



Rocinante Breaks Down: Nearest repair garage: 573 kilometers, but still 18 hour's away. Nearest water: 18 feet away, although the idiot driver had no clue where to look.



Bucket Brigade: *Though still all-female, this generation of gatherers has gained leverage through water to collectively negotiate their futures.*

DNA most closely resembles the Bushmen of today.

That night in the Kalahari, while lost, alone and hopeless, I built a fire, reflected for hours cursing my crushing idiocy, and considered my options. I had five days of water. If the situation got worse, I could walk through the game reserve to the nearest Bushman clan, hope the lions weren't hungry. And hope like hell the Bushmen would still be there.

So during that long sleepless night under a full moon, something modern and Western in me began to fall away. To me, Bushmen began to lose their romantic aura; they stopped being 'noble savages' of the past. Instead I began to see them as pragmatic opportunists, who offered me clues for how modern society could adapt, even with laughter, even as water dried up and ran out.

Some say, *Now Jamie, that's all very quaint, but I like showers. I like swimming pools. I like ice and water in my Scotch.* So do I. Hell, for that matter so would the Bushmen, given a chance. *So, do you really want us all to go back to a 'primitive' stone-age, hunter-gatherer past like the bushman?* Of course not. But the so-called 'modernists' and 'realists' entirely miss the point.

Today we fail to keep up with escalating water demand. We fail to increase our shrinking water supply. With climate change, we face increasingly fickle weather that makes us dam less, pump less and evaporate more. In two decades, one third of the earth will face absolute water scarcity. In north and southern Africa, India, China and the Middle East, modern society will soon face the same dry future that Kalahari

Bushmen already face today.

What will happen? Despite a century of trying to make Bushmen 'modern' like us, we may well begin to adopt variations on the very same 'backward' survival strategies long used by them.

Man vs. Woman

This reversal of fortune starts within the arid African household. If water scarcity pits man against man, imagine how it influences man against woman. Africa is no matriarchy; men guard their privileged position, for they control title to land, cattle and urban jobs; yet surprisingly, females control the water these depend on.

Females gather it, hold it, use it with economy. The African

cliché — a gossiping woman walking miles with water balanced on her head — may well endure. But I saw her posture change as rivers and taps dried up. That man-made aridity gives woman new leverage with which to negotiate her future. On three-fourths of arid African plots, key decisions are made by females. Male tribal leaders authorize the government to build a dam, then have to scrap it after explaining it to their wives. To avoid that, hydrologists now insist women attend meetings.

And you may Recall Gaugela, the water carrier I wrote about in an early newsletter? I caught up with her a year after we met. That tireless single mother saw water as currency, as capital. It was a means to: Brew beer, cast cement blocks, style hair, start her own garden and sell extra vegetables.

But when lines at taps grew long due to male negligence, she entered politics, got other women to join her, and organized a voting block based on securing water. She **won**.

As water wanes, woman's authority waxes.

Rich vs. Poor

So much for the battle of the sexes. But how might water scarcity affect class warfare? Few places have wider gaps between rich and poor than Africa. From Egypt's Nile-Delta irrigators to Zimbabwe's slums to Namibia's nomadic Himba tribes, I saw already rare water growing scarce and expensive.

The rich man could fill his swimming pool with water that beggars outside his fence couldn't cook with or

drink. That's why I once assumed riots over water meters meant Kaplan's 'coming anarchy' had already come. In hindsight I began to see they meant something else.

Ironically the protests over finite water actually *increased* social stability. Scarcity became a catalyst to level class equality. It brought an end to an old feudal patronage order based on "all water for some for now," and ushered in a new arid **interdependence**, based more accurately on "some water for all forever."

Who wants to pay more or anything, for water? Years of getting water cheap or free made people assume 'water is a gift from God.'

Does any politician wants to charge more, or cut off delivery for unpaid bills? Exchanging cheap water for support was what kept those officials in power. Aridity forced both sides to confront reality. Voters who said 'God gave us the water,' now know 'Well, She forgot to install the pipes.' Belt-tightening Governments know the poor can't afford to pay rising costs of water.

Only scarcity made rich and poor decide together: What was water really worth? If they set water prices too low, people waste it away. Set prices too high, and the poor drink from puddles and sewers. So they adapted in a gritty compromise unique to South Africa.

South Africa reserved 25 liters for each person, each

day, and each family got the first 6,000 liters a month free. After that, rates rose sharply, and demand fell accordingly.

So now, as that mansion owner pays more to fill his pool, he cross-subsidizes the surrounding shantytowns that can't even afford flush toilets.

European tribe vs. Nonwhite Tribe

As water scarcity eases tensions between Africa's classes, there remains the ugly legacy of strife between races.

We picture water as not only colorless, but colorblind.

In Africa it never was.

Water right was based on might, which in turn, was based on white. Water flowed uphill... toward the ruling race.

In Kwazulu Natal, the white 10 percent use 99 percent of the Mhlatuze River. Nationwide, 95 percent of south Africa's irrigation water goes to white farmers.

It's easy to cheer the end of apartheid, but hard to untangle this distorted legacy. How can anyone bring balance and racial justice without triggering a Mugabe-style meltdown? Each nation has been vigorously experimenting with reforms, and these in-



Free at Last: *These Caprivi Strip women in Namibia celebrate their tribal village's first cool, clear running water, released from a borehole where it had been locked underground. Now the hard part: how to share it, pay for it, and use it after the first 25 liters per person is delivered for free.*

terventions typically focus on land.

Whether they redistribute land fairly or militantly, most efforts fail to reach even modest social goals. Land use is a contentious and complicated field. Bureaucracies can't keep up with change.

Market economics favors those with money. The upshot: All too often, fertile land reverts to rich whites.

Meanwhile, the most profound changes have come elsewhere. Throughout southern Africa, to empower non-whites the state has quietly, profoundly nationalized every single drop of water on, above or beneath the ground.

Interestingly, the sweeping wave of water nationalization has caused not a ripple of outrage. It has failed to trigger the same disastrous economic effect as nationalizing land, oil, minerals or property.

Why is that?

Unlike these resources water is dynamic. It is irreplaceable. And it is hard for any government to hold, store

or concentrate in one place for so long. So when non-whites came to collect their new water they found the state deeply in water debt: 'hydro-bankrupt.'

From Cairo to Cape, as water grew scarce and competitive, central bureaucracies could no longer respond. Kaplan says at this point the state collapses and anarchy reigns.

Under my experience, it wasn't nearly that exciting.

Instead, at this point, the state grudgingly gives birth to more democratic, autonomous units.

These were based not on race or class, but on the most efficient and productive use of water. In fact they are even called Water User Associations (WUAs). Egypt used them to extract more crop per drop of the Nile. South Africa established them to give blacks more say. Botswana and Namibia set them up to pump water from the ground.

Drop by drop and borehole by borehole, planners and bureaucrats surrendered water to locals, and with it the costs and responsibilities of use.



This transfer of authority doesn't always lead to equity or democracy. What it does is lock black and white ... and Reds and Greens ... in the same room to determine their own, shared use of water. It was these new local hydrocrats, not federal bureaucrats, who were determining the basis for a colorblind society everywhere at every level.

Humans vs. Nature

Indeed, water scarcity appears to be Africa's missing social glue. It binds men and women, rich and poor, black and white.

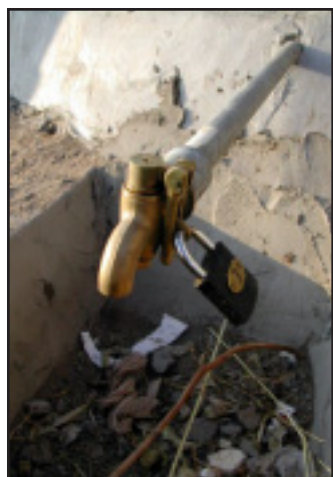
But what about man and nature? Do those thirsty, mad, Vervet monkeys foreshadow an ugly inter-species rivalry? Or the opposite?

Africa's greatest comparative advantage against the rest of the world is its extraordinary wildlife. Tourism is the fastest growing industry in the subcontinent. It is also, happily, the most efficient and lucrative use of water.

So while Booming cities — Maseru, Maun, Masvingo and Maputo — demand more, they also can't afford to dry up the very rivers all African species depend on, including primates and pachyderms.

This emphatic interdependence on rivers has caused a third re-mapping of the subcontinent.

During Peter Martin's 1950s fellowship,



WUA's, Old and New: *First, the Tsamma Melon Strategy, in which CKGR's Bushmen Dissidents harvested wild and water-rich ground melons and hid them in a camouflaged and thorn-ringed 'vault' to get through the rainless winter. Second, Today, progressive tribal villages unite to harvest rainwater locally from rooftops, but keep access **under lock and key** for those who built and clean the tanks, to last them through the dry season.*

apartheid South Africa was divided into four provinces.

During Sharon Doorasamy's 1990s fellowship, the nonracial democracy re-partitioned it into nine new provinces.

This century, as competition over water stressed the precarious balance between the federal capital and these provinces, I expected intra-state water wars of secession. Instead, I found a *new form of government* emerging.

And it might sound familiar to some. In the Cosmos Club lobby downstairs hangs a huge portrait of John Wesley Powell: explorer, scientist, visionary, bureaucrat. In 1898 he argued for rationally dividing the arid American west into autonomous authorities that would share one river. His bold ideas were correct, but alas, way too far ahead of their time; so instead we have those square states constantly fighting over the Snake, the Colorado and the Columbia Rivers.

In 1998, a century later, both South Africa and Zim-

babwe are finally putting that concept into practice. They have established agencies based on governance of rivers. South Africa set up 19 "catchment management agencies"; while Zimbabwe set up seven "catchment councils."

By any name, these institutions have power. They can both regulate and allocate rivers and aquifers. They can raise revenue for operation and management, based on 'compulsory licensing' of 40-year water leases.

When I recall how water is the root of all life and wealth, how the power to tax is the power to destroy, and how an emerging Catchment Management Agency has the power to tax all water use, I sense what a radical and profound shift this involves.

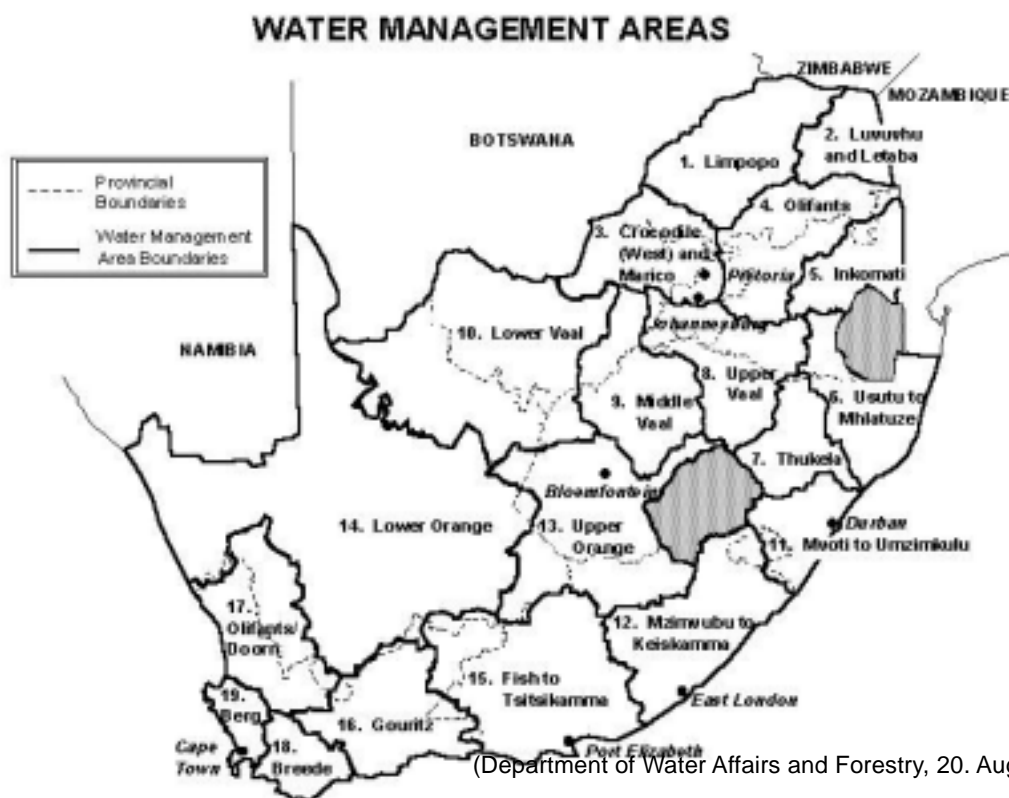
I also sense why the current powerful elite feels threatened by them.

So don't expect an overnight arrival of the Age of Aquarius, where peace and love and understanding comes based on water. No, giving water control to CMAs

Water as a national resource: The fundamental principle that guides the National Water Act (NWA) (Republic of South Africa, 1998b) is that water is a national resource, owned by the people of South Africa and held in custodianship by the state (section 3). This principle allows the state to have total control over the utilisation of the resource. It allows for mechanisms to be put in place to manage water resources using a more holistic, ecologically based approach, taking into account the entire water cycle.

Catchment management and stakeholder participation: The Act provides for catchment management agencies to be created in 19 (initially 18) catchment management areas (Figure 2). Each agency must draw up a management strategy for the catchment and will have to perform vital functions for the implementation of the Act, including the crucial process of issuing licences (see below).

Figure 2: The proposed 19 catchment management areas



(Department of Water Affairs and Forestry, 20. August, 1999)

is a slow and deliberate process.

But to me it is an irreversible process, too. In water-less world, people have no choice.

If this transfer of authority is completed, you wonder what's left for the state to do, besides ensure national security.

Nation vs. Nation

Speaking of which, let's return to those inevitable "Water Wars."

That poetic phrase falls fluid from the mouth.

Water – source of life.

War – source of death.

United in perfect disharmony.

A decade ago experts predicted water wars would erupt by now. Well, perhaps they're just running late. Hydro-pessimists say the only reason we don't have anarchy is because of the oppressive power of the state.

If so, as trans-national rivers run dry, each state should fight its neighbor for control of water. The 'prophets of doom' repeat this scenario so frequently, so prominently, and for so long that it has become Gospel. One of Africa's own leaders warns, "Water scarcity and the reliance on shared rivers can be a potential source of conflict."

Well, to keep my loyal newsletter readers awake, I searched long and hard for that conflict. Two years later, I can offer my own breathless prediction: Those once

inevitable 'water wars' between nations?

Ain't gonna happen. Not in Africa. Not here. Not ever.

Convincing you may be like disproving a conspiracy theory. It's not only difficult; it's no fun. But I think it's necessary. For it was here, at the international level, that water scarcity is bringing about its most delicate and important social transformation.

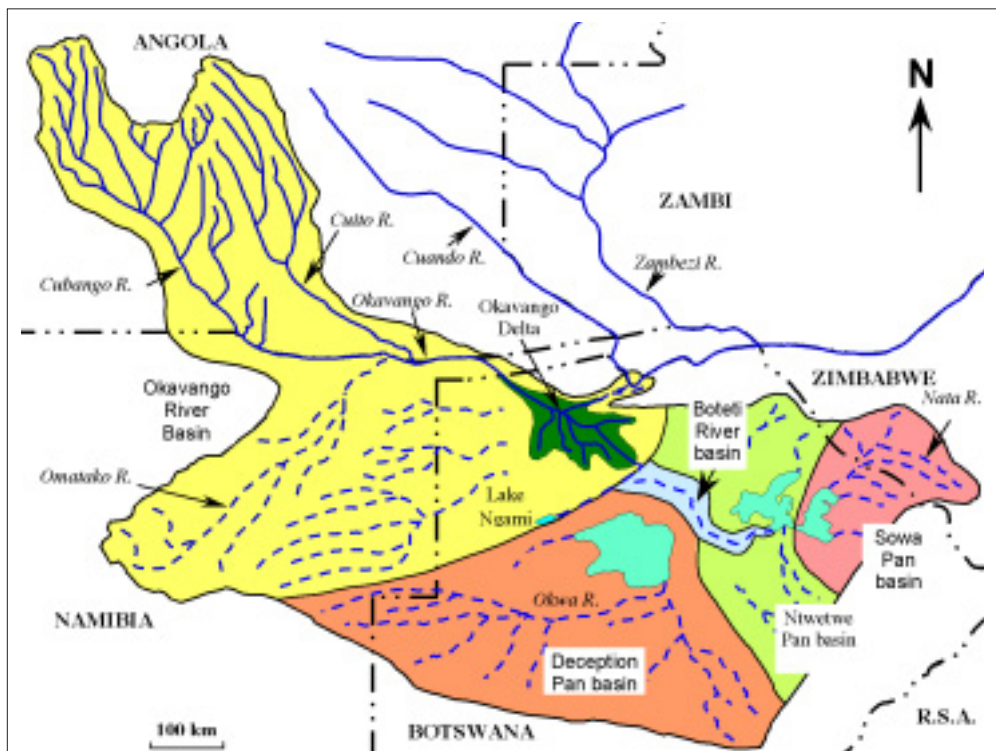
You may know the maxim: "All politics stops at the border." Whatever a nation's partisan differences, its people unite against a foreign foe. Yet if all politics stops at the border, very few rivers do. They flow right across, indifferent, thumbing their nose at the man-made 'State.'

A classic case is the Okavango River, Gathering and flowing out of Angola, sliding along and across Namibia, and then finally soaking into the sands of Botswana, it is the sole lifeblood of that equally indifferent Kalahari.

The Okavango tests each arid nation's authority by making them share the same finite resource. This test is not at all hypothetical. Nor is it unique. It has been thrust upon every southern African nation sculpted by geology, by colonial history, and by need. Newly legitimate and democratic African nations rightly say: We're in charge.

Only water chortles at this. It mocks and defies their will. It moves. It seeps down and runs away from their grasp. It is a dynamic fugitive from sovereign authority. Yet States need fugitive rivers more than rivers need states. As a result, it forces cooperation.

Lacking any 'global government' (a benign and com-



The Makgadikgadi basin, showing the extent of the four sub-basins, the Okavango Delta, the Boteti River drainage basin and the different tributary rivers. Ephemeral and episodic rivers are shown as dashed lines, while perennial rivers are shown as solid lines.

Source: Map redrawn from UNDP/GEF (2001).

petent United Nations with teeth) we might ask not whether water scarcity leads to peace and cooperation between states, but *why* it does.

History offers clues. Since AD 805, states have signed 3,600 water-related treaties. Of seven water-related skirmishes, all began over other issues. The last Middle East peace treaty began with water.

Or consider geography. Of 261 trans-boundary rivers, only rarely will you find four potentially fatal conditions: 1. the downstream state depends heavily on the river; 2. the upstream state can restrict that river's flow; 3. there is a legacy of animosity between river-sharing states; 4. and finally the downstream state is militarily stronger.

All four conditions apply to the Okavango River, you say? Uh, oh. Looks like trouble.

But wait. Let's consider options. One river yields diverse potential benefits. Angola wants the river for irrigation and power; Namibia wants it for industry and consumption; Botswana wants it for lucrative delta ecotourism. These are mutually exclusive, diametrically opposed uses, but at least they open potential for discussion and trade.

So finally, let's consider 'virtual water.' A country that buys 100 tons of wheat also invisibly imports the 100,000 tons of water that grew it. So it always costs less to import virtual water than to fight for control of the real deal.

Alas, rational self-interest does not guide warmongers. Some insecure tribal leaders I know may even go so far as to wage war to avenge an insult to their father. Imagine!

Emotions get the better of us; perceptions outweigh reality. If Namibia diverts the Okavango, it may well stress Botswana. Not because it significantly cuts the river's flow to the Delta, but because people *perceive* it might.

So Africa has been taking no chances. Its leaders have confronted their interdependency. Aridity made them sign a Protocol on Shared Rivers, to reinforce international law in a regional context. The young African states now have more experience negotiating water treaties or joint water management bodies than



Epicenter of Conflict: *Looking downstream through the site of the Okavango that Namibia wants to dam for hydroelectricity, at Popa Rapids. Some fear war with Botswana will start over the use of this strip of water. Don't hold your breath.*

any other region on earth (save 'Old Europe').

Still, the proof of these treaties is in the damming.

Will Angola or Namibia dam the Okavango? They sure want to. Some say they need to.

Will doing so provoke an angry, perhaps violent reaction from downstream Botswana? Well, they have formed a unique new body to avoid that chance. It is called the Okavango River basin organization commission, a.k.a. 'OKACOM.'

Like other commissions, OKACOM was once shrouded in mystery, behind closed door top-secret talks. But under pressure of aridity, water stress and a desperate need for options, all have opened to a wider range of interests and eyes. Including mine. I attended several meetings with OKACOM. I saw how three nations, represented by six men, have been struggling to share one river.

None of these men like to use the word 'conflict.' They insist to each other and outsiders that they are all brothers in pan-African solidarity. They don't "argue." They acknowledge 'disputes.' Each man employed a different tactic in dealing with disputes. Botswana delayed, Namibia blustered and Angola negotiated. None seemed eager to give up an inch of their nation's dominion. When impatient, these men questioned the legitimacy of OKACOM. Yet each stayed at the table, dragged forward to realize: National sovereignty just ain't what it used to be.

Recall Kaplan's ultimate apocalypse: resource scar-

I'd call it: "The Coming Hydrocracy."

I hear ICWA's tireless editor Peter Martin shuffling through dictionaries looking for a definition of this neologism. No, Peter, the word doesn't exist. Not yet anyway. But to me it best describes what's happening at every level.

Single mothers, labor unions, city managers, AIDS orphans, irrigation farmers, diamond miners and diplomats in Africa aren't waiting for me, or ICWA, or development officials to come and tell them what they should do in the face of water scarcity.

They are doing it.

Not because they want to, but because they must. African aridity is forcing them to adapt like the Bushman.

I'd treat water stress with ICWA-style benign neglect. Let people collide with each other and themselves over rivers, let them hit dead-ends, problems and impossibilities over boreholes and wells. Let them endure minor conflicts and confrontations over water; and re-organize themselves around a shared and desperate need.

For southern Africa at large, all shared and desperate needs reduce down to a single element.

Eighteen months ago, in the middle of the dry season, I interviewed the Central Kalahari's dissident Bushmen in Metsimeng. I asked one resourceful elder about water use, and needs, and how he was adapting to both a drought and to the government's cutting off water. He grew reticent and evasive. I asked whether he had enough water for his family and clan to last until the rainy sea-

son. He wouldn't respond. I repeated the question to a translator. He grew angry, testy, frustrated. All very un-Bushman-like responses.

At the time, I didn't understand. Today, I think I am beginning to. Despite our heroic engineers, our federal treasuries, our all-powerful states, we discover we can't 'regulate' water any more than we 'regulate' climate, wind, clouds, rainfall, or fish. We discover anew what that Bushman never forgot:

We don't govern water. Water governs us.

Thank you.



Return of the King? *Molapo leader Seco Gatlano has returned to repopulate his ancestral home, not on his or the Botswana government's political terms, but on water's immutable law.*

INSTITUTE OF CURRENT WORLD AFFAIRS

Fellows and their Activities

Alexander Brenner (June 2003 - 2005) • **CHINA**

With a B.A. in History from Yale in 1998 and a Master's degree in China Studies and International Economics from the Johns Hopkins School of Advanced International Studies, Alex in China, focused on the impact of a new government and a new membership in the World Trade Organization on Chinese citizens, institutions and regions both inside and far from the capital.

Cristina Merrill (2004 - 2006) • **ROMANIA**

Born in Bucharest, Cristina moved from Romania to the United States with her mother and father when she was 14. Learning English (but retaining her Romanian), she majored in American History at Harvard College and there became captain of the women's tennis team. She received a Master's degree in Journalism from New York University in 1994, worked for several U.S. publications from *Adweek* to the *New York Times*, and will now spend two years in Romania watching it emerge from the darkness of the Ceausescu regime into the presumed light of membership in the European Union and NATO.

Andrew Rice (May 2002 - 2004) • **UGANDA**

A former staff writer for the *New York Observer* and a reporter for the *Philadelphia Inquirer* and the Washington Bureau of *Newsday*, Andrew is spending two years in east-central Africa, watching, waiting and reporting the possibility that the much-anticipated "African Renaissance" might begin with the administration of President Yoweri Museveni. Andrew won a B.A. in Government from Georgetown (minor: Theology) in 1997 after having spent a semester at Charles University in Prague, where he served as an intern for *Velvet* magazine and later traveled, experienced and wrote about the conflict in the Balkans.

Matthew Rudolph (January 2004-2006) • **INDIA**

Having completed a Cornell Ph.D. in International Relations, Matt is spending two years as a Phillips Talbot South Asia Fellow looking into the securitization and development of the Indian economy.

Matthew Z. Wheeler (October 2002-2004) • **SOUTHEAST ASIA**

A former research assistant for the Rand Corporation, Matt is spending two years looking into proposals, plans and realities of regional integration (and disintegration) along the Mekong River, from China to the sea at Vietnam. With a B.A. in liberal arts from Sarah Lawrence and an M.A. from Harvard in East Asian studies (as well as a year-long Blakemore Fellowship in Thai language studies) Matt is also examining long- and short-term conflicts in Burma, Thailand, Laos and Cambodia.

Jill Winder (July 2004 - 2006) • **GERMANY**

With a B.A. in politics from Whitman College in Walla Walla, WA and a Master's degree in Art Curating from Bard College in Annandale-on-Hudson, NY, Jill is an ICWA Donors' Fellow looking at Germany through the work, ideas and viewpoints of its contemporary artists. Before six months of intensive study of the German language in Berlin, she was a Thomas J. Watson Fellow looking at post-communist art practice and the cultural politics of transition in the former Soviet bloc (Czech Republic, Slovakia, Poland, Croatia, Hungary, Latvia, Romania, Slovenia and Ukraine).

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