## WATER! WATER! WATER!

## Your "public" right to water

We've probably all heard that the new wars are gonna be fought over water. But I mean do you *really* entertain that. I mean really. Aren't we smack in the middle of an oil war right now and how many of us really get that? I mean sure gas prices have escalated but they're also kinda stable these days (they're expensive right) but we all seem pretty resigned, if not accepting of that. So I mean really. Water! If water's next does that mean oxygen will follow?

Mathew Gandy has suggested that the history of urbanisation is intricately tied to the ever demanding provision of a sufficient water supply. This is certainly traced out in his history of New York City which requires a massive water infrastructure, some of which reaches as far north as Canada, to sustain its commercial and domestic needs. Of course in an age of increasing deregulation, where it's not uncommon to see electrical and gas supplies being brought in from other city's surpluses through networks of inter-regional exchange, perhaps this systematic diversion of water shouldn't be such a surprise. What is though is the way the charismatic public face of water, that common front in which its assured impunity as a "natural gift" has been consistently leveraged to sustain social and economic influences that often have far narrower inclinations in mind than its public face might suggest.

The mid 1830s marked a decisive change in the New York City's attitude to water provision. Prior to this the city had made do with a combination of private wells and rain water collection. However by the mid 1800s the water quality of these sources had deteriorated so badly that the New York Journal described the 'collect pond', one of the few remaining water reservoirs that could consistently be pumped, as little more than a 'sink and common sewer'. This still didn't stop a considerable water racket emerging in which the appropriately named "tea watermen" who controlled access to the reservoir from raking in \$275,000 a year.

Sparked by the cholera epidemic of 1832, sanitation and water quality, a matter previously written off as simply an issue of taste quickly became a "public" problem that required urgent attention. As alarmist as these calls to ensure public health may have been, attempts to provide New York City with a consistent supply of water really only achieved momentum in the wake of the great fire of 1835 which destroyed 674 buildings. Almost irreparably crippling New York City's burgeoning insurance agencies, the bill to compensate damage caused by the fire dramatically eclipsed the cost of any infrastructure to pipe in water from out of state sources. Coinciding with sustained calls from New York City's industrial economy whose breweries, tanneries, distilleries and chemical factories all needed a consistent provision of clean, refined water, New York City was finally pinned into a corner from which it could no longer deflect the need to ensure the city had a sufficient and bountiful supply of quality water. The answer was the Croton Aqueduct, which built in 1842 took so much water from the Croton River in Westchester County that by the 1850s New York City had the highest level of per-capita water consumption anywhere in the world.

The main beneficiaries of the Croton Aqueduct, those private commercial enterprises who were the main pressures behind it, are entirely absent from the public celebration of the aqueduct as a new source of civic pride. Enshrined by the elaborate and very visible Croton fountain in Union Square, water became an abundant natural product freely available to a grateful public. 

Keeping the streets clean and building's safe, the public provision of water finally created that hygienic urbanism in which a city and its populace could blossom. As the architect Vittorio Gregotti blushed at the time, the aqueduct was a perpetual reminder that 'to supply water freely to a city is much more than guaranteeing a service: it represents in an exemplary way, the collective effort to ensure the communal life of the settlement'. 

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New York City continued throughout the 20<sup>th</sup> century to draw water from the Catskill Mountain regions, buying up huge tracts of land and even lakes. However by the late 1990s, considerable pressure from development in the upstate region had begun to challenge New York City's right to draw water from their territory. Coupled with the appearance of bottled water as a niche market and a renewed ecological awareness (if even only a pop-sentimentality thanks to stores like, The Body-Shop and The Nature Company) the public perception of water in New York City altered dramatically. Long since dubbed the 'thirsty metropolis', its citizens finally started to question the need for private industrial enterprises to claim the majority of a misleadingly titled "public" water supply. Propelled by the general but begrudging acceptance of bottled water, and the dramatic decline in the quality and taste of "public" water, New York City's citizens demanded a greater transparency and public influence over the provision of their water supply. With calls for industrial water supplies to be taken from the Hudson River in order to free up domestic access to the cleaner, higher quality water coming in from the Catskill Mountains going ignored, the conflict over water access during the 1990s clearly showed, as Mathew Gandy has usefully explained, how 'the very word 'public' misleadingly elides dominant economic, political and cultural developments to the exclusion of more marginal voices'. What the history of New York's water supply shows is that hidden under this mantra of public access, the provision of water has always been guided by far narrower political prescriptions, something Athens' water drought in the early 90s also exemplifies all too well.

In 1985, after months of unprecedented rainfall, the city of Athens' main water reservoir overflowed creating a surplus of water that enticed the then socialist government to declare water a 'natural gift' that every citizen had a right to freely access. In fact, the government was so swayed by this civic empowerment that it restructured the laws governing water supply to ensure the priority of domestic supply over commercial and industrial use. However with the onset of a draught from 1989-91, the social cohesion and priority of the citizens' right to free water was dramatically reversed as water, once an abundant resource, became a source of conflict. With the daily public countdown of 170 days of water, and newly enforced pricing structures, water quickly became a commodity with a very tangible exchange rate. As Maria Raika explains, 'the shift in the discourse and practice of water management that was forged during that period gave a decisive blow to the public and social character of the

water company and contributed towards turning water in the public consciousness from a public good and a national heritage into a commodity'. That the drought also allowed, even demanded, the immediate development of a new dam, a huge undertaking with clear beneficial outcomes for a stagnating construction industry is also a clear example of water politics having far wider consequences than the 'public' weal of civic endowment. In fact given the almost immediate dissipation of the water crisis once the 'water emergency-act' had been legislated, measures which only managed to reduce domestic water use by 20%, and the continual treatment of the crisis as a natural disaster it seems odd to think of the drought as anything other than a manipulative event which ushered in a commercial environment that radically altered the assumption that every citizen was freely entitled access to the city's water supply.

As the examples of Athens and New York show the provision of a public supply of water are far from straightforward. That private enterprise can manipulate and coerce the development and provision of water shouldn't really come as much of a surprise but that still doesn't mean it should dominate it. As Mathew Gandy has suggested the control over and supply of water requires 'a more sophisticated public sphere through which new forms of democratic decision making can emerge'. Given the tendency towards privatisation and 'sustainability' management mantras, what then we are to make of the Christchurch City Council's recent "Water Wise" initiative, that encourages domestic responsibility, with slogans like 'EVERY DROP COUNTS'. Should we in turn be sceptical that this initiative purposefully deflects attention from the fact that the majority of Canterbury's water is currently being supplied free of charge to a burgeoning dairy industry? Surely we should read such initiatives as merely a precursor to the entirely similar agendas of privatisation and "scarcity" rhetoric that lay siege to Athens' "public" water supply.

Last year the contestation of water reached Christchurch's local body elections when a group of civic leaders formed the political party, Save Our Water. Contesting both the Christchurch and Canterbury Regional elections, Save Our Water, whose stated goal was to stop 'Christchurch ending up with a very restricted supply of badly contaminated and expensive water', directly attributed the declining standard of water in Christchurch City to the region's diary and agriculture industries. With surging global prices for dairy commodities (milk, butter, solids) and the corporate restructuring of Fonterra monopolising the diary market in the last decade, dairy farming has become an increasingly attractive option for New Zealand farmers. The Canterbury region is typical of this upsurge, especially given that Canterbury farms are averaging a profit almost twice that of the national average. However, the financial incentives to convert agricultural and mixed herd farms into the monoculture dairy pastures has placed excessive pressure on Canterbury's aquifers that once provided Christchurch City with one of the best water supplies anywhere in the world. When just one large scale dairy farm consumes 50% of what the entire domestic population of Christchurch uses its hard to understand why the city council has implemented a city-wide poster and media campaign to encourage Christchurch City residents to be more water conservative. Never mind that the constant irrigation these dairy farms need is causing a massive run off of chemical and animal effluent to burrow its way into the very aquifers that sustain Christchurch's domestic water supply. To make matters worse, the buoyant upsurge in the diary economy has resulted in the application known as the Central Plains Water Scheme which intends to take water from both the Rakaia and Waimakariri rivers in order to irrigate a future 60,000 new hectares as dairy farm pastures in the south Canterbury plains. As Save Our Water point out, this initiative will not only take 51 times more water than is currently being used but it will also result in the equivalent of 20 to 30 times the amount of sewerage currently being spilled into the waterways of the Canterbury region.

The politicisation of water in the Canterbury isn't a straightforward problem. It's certainly not going to be solved by inciting urban folk to condemn rural water usage. In fact, with recent implementation of water metering on all new private bores, and greater awareness of the vulnerability of the resource, rural initiatives are more likely to practice water conservation policies than many urban residents. Similarly too, Waterwise, Christchurch City's water monitoring division devotes two thirds of its staff to focus on water reduction in commercial enterprise in a much more hands on role than its cursory domestic attention could ever hope for. Urban water users could also learn from rural initiatives such as Living Streams who are doing wonders to restore and protect riparian corridors throughout the Canterbury region. Of course a large part of these conservations are being propelled by the financial bottom line, an incentive that currently isn't being imposed on domestic water-usage. However, shrill calls from less than pious urban consumers will ring mute on rural ears especially when we remember they're the ones who are already having to bear the brunt of failed water policies by having to boil water before its safe for personal use. Is it any wonder then that the regional council, (Ecan), to which a number of pro-water councillors have been newly elected has suggested that their major barrier to implementing effective water policy is the tainted image of Ecan as a disciplinary, meddling "urban" body who only wants to make life difficult for the rural community. None of this is to say that we shouldn't be sceptical of the initiatives like the Central Plains Water scheme, which whilst masquerading as an independent study is underwritten by a group of shareholders who also happen to be the very farmers who will benefit from the implementation of the scheme. It's just that when so much of Christchurch's domestic, "public" water supply depends on the goodwill of the rural population it bears remembering that there is little point in senselessly vilifying them.

Globally water is increasingly becoming a contentious issue. In a way it always has been. The very word rival is linked back to competition over watering holes. However, with the responsibility for public water access being increasingly handed over to private interests, predominantly multinational corporations like Vivendi, who today are responsible for supplying water to 70 million people throughout the world, it's quite remarkable Christchurch has been able to blithely ignore what has become such a contentious issue in other parts of the world. A large part of this is that Christchurch has taken for granted, not only its water supply but also its consistent quality. Such short-sightedness though is likely to inflame attempts to address problems when water quality deteriorates. One of the major decisions to come will be how to effectively use a grey water system which will relieve pressure from the aquifers which are today Christchurch's main water supply. Widely available overseas are kits which allow domestic users to collect and store rain water for garden use. Why these aren't available more widely here, where 30% of domestic water consumption goes to maintaining that Garden City cliché, beggars belief. Future debates too, are likely to be sounded out over competition to use the refined water coming from Christchurch's aquifers, especially as water shortages in

other provinces and countries send demand for water through the roof. Should the council be allowed to profit by supplying water to other markets to ensure funds for better water infrastructure (pipes, pumps, meters, people). These and other questions are likely to come, but what Christchurch should take from examples around the world is that these questions are best debated in a very public manner. Too often organisations have swept in through apathetic disinterest to close off this public voice. Which is a shame really, and one we'll only likely to experience when we're being forced to pay for dirty, dissatisfying "public" water supply. <sup>11</sup>

<sup>1</sup> Mathew Gandy, Concrete and Clay, Reworking Nature in New York City, (Cambridge, MIT Press, 2002).

<sup>&</sup>lt;sup>2</sup> In Gandy, 24.

<sup>&</sup>lt;sup>3</sup> Public celebrations to commemorate the completion of the Aqueduct were larger and grander than any seen since the American revolution.

<sup>&</sup>lt;sup>4</sup> Quoted in Gandy, 32.

<sup>&</sup>lt;sup>5</sup> Maria Kaika "The Political ecology of water scarcity, The 1989-1991 Athenian Drought", *In the Nature of Cities*, Ed. Nik Heynen, Maria Kaika and Erik Swyngedouw (London, Routldege, 2006); 168.

<sup>&</sup>lt;sup>6</sup> The newly proposed Evinos Dam continued a long tradition in Greece in which large scale construction projects like dams have been used to bolster a slumping national economy. As Kaika explains, 'Since the end of World War II, state support for the construction industry in Greece has been an efficient and popular way of producing sort-term economic growth, mainly because of the economics of scale produced by this industry and the relatively large number of people involved'. This short-term gain has another relayed effect when the project is a dam because it also allows speculators to manipulate the property market. Thus 'during the post war period, the development of the water supply system of Athens played a pivotal role in supporting urban expansion and land speculation. The urban sprawl that occurred between 1950 and 1970 could not have happened without the expansion of the water supply network and of the resource base [dams], both of which were either funded or heavily subsidized by the state... Water supply was not only a guarantor for urban sanitation; it also became a determining factor for land speculation. By securing water supply for new urban development schemes the state in effect subsidised private developers and assisted in their land speculation practices' (165).

<sup>&</sup>lt;sup>7</sup> Pointing out that the efforts to curb water consumption alongside initiatives to bring in water from outer lying regions failed miserably meet the estimated provision of 1,000,000 m³ of water per day, Kaika has suggested that the actually water crisis was possibly more 'discursive, rather than a real imminent threat of water scarcity during the period' (168). Perhaps this is why the minister for the environment, who only three months prior had suggested Athens was facing an unprecedented an entirely unavoidable disaster, was then able to publicly claim that the water problem had been solved thanks to the emergency water act which ushered in the privatisation of a once treasured "public" resource. As Kaika notes, by linking the 'the increase in its exchange value' to a "naturalised" water scarcity epidemic, this "natural" character created a handy 'public consensus' which wilfully ignored 'the actual institutional, economic and social organisation' that actually 'makes water a commodity' (162).

<sup>&</sup>lt;sup>8</sup> Gandy, 74.

<sup>&</sup>lt;sup>9</sup> Microbiologists are extremely concerned about the continual seepage of animal effluent into the domestic water supply and are already calling for it to chlorinated. While this process may result in a reduction in the cases and incidents of campylobacter, crypto sporidium and other bacterial outbreaks it will have little affect on the cancer causing nitrates and various toxic chemicals that are already in the water supply thanks to the continual dependence of dairy farming on fertilizer to keep those bountiful green pastures lush.

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The quality of available Canterbury water has already reached tipping point. Already outlying towns like Springston are forced to boil tap water before use because of continual e-coli outbreaks. The Selwyn River is littered with signs declaring "this waterway is polluted, swimming is not recommended". If this isn't bad enough research by civil engineer Richard English predicts that the Avon River is likely to run dry by the end of the next decade.