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The political construction and fixing of water overabundance: rural-urban flood-risk politics in coastal Ecuador

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ABSTRACT

Ecuador's mega-dam project aims to control Chone city's flooding hazards, but it submerges peasants' territories – legitimized by 'modern city/majority benefit' versus 'rural backward/sacrifice-able minority' discourse. Presented as disordered, unruly and needing domestication, peasants must follow urban imaginaries and safeguard modern-urban progress. Policy-makers' water overabundance discourse presents 'flood risk' as a natural and techno-managerial problem, hiding how unequal power balances establish 'high-value' (urban/elite) areas as protection zones and rural areas as sacrifice zones. Excessive water is stored in rural areas, neglecting peasants' livelihoods and governance forms. The paper's political ecology approach displays the 'water overabundance' discourse as a techno-political, naturalized construct that profoundly impacts rural-urban hydro-territoriality.

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Introduction

In the thematic fields of rural-urban water governance, critical scholarship has identified the theme of water transfers from rural to urban areas for urban water supply as a prominent issue. Such transfers are commonly motivated by a powerful water-scarcity discourse, as noted by, among others, Bakker (2010), Hommes and Boelens (2017), Lynch (2013), Riaz (2002) and Swyngedouw (2004). This discourse on a city's water scarcity commonly sidelines intra-urban leakages, exclusions and mismanagement to justify bringing water that is presumably unused from apparently water-abundant and pristine rural water reserves. Water-scarcity discourse is criticized for legitimizing and obscuring the contentious ways in which water resources are taken from these rural territories to benefit urban areas. What is likewise important but rarely addressed is how water-overabundance discourse similarly serves to support and legitimize the adoption of depoliticized urban-biased water policy models (cf. Alatout, 2009). This

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becomes prominent, for instance, in the case of possible flood risks for cities. There are similar shifts and movements of water under notions of water overabundance. Though given far less critical attention, in the same way water overabundance tends to neglect rural livelihoods. Where is the overabundant water kept? What transformations does this bring to rural and urban areas? How does the nexus between modern water technologies (e.g., dams) and flood risk work?

In the past century across the globe, urban centres have become consolidated as privileged settings for modern development and societal progress, even as they remain deeply stratified (Banister & Widdifield, 2014; Baviskar, 2007). Precisely because cities gather large numbers of stakeholders and diverse economic activities, among their most pressing problems is the issue of water access and control. The growing uncertainty about the potential effects of climate change (e.g., droughts and flooding) and permanent, often unplanned, migration from the countryside to the city are placing even greater pressure on urban water governance (Molle & Berkoff, 2006). In many cities, these problems involve not only water supply but also keeping overabundant water away. In this context, hydraulic mega-infrastructure projects such as inter-basin transfers and multipurpose dams are widely accepted among politicians, public planners, financing agencies and private-sector stakeholders such as construction companies. Such projects facilitate the redistribution of water to the strongest actors, whereby in many cases large cities acquire a prominent role. Rural areas are commonly underestimated and framed as the other. For instance, Duarte-Abadía and Boelens (2016, 2019, in this issue) show how, in the context of rural-urban water conflicts in Colombia and Spain, peasant water cultures and knowledge frameworks are presented as backward compared with those of modernist urbanbiased water provision projects (see also Roa-García, 2014; Romano, 2017; and Hommes, Boelens, Harris, & Veldwisch, 2019, in this issue). Johnston (2018) and Lynch (2019) present the illustrative case of Chixoy in Guatemala, where rural areas were written off as empty-able (see also, e.g., Baviskar, 2007; and Nixon, 2010). Alternatively, as aquifer recharge areas and other bodies of fresh water originate precisely in rural areas, they are often presented as places to be conserved, or depicted as the places where the natural capacity for flood mitigation lies. This interaction creates and aggravates tensions between urban and rural water governance.

As will be argued throughout this paper on Ecuadorian water development, dominant modernist water policies and models are justified by categorizing rural territories as areas that can be sacrificed for urban flood protection implicitly or explicitly portraying urban areas as developed while depicting rural territories as underdeveloped and backward (see, for instance, Radcliffe & Westwood, 2005, for an analysis of Ecuador's modernist cultural politics). This argument is illustrated through the discourses and practices deployed to legitimize the urgent call to prevent floods (water overflows) affecting the city of Chone in Ecuador (Figure 1). In analyzing these flows and infrastructural efforts, we offer scrutiny of ways that the government deploys constructed hierarchies of urban over rural. Using a depoliticized water overabundance discourse, the government also justified the construction of the Chone multipurpose mega-dam and the associated transformation of rural surroundings.

This contribution is based on historical and ethnographic research carried out in the city of Chone and rural Río Grande communities located in the Chone multipurpose mega-dam's influence area (Figure 1). The field research was performed through

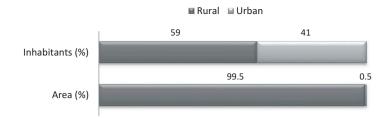


Figure 1. Chone's dam and the main rivers flowing through the city of Chone. Source: Authors.

extensive field visits between 2014 and 2016 and the first author's professional experience within the project from 2010 to 2011. Participatory observation, semi-structured interviews, a literature review and secondary sources (historical archives, newspaper articles, official reports) were the main data-collection methods.

Water overabundance and the urban-rural water nexus

Water governance is socially constructed and politically informed. It involves, for instance, divergent interests and contradictions regarding water control and access in cities (e.g., Ioris, 2016; Swyngedouw, 1995), in rural sectors (Hidalgo, Boelens, & Vos, 2017; Mena-Vásconez, Boelens, & Vos, 2016) and the relations between them (e.g., Linton & Budds, 2014; Molle & Berkoff, 2006; Riaz, 2002). The different means (public policy, laws, governance models, infrastructure/technology, etc.) used to appropriate, accumulate and/or distribute water are deeply influenced by different notions of how to understand the relationships between nature, technology and society (Baghel, 2014; Swyngedouw, 2004). In the discussions regarding mega-hydraulic infrastructure and large dams, proponents typically construct water discourses around two 'naturalized' extreme conditions or threats to legitimize their positions: water scarcity presented as droughts and water overabundance deployed as floods (cf. McCully, 2001).

The discourse created around physical water scarcity as the basis to develop 'good water governance' is widely promoted, but also criticized. Goldman (2007) and Lynch (2013), for example, show how the discourse of scarcity is historically promoted by international institutions such as the United Nations (UN), the Food and Agriculture Organization (FAO) and the World Bank (WB) and adopted by governments to justify their actions regarding 'good water governance'. Lynch insists that 'the policy prescriptions of international institutions seeking to transform fresh water governance [...] are driven by fear of an impending crisis due to an *absolute scarcity* of fresh water' (Lynch, 2013, p. 70, added emphasis). Through the Peruvian case, Lynch shows how this universalized discourse tends to present water governance as an apolitical, natural matter, while eclipsing essential aspects of its social, political and economic construction. Thus, water scarcity is referred to only as a natural problem caused by nature and climate change, rather than as a problem of distribution or of uneven power relations (cf. Bakker, 2010; Hommes & Boelens, 2017; Swyngedouw, 2004).

As with the case of the social construction of water scarcity (e.g., Aguilera-Klink, Pérez-Moriana, & Sánchez-García, 2000; Mehta, 2006), water overabundance is similarly a relational concept and political notion. Thereby, the social construction of abundance is translated into *flood risk*, partly used to justify the implementation of modern water technology and specific infrastructures intended to protect cities as key sites of progress (e.g., mega-dams). With such a logic, state planning and water agencies define which areas are at higher and lower risk. Measures are chosen to decrease potential flooding contingencies, privileging certain areas over others (e.g., Porter & Demeritt, 2012; Roth & Warner, 2007). When defining these areas, there is usually a correlation between increasing risk and economic assessment: the higher the economic value, the higher the risk (Warner, 2010).

From this perspective, mega-hydraulic projects are at times deployed as the panacea to control floods. These infrastructures are generally located upriver from urban centres and/or rural areas with high levels of capital investments (e.g., Warner, Hoogesteger, & Hidalgo-Bastidas, 2017) and politically powerful interest groups (Marks, 2019; Roth et al., 2018). As shown by Osti (2017), the focus of implementing actions and infrastructure to prevent flood risk is contentious and involves the need to find 'rural spaces to occupy [...] the image of security, and the search for an urban-rural cost-benefit balance' (p. 266). This haggling between urban and rural suggests that - as in the case of scarcity - so-called overabundance is not always merely physical and natural. As a techno-political and discursive policy notion, flooding risk may also become a contingency swayed by profoundly social, economic and political reasons, and power relationships. This also means that, in utilitarian terms, certain territories imagined as less valuable could be sacrifice-able in the name of common well-being (Nixon, 2010), privileging the so-called majority who live in *higher value* areas. Thus, the social and political construction of 'water overabundance' is also a powerful driver transforming policy, institutions, water infrastructure, and everyday people's lives and territories in rural-urban contexts (e.g., Hommes, Boelens, Duarte-Abadía, Hidalgo-Bastidas, & Hoogesteger, 2018). In sum, water overabundance relates to a hydro-political notion that in political-economic practice often becomes technified, universalized and naturalized. What is considered as water-overabundant is a social and a political construction (cf. Alatout, 2009; Erensu, 2013). Through the specific case of Chone, this paper helps one to understand how water-overabundance discourse and management practice are defined by sociopolitical and economic power relationships and how they serve to render invisible rural-urban water inequities.

Therefore, beyond viewing urban or rural separately, the study of the urban-rural dialectic is important, requiring a political ecology focus of urbanization/urban-rural territorialization. The urban-rural or country-city relationship is not one way; urban and rural regions deeply influence each other and are fundamentally interlinked. What we do make explicit is that the linkage between these two spaces often is inequitable and driven by power relationships that have historically positioned urban centres as the referents for development, while rural areas have been relegated as places that can be sacrificed (Boelens, 2015a; Nixon, 2010). In this representation, 'underdeveloped' rural spaces may become 'developed' through adopting (e.g., urban) dominant norms and values (Shah, Liebrand, Vos, Veldwisch, & Boelens, 2018; Hommes et al., 2019, in this issue). Since colonial times, in Ecuador as in other

Andean countries, the countryside usually has been on a tightrope between being labelled as *different* and, at the same time, as *potentially equal* (Boelens, 2015b). It is constructed as different because of its 'backwardness' compared with the city, but with potential to catch up and become equal by adopting and adapting to the models, values, and identities imagined and imposed by those who are in power (cf. Radcliffe & Westwood, 2005; Hommes et al., 2019, in this issue; Torio, Harris, & Angeles, 2019, in this issue). Thus, our understanding of water governance, in any context, goes beyond the idea of humans governing water but captures, in particular, the notion of 'governing people through water, as ways of organizing power and decision-making to bring about environmental control and societal order at once' (Boelens, 2015a, p. 13).

The return of the state: the citizens' revolution – good living and modernity

In 2007, a new government came to power in Ecuador. Its battle cry was to re-establish the nation with a revolution by the citizenry. This revolution would leave behind what then-President Rafael Correa framed as 'the long, woeful neoliberal night'. The overarching goal of his political movement, Patria Altiva i Soberana (PAIS - Proud, Sovereign Nation), was to construct Socialism for Good Living. Guided by this premise wielding a progressive discourse of social justice, equality and sovereignty, the government of the so-called Citizens' Revolution made an array of efforts to strengthen the state's role and presence, which had been dismantled by neoliberalism and its consequent social, political and economic crises since the 1990s. Part of the itinerary for this dawning of a new age was to profoundly modernize the state, recover the torn-down institutions and bring development expressed as Buen Vivir (Good Living) to every corner of the nation. The most visible efforts to achieve this included their alliance with other political forces (indigenous movements, critical scholars, rural people, labour unions, etc.) and citizen forces to construct, in 2008, a new constitution guaranteeing rights, as never before. This new constitution emphasizes the importance of citizens' participation, recognition of pluri-nationality, ample introduction of access to water as a human right and respect for the rights of nature (e.g., Boelens, Hoogesteger, & Baud, 2015; Hidalgo et al., 2017; Radcliffe, 2012).

Although they began with quite progressive, inclusive proposals, over the years this political movement has received criticism even from many groups that initially backed it. This criticism has been based mainly on contradictions between governmental discourse and practice (e.g., Acosta et al., 2013; Gudynas & Acosta, 2010). Most criticism involves the government's inability to include stakeholders who think differently, the criminalization of protests, authoritarianism, lack of independence for branches of the state, de-legitimization and consequent weakening of autonomous societal organization (Acosta et al., 2013). Part of the criticism included the government's uses of the concept of *Buen Vivir* – social organizations and other critical social actors (e.g., indigenous movement) accused the government of having captured the concept to make it instrumental to suit its own purposes, including particular economic and political interests (Van Teijlingen & Hogenboom, 2016). While, on the one hand, government institutions have embraced a combination of discourses of progress, well-being and efficiency, presented as the scientific-bureaucratic truth, on the other hand,

dissident voices inside and outside the state have been demanding recognition for alternative modes of thinking and acting regarding societal development. This made the government disqualify opponents in a profound manner: portraying them as against development, backward and even pre-modern. This tension and criticism surfaces particularly in state interventions that conveniently ignore and infringe citizens' rights that are consecrated in its own constitution (Radcliffe, 2012; Valladares & Boelens, 2017; Van Teijlingen, 2016).

One core thrust of the government's political project was to change the production and energy matrix, for which technocratic water management has played a leading role (Hidalgo-Bastidas, Boelens, & Isch, 2018; Hoogesteger, Boelens, & Baud, 2016). As part of the new institutional arrangements to promote this approach, and for managing water and other resources defined as strategic, the Ministry of Strategic Sectors (MICSE) was created, with the National Water Secretariat (SENAGUA) and the Strategic Ecuador Public Enterprise (EEEP). The MICSE governs policy to manage strategic resources, the SENAGUA issues national policy on water management and builds major water projects, and the EEEP provides economic compensation to communities affected by construction and implementation of strategic national projects, with funding from petroleum and mining revenues. Despite the progressive, participatory discourse, megaproject design, construction and implementation have faced resistance from affected local communities. Surprisingly for a government with these leanings, such projects have been tinged with state violence, forced evictions, scanty participation in decision-making, ignored prior consultation and questionable environmental impact studies.

In this context, the state's dominant stereotype of *Buen Vivir* delegitimizes any other forms of development and territoriality, especially those opposed to the works and actions of the official political project (Van Teijlingen, 2016). As then-President Correa put it in his speech, inaugurating a dam built by his government:

Special greetings for the families affected by the reservoir, who have collaborated patriotically, knowing that this was for the common well-being. They made a sacrifice [...], they made an effort, and I think that their efforts have been fairly compensated; they have been resettled, and now they have a decent home, made of cement. (presidential speech, Chone, 27 June 2013)

He implicitly suggests that, thanks to people's alignment with the official development project, they have a *civilized* home, unlike the one they used to have, which was not decent. However, later in that same speech, he complains about the inhabitants of Patricia Pilar, a community that opposed the dam construction somewhere else (Hidalgo-Bastidas & Boelens, 2019):

Certain groups were opposed [...] and we redesigned the project. [...] The reservoir is a thousand hectares; the original was to be three thousand hectares, but that would have flooded Patricia Pilar. Patricia Pilar has about 2.000 families, we the Citizens' Revolution could have given them extraordinary houses – like the families who were relocated now – to make a new town, with basic utilities, planning, etc. [...], but they showed a lack of vision, opposition to any change, defending their own turf rather than seeing the common good – which will make the world worse rather than better.

This way, people and local territories who aligned with the official project's models and guidelines were portrayed as *radically different*, backward rebels, while they could have become *potentially equal*, belonging to the so-called majority.

The city will not be flooded anymore! the Chone multipurpose dam and urban-rural water paradoxes

The city of Chone is located on the Ecuadorian coast and is the capital of the canton of the same name.¹ This medium-sized city occupies 0.5% of the canton's area, with nearly 52,000 inhabitants. Contrary to what the government discourse depicted, most of the population is scattered throughout the rural areas which account for over 99% of the canton's area (Figure 2). Further, about 70% of the population depends on agriculture or livestock, consolidating the rural area as the canton's and city's most important socioeconomic base of subsistence.

One particular characteristic of this city is that it is located at the bottom of the valley, along the banks of the Chone River (Figure 1). This means that, during each rainy season (from December to May), the city floods when the river and its main tributaries – the Grande (Río Grande), Garrapata and Mosquito rivers – overflow. For this reason, since the early 1980s, infrastructure alternatives have been planned to control flooding of the urban zone. Along with a drainage canal, a mega-dam on the Grande was built as part of the multipurpose project inaugurated by ex-President

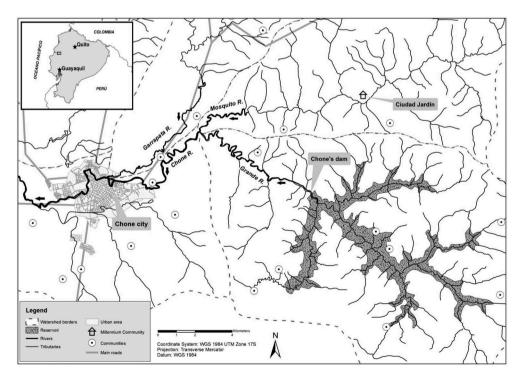


Figure 2. Comparison between rural and urban in Chone's canton. Source: authors' elaboration.

Correa in November 2015 (Figure 1). The main infrastructure of the Chone multipurpose system is the dam, 59.5 m high, over the Río Grande.

The project was promoted for its multiple purposes apart from flood control, including provision of irrigation for lower zones (around 2200 ha) as well as provision of domestic water supply for the city.

Chone dam's justification: emphasis on urban risk and development

Despite the importance of rural livelihoods, from the very first discussions about the project, the city of Chone was depicted as a privileged space vis-à-vis the rural areas. Part of this positioning involved reinforcing the discourse about the necessity to address urban flood risk and development centring on the city's image. While flooding risk was the main justification for the dam project, the development discourse played a key role, above all in creating an image of *the other*, of rural life as less developed or backward (cf. Boelens, 2015b; Radcliffe & Westwood, 2005). Neglecting the rural problems of water overabundance, for the first time in November 1979, the largest-circulation Ecuadorian newspaper presented flooding of the city as the main issue:

Requests from Chone canton will be answered: An expanded meeting will be held in the CRM Manabí Rehabilitation Center [regional entity in charge of planning and managing the Province's water resources up to 2009]. The Governor of the province stated that deviating the Chone River was the most important project because, if the solution of this issue is delayed, this city could be flooded again next rainy season. (*El Comercio*, 26 November 1979)

This urgency led to almost three decades of studies to safeguard the city's interests. In 1983, the first feasibility studies recommended building a regulating dam on the Río Grande, an irrigation system and a channel for the Chone River around the city. These early studies provide the basis for the final designs in 1986. For economic reasons and lack of political support, these studies were not implemented immediately. The project's definitive reactivation was in February 2008 after another heavy rainy season flooded much of the Chone River valley, including the city. Ex-President Correa gave a major push to this project: 'Here, the final solution is the multi-purpose Chone project, which would be justified if only for flood control [...], we are going to do this project!' (press conference, 24 February 2008).

It was so urgent to control flooding that the government waged a major propaganda campaign to promote the project. Gigantograph signage all around town reminded everyone of the recent histories of the city's flooding. Complaints and arguments by Río Grande communities were indirectly or tacitly disregarded. Rumours and gossip were all the information available to people living in the rural area where the dam site would be implemented. Farmers, however, presented a calculation showing that permanently flooding their farms would cost the city and province losses of nearly US\$14 million. However, the farmers' calculation was ignored, 'because it was not prepared by technicians and engineers, as were the official calculations', according to a technician from the SENAGUA (personal communication, 1 September 2015).

The prioritization of the city over rural areas as a main justification for the project was reflected in the environmental impact assessment (EIA) and the social participation

process, which, furthermore, did not follow the established procedures. As an affected farmer put it, 'their point, SENAGUA's, is to make the reservoir here, and then see where they can relocate us [...] they have no plan [...]' (*RTU Noticias*, 16 August 2011; www.youtube.com/watch?v=Cg2kpmFHrF8). This is ratified by an internal report by the SENAGUA (2012) stating that the environmental licensing and 'social participation' took place almost five months *after* signing the project construction contract.

Interestingly, the involved technicians were not at all blind to the rural communities' special ties to the river. A technician from the project's social and environmental area, for instance, acknowledged the territorial roots and incommensurable values of the water–society relationship by stating:

I always say that this is a very complex issue to understand. Only someone who has lived on a river understands the river. We people from Chone are attached to our things, to our mountains, to our farms, to our rivers [...] you live on a river, where you bath, where you catch crayfish in the rainy season, where you water your horse, where you have been all your life, next to the river – and now they take the river away from you – that's very hard. These things have no price. (personal communication, 1 September 2015)

Yet, at the same time, he recognized that these factors were not taken into account in the decision-making process: 'what we didn't achieve during the social participation process was to agree on the dam construction by consensus, because there was nothing to agree upon – it was going to happen anyway'. This project justification went hand in hand with the subordination of rural interests, particularly in the zone affected by the dam.

The multipurpose project was mostly supported by Chone's urban population. A SENAGUA advisor acknowledged: 'the urban population supported the project whole-heartedly. In the rural zone, in Río Grande, they disagreed' (personal communication, 2 August 2015). Along the highway leading to the project zone were signs: 'Here we are building Chone's dream. Change is underway, and nothing can stop it.' With this backing, the construction contract was signed in July 2010 in the presence of national and local government authorities. At this event, inhabitants of Río Grande communities occupied the surroundings of the site and protested the project.

Río Grande communities are 'different' but 'potentially equal'

Wanting to transform society through public policy and through efficiency and effectiveness is not possible, because true transformation is within human beings: we have to decode pre-modern patterns and encode new, modern patterns in order to construct Good Living. (ex-secretary of the National Water Secretariat, 21 July 2016)

As the former water secretary said, constructing development or *Buen Vivir* as a crosscutting government goal was frequently based on an antagonistic duality: *pre-modern* versus *modern*. In practice, this is evident in portraying the city of Chone as a privileged space that must be protected from flooding, while the image of rural Río Grande region was (consciously or unconsciously) subordinated as the 'other', backward and even dangerous. As the SENAGUA technician put it, 'They are dangerous people. Especially my colleague in charge of expropriations has had to deal with people who have acted like criminals and threatened him.' Such characterization of rural reality contributed to legitimize the project. The latter would be replete of benefits for the dam-affected farmers, who would be enabled to 'improve'. That is, they could become developed 'just like folks in the city', and were therefore *potentially equal*.

They have already lived in isolation for all of their lives. Of course, you can't tell them this to their faces, because they would take it as an offense, because they would think that we technicians look down on them. [...] We have been generous enough to intervene. The project actually helped them improve their lives. They have always lived badly – you could say that they have been backward communities. (personal communication, SENAGUA's Socio-Environmental Department Manager, 1 September, 2015)

As mentioned, the dam implementation was not free of protests by Río Grande communities. Communities began organizing in 2009, based on an earlier organization devoted to providing order and local security and preventing the loss of livestock assets: the Central Committee of Rural Communities of Río Grande (CCRG). Most members were small and medium-scale farmers in the Río Grande watershed. This initial organization triggered the formation of the Defense Committee of Río Grande.

The resistance also included other stakeholders who were not CCRG members: critical scholars, non-governmental organizations (NGOs), local and national politicians, rural people affected by other dams, and critical citizens from the city of Chone. The resistance mobilized in several ways to make their complaints heard: judicial lawsuits, blocking the streets in the cities of Chone and Quito (the capital), symbolic demonstrations rejecting the dam, articles in the press, social networks and preventing outsiders from entering the Río Grande zone. All these activities postponed the beginning of the construction works and physically prevented the construction company from entering the zone. As the project moved forward, protests grew stronger, which made the dam construction begin over a year late. However, resistance was gradually demobilized by a range of government actions.

For example, as the opposition movement refused to abandon the site where they were gathering (the farm of one of the leaders, located precisely where the dam was ultimately built), the SENAGUA declared several farms as properties of public use. On that basis, a judge in Chone ordered the police to provide support and backing for immediate, violent occupation of the site where the resistance had gathered. The police report, which was part of an internal SENAGUA document, narrates:

With the support of police personnel [...] we proceeded to enter that property for the immediate occupation ordered by the responsible authority. We were greater in number than the opponents, so we were able to dissuade them and get them to abandon the land, through progressive use of force. (SENAGUA, 2012, p. 267)

Within hours after the eviction, while the building company's machinery entered the zone to demolish homes and clear vegetation, in Quito the use of force was legitimized and the state's sovereign power was ratified by President Correa, by signing Decree No. 914, which declared the project zone an area of national security. Therefore, the police and army kept guard over the area to guarantee the project's implementation. The coercive strategy worked, according to SENAGUA (2012, p. 247): 'We must highlight the results achieved by the police entrance into the dam construction zone [...] which got the owners from the Río Grande zone who were opposing the dam to join in supporting it.'

Driven by the imperative to build the dam, the government used an antagonistic duality to justify implementing various coercive and non-coercive strategies to disperse the opposition. On the one hand, those against the dam were portrayed as radically opposed to progress. The then Vice-President even labelled them 'people-delayers' and 'political riffraff', meaning the opposite of development and Good Living. Or, as the former secretary of the SENAGUA said: 'It is a clash between change and traditions. [...] The rural folk didn't understand the future, and we wanted to show them the future. They are defending pre-modern ways of life' (personal communication, 21 July 2016). In that narrative, the opposition was defending almost irrationally different ways of life from the ways desired or prescribed by the government as *adequate*. On the other hand, several offers of compensation were tendered to the farmers in the resistance, based on the idea of urbanizing rural life (for a comparative 'commensuration/equalization' process, see Hoogendam & Boelens, 2019). In the government's view, rural communities needed to become modern and dignified, and the right path towards it was getting as close as possible to an urban lifestyle. An important part of this proposal included building the state's so-called 'model institutions': the 'millennium community' called Garden City (Ciudad Jardín) and a 'millennium school'. A SENAGUA advisor put it this way when referring to the resettlement programme: 'This was a great achievement. Building the multi-purpose project made it possible to propose a model city like the one that was built.² That is, opponents who accepted the government's rules, values and ideology regarding what developed means, in this case urban, found the doors open to the opportunity to be a little more equal.

Governing society through water: Ecuador Estratégico (EP) and its urban-rural dream

The compensations implemented by the government took different shapes and had two purposes: first, to disperse the resistance, and second, to promote development for the people affected by the dam. The government-installed institute Ecuador Estratégico (EP) played a major role in both aims. It was created in 2011 as an institutional proposal to materialize the *Buen Vivir* discourse by investing in schools, millennium communities and paved roads in zones affected by major projects considered strategic.

In the conflict created by the dam in Río Grande, the millennium community and school were crucial parts of a radical intervention in rural communities: the project would help the backward (different) to become developed (equal). With this intention, the millennium community was planned and built to set up a civilized-urban lifestyle, targeting peasants on the properties affected. During the millennium community's planning stage, technicians approached farmers opposing the project on an individual basis to offer them houses on the condition that they persuade more people to desist from protesting. This strategy was effective: several farmers accepted the proposal. In the words of a former opposition leader and one of the first leaders of the millennium community:

We were protesting [...] but one night an engineer from SENAGUA called me and said: 'you know, the President is going to build you a new little town. On such and such a date, bring all the people to sign, to give them these houses.' Then I went along, and I switched from the opposition to being in the government's favor. We gave in. We were blind, and others in the opposition, who now live in these new houses, were, too. (personal communication, 10 December, 2014) Interestingly, during the early stages of planning compensatory measures, projectors considered creating three new resettlements right near the affected area on the shores of the lake reservoir (Figure 3). However, one aspect that largely guided final decisions about locating the resettlement village for affected families was the idea that the projected micro-watershed (where the dam, the reservoir and its shores were located) should remain an empty or empty-able place, mouldable according to the needs of optimal technical design without social interferences.³

Technicians saw the construction project as an opportunity to bring *order* to that previously disorganized territory. As one of the technicians responsible for the project's socio-environmental management put it:

It was ideal to have the area empty of people, [...] we decided to locate the resettlement outside of the micro-watershed to avoid affecting the reservoir's water quality, because of waste or basically any environmental problems. President Correa wanted this to be a model resettlement for Latin America linked with the mega-project. (personal communication, 1 September, 2015)

Thus, the millennium community was built in the Mosquito River basin, outside the Río Grande micro-watershed (Figure 1). The multipurpose project was not only a way to control and organize nature but also a way to put society in order.

Once the community had been built, the EEEP established and publicized new rules and norms for living in this newly configured biophysical space. Ignoring local customs, the community was constructed as an example of how *Buen Vivir* is an urban lifestyle. In the middle of an entirely rural province, as an enclave, the community – like any urban neighbourhood – is organized into city blocks, with traffic signs and speed bumps every

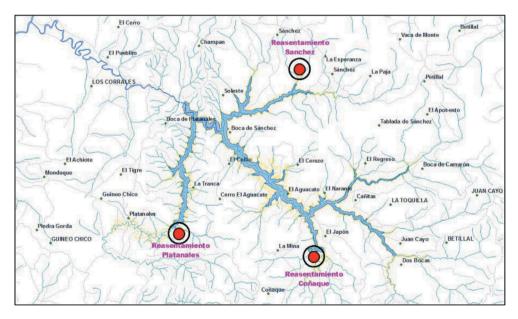


Figure 3. Original resettlement plan with three different locations around the reservoir area. Source: The National Water Secretariat's (SENAGUA) environmental impact assessment (EIA) social participation material. 10 m. It also has community spaces: park, market, church, computing centre. The new rules for living together in the community include: organizing by blocks to maintain the common areas, not having parties later than midnight, not keeping poultry or hogs, and not leaving the house empty for longer than two weeks. If rules are not kept, the EEEP would analyze the possibility of giving the house to another family (Figures 4 and 5).

No house has any extra land to grow plants or raise animals; instead, the government purchased two farms to promote collective work by the resettled people. This, however, was based on a romanticized-socialist collectivization utopia and went against the everyday individual farm-work practices that these farmers had pursued for centuries (Ferrín-Schettini, 1986). The government envisioned the implementation of an urban life style for the inhabitants of Ciudad Jardín, simultaneously assigning the people the position of farmers, albeit under government-dictated conditions.

Despite the government's efforts, implementing coexistence rules was not enough to adapt these rural people to a more urban, rational lifestyle. As part of the process, the EEEP developed a board game to teach the resettled people the right way - according to the official political project - to achieve happiness, or Buen Vivir. Community promoters taught the community this game in several training sessions and visits to resettled people from other strategic projects (agricultural, inter-basin water transfer, dams, hydropower) constructed by the government. The game has three versions, one for each strategic sector: mining, hydrocarbons and hydropower megaprojects. The logic of the game is similar to the popular board game Monopoly. It includes drawings and information leaflets in simple, direct language, with dice and a path to follow, full of boxes that reward or punish on the basis of players' choices. As long as the player reaches boxes corresponding to the Citizens' Revolution government flagship projects, the pathway to happiness is guaranteed. A fundamental part of the game, as players advance on the board, is to answer a series of questions that openly promote the government's political project. Therefore, one leaflet asks: 'In Ecuador, do petroleum activities protect water resources?' The answer is 'Yes'. Another asks, 'What is the money from strategic resources used for?' The categorical answer is: 'To generate development for the country.' Perhaps one of the most suggestive questions is: 'What does petroleum mean to Ecuador?' The only answer is: 'Development, prosperity and well-being.' Through this game, the government's norms and truths are presented to community residents.



Figures 4 and 5. Ciudad Jardín millennium community. Photos: Authors.

A few months after moving to the community, especially women were worried about not having any work or any piece of land near their home, and they began raising chickens and a few hogs, disobeying the rules. Some women began setting up organic food gardens in their own homes; others began cultivating illegally on land outside the community limits. This gradual disobedience of the rules irked community leaders, who said: 'People don't follow the rules because the problem is that they are not used to living well' (personal communication, 5 November 2015). However, they had difficulties not only with living together in the community but also with working on the farms the government had purchased for them. Although the Ministry of Agriculture created an irrigators committee and trained farmers about the experience of community projects implemented in other regions of the country, this working modality was not welcomed and met with resistance (cf. Scott's, 1985, everyday resistance). A leader of the irrigators committee admitted about work on one of the farms:

When the corn was fumigated, I saw that people did not collaborate [...] they are lazy and don't understand. They didn't mix the chemical with the water in the pump, they just filled it with water halfway and pretended to spray, but they stole the liquid or the fertilizer, sneaking it out in the disposable containers that lunch came in. (personal communication, 5 November, 2015)

This behaviour could be explained partly because many resettled people still had working relationships with their previous employers or neighbours. Some still had some land where they used to live. Many preferred to ride a mule for over an hour to the expropriated land (not flooded yet) to continue working there, instead of participating in collective work on the new farms.

Through all these changes, the norms and discourses for the dam have reconfigured not only the landscape and its ecology but also the social, agro-productive and working relationships of local communities. The governor of the province of Manabí, in her inaugural speech, encapsulated the meaning of this mega-project:

This project has a soul and a body. The body is this majestic dam, but the soul is being planted in the consciousness, in the soul of the purest people: in the souls of our girls and boys. This project is not only infrastructure. (24 November, 2015)

However, over 1000 ha were permanently flooded in the Río Grande zone, sacrificing rural communities and families' homesteads. Beyond the environmental impact, nearly 100 rural families have not been resettled, their lands, livelihoods and histories have been flooded by the water governance/dam design decisions – many being left in deeply precarious conditions. Several face difficulties at reframing their livelihoods and accessing their territory because of the water lilies building up on the reservoir's surface, which obstructs their ways of working in different territorial sites and significantly increases transport costs. Further, today there is an evident social division even among those who once were united and belong to the resistance. The mega-project was presented as a technical solution to diminish floods risk, while its soul promoted, legitimized and justified an official sociopolitical project contrasting rural and urban life,⁴ and governance of the abundance of water.

Discussion and conclusions

We have shown in this paper how the discourse on water abundance is used to promote mega-dams as technical, apolitical remedies, which, however, heighten relationships of inequity between urban and rural zones. We have also shown how the solution chosen in Chone follows a national policy of believing in modern living as a stepping stone toward development, or Buen Vivir. The ways in which the Citizen's Revolution government uses the concept of Buen Vivir is highly controversial in this case. Regardless of its origins, the government has appropriated the concept, endowing it with the government's own notions of development and underdevelopment (Van Teijlingen & Hogenboom, 2016). It has been used as to legitimize the government's political water projects and its 'postcolonial conditions of development' (Radcliffe, 2012, p. 240). Such modernizing policy about life and living, and its programmes and projects in the water sector, have been backed by the comeback of a wolf state in a sheep's clothing. Its reforms, proclaimed under the banners of participation and inclusion, have been thoroughly infused with a hierarchical ranking of knowledge (modern versus pre-modern), forms of governance (good versus traditional), ideologies (Socialism for Good Living), territories (development versus sacrifice), persons (majorities versus sacrificed minorities) and geographical spaces (urban versus rural). Under these circumstances, the city of Chone bolstered its image as a development territory, while Río Grande and its rural communities were labelled backward and sacrifice-able. This has meant that, by building the dam, the city is now partially protected from flooding, because the Río Grande's water has been controlled. However, much of the city and surrounding areas continue to flood when other tributaries, such as the Garrapata, overflow. Soon, this 'technical deficiency' may be used to justify the construction of other mega-infrastructures, as happens in other Ecuadorian hydrosocial territories.⁵ Meeting initial objectives creates the need to plan and implement more projects following on from the first one, justified by the promise of greater efficiency.

Mega-dams such as Chone's are commonly justified under the utilitarian premise: *the well-being of the majority*, but it is the (rural) majorities who actually are most affected by these policies. The social and political construction of 'majorities' and 'minorities' follows the ways in which higher political–economic value is given to urban zones or elite properties. These areas have priority to be protected from flooding risks – despite the fundamental socioeconomic importance of the rural areas for *most* people's livelihoods. According to the distribution of inhabitants among rural and urban areas, the 'majorities' discourse that the government used as a justification to build the dam was not totally accurate. This case shows that the majority actually live in rural areas. Therefore, the utilitarian myth obeys a hierarchical ranking to suit the interests of those in power. As we have shown, this becomes manifested in how the notion of water overabundance is defined and informed by economic and political powers rather than just by biophysical and natural conditions or any objective technical considerations.

We have also analyzed how this hierarchical construction not only justifies construction of megaprojects such as Chone's but also – and structurally – (re)produces profound damage to and transformations of rural societies. We go beyond an analysis of majorities versus minorities. It reveals a more structural aspect of utilitarianism, which is labelling people, territories, ideologies and ways of life as radically different, but also potentially equal whenever they obey power and behave according to as modern defined norms and ways of life. This, as we have shown in Chone, subjects the so-called minorities to transformation. Consequently, by following the norms, values, ideologies and lifestyles pre-designated by those in power, those minorities – for instance, in millennium communities – can become *just as equal*. That is, if they would follow the right rules, rural people can be just as developed, modern and happy as urban people. As an affected woman expressed: 'We are just happy here, now we live like in a gated community of Guayaquil. Why shouldn't I be happy?'

The case of water overabundance contributes to an urban-rural political ecology conceptualization. It emphasizes that the linkage between rural and urban is not only aggravated by spreading the city limits out into the countryside, absorbing rural space, resources and inhabitants. Complementarily, this encroachment is fed by cultural politics, the clashes between different, opposing categorizations of superiority and inferiority, historically granted to urban and rural settings.

Understanding the social construction and legitimizing discourses of the black boxes *water scarcity* and *water abundance* opens our eyes to scrutinize issues of inequity in water governance. In our case, the water-abundance discourse, and flood control for cities, encloses and reproduces particular forms of water injustices. It especially shows, by examining permanently drowned waterscapes, how rural waters are not simply materially transformed but also socially reordered and controlled.

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Notes

- 1. Ecuador's political-administrative division has four nested subnational levels: province, canton, parish and neighbourhoods (urban) or hamlets and communities (rural).
- 2. On the governmentality politics of these modern model villages ('Millennium Communities and Schools') in Ecuador, see Valladares and Boelens (2017).
- 3. According to SENAGUA, 181 families were directly affected by the dam construction; however, the millennium community has capacity for only 81. That is, nearly 55% of affected families have not been relocated.
- 4. See Özok-Gündoğan (2005) for a similar strategy implemented in Turkey.
- 5. We show such dynamic in the case of the Daule-Peripa Dam, which was constructed in the early 1980s in coastal Ecuador (Hidalgo-Bastidas et al., 2018).

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References

- Acosta, A., Álvarez-Gonzáles, F., Ávila-Santamaría, R., Castro-Rieria, C., Cuvi, J., Dávalos, P., De la Torre, C., ... Villavicencio, A. (2013). *El correísmo al desnudo (Segunda* ed.). Quito: Montecristi Vive.
- Aguilera-Klink, F., Pérez-Moriana, E., & Sánchez-García, J. (2000). The social construction of scarcity. The case of water in Tenerife (Canary Islands). *Ecological Economics*, 34(2), 233–245. doi:10.1016/S0921-8009(00)00160-9
- Alatout, S. (2009). Bringing abundance into environmental politics: Constructing a Zionist network of water abundance, immigration, and colonization. *Social Studies of Science*, 39(3), 363–394. doi:10.1177/0306312708101979
- Baghel, R. (2014). *River control in India: Spatial, governmental and subjective dimensions.* Dordrecht: Springer Science & Business Media.
- Bakker, K. (2010). *Privatizing water: Governance failure and the world's urban water crisis*. New York: Cornell University Press.
- Banister, J. M., & Widdifield, S. G. (2014). The debut of 'modern water' in early 20th century Mexico City: The Xochimilco potable waterworks. *Journal of Historical Geography*, 46, 36–52. doi:10.1016/j.jhg.2014.09.005
- Baviskar, A. (2007). Waterscapes. The cultural politics of a natural resource. Delhi: Permanent Black.
- Boelens, R. (2015a). *Water justice in Latin America. The politics of difference, equality, and indifference.* Amsterdam: Center for Latin American Research and Documentation (CEDLA)/University of Amsterdam.
- Boelens, R. (2015b). Water, power and identity: The Cultural politics of water in the Andes. Washington, DC, and London: Earthscan and Routledge.
- Boelens, R., Hoogesteger, J., & Baud, M. (2015). Water reform governmentality in Ecuador: Neoliberalism, centralization and the restraining of polycentric authority and community rulemaking. *Geoforum*, 64, 281–291. doi:10.1016/j.geoforum.2013.07.005
- Duarte-Abadía, B., & Boelens, R. (2016). Disputes over territorial boundaries and diverging valuation languages: The Santurban hydrosocial highlands territory in Colombia. *Water International*, 41(1), 15–36. doi:10.1080/02508060.2016.1117271
- Duarte-Abadía, B., & Boelens, R. (2019). Colonizing rural waters. The politics of hydro-territorial transformation in the Guadalhorce Valley, Málaga, Spain. Special Issue 'Rural-urban water struggles'. *Water International*, 44(2), 148–168. doi:10.1080/02508060.2019.1578080
- Erensu, S. (2013). Abundance and scarcity amidst the crisis of 'modern water': The changing water-energy nexus in Turkey. In L. Harris, J. Goldin, & C. Sneddon (Eds.), *Contemporary water governance in the Global South: Scarcity, marketization and participation* (pp. 61–78). New York: Routledge.
- Ferrín-Schettini, R. (1986). Economías campesinas, estructura agraria y formas de acumulación: El caso de Manabí a partir de la Revolución Liberal. Quito: PUCE-CONUEP.
- Goldman, M. (2007). How 'Water for All!' policy became hegemonic: The power of the World Bank and its transnational policy networks. *Geoforum*, *38*, 786–800. doi:10.1016/j. geoforum.2005.10.008

- Gudynas, E., & Acosta, A. (2010). Si eres tan progresista? Por qué destruyes la naturaleza? Neoextractivismo, izquierda y alternativas. *Ecuador Debate*, 79(5), 61–82.
- Hidalgo, J. P., Boelens, R., & Vos, J. (2017). De-colonizing water. Dispossession, water insecurity, and Indigenous claims for resources, authority, and territory. *Water History*, *9*, 67–85. doi:10.1007/s12685-016-0186-6
- Hidalgo-Bastidas, J. P., & Boelens, R. (2019). Hydraulic order and the politics of the governed. The Baba Dam in coastal Ecuador. *Water*, *11*(3), 409; doi:10.3390/w11030409
- Hidalgo-Bastidas, J. P., Boelens, R., & Isch, E. (2018). Hydro-territorial configuration and confrontation. The Daule-Peripa multi-purpose hydraulic scheme in coastal Ecuador. *Latin American Research Review*, 53(3), 517–534. doi:10.25222/larr.362
- Hommes, L., & Boelens, R. (2017). Urbanizing rural waters: Rural-urban water transfers and the reconfiguration of hydrosocial territories in Lima. *Political Geography*, 57, 71–80. doi:10.1016/ j.polgeo.2016.12.002
- Hommes, L., Boelens, R., Duarte-Abadía, B., Hidalgo-Bastidas, J. P., & Hoogesteger, J. (2018). Reconfiguration of hydrosocial territories and struggles for water justice. In R. Boelens, T. Perreault, & J. Vos (Eds.), *Water justice* (pp. 151–168). Cambridge, UK: Cambridge University Press. doi:10.1017/9781316831847.010
- Hommes, L., Boelens, R., Harris, L., & Veldwisch, G. J. (2019). Rural–urban water struggles: Urbanizing hydrosocial territories and evolving connections, discourses and identities. *Water International*, 44(2), 81–94. doi:10.1080/02508060.2019.1583311
- Hoogendam, P., & Boelens, R. (2019). Dams and Damages. Conflicting epistemological frameworks and interests concerning "compensation" for the Misicuni project's socio-environmental impacts in Cochabamba, Bolivia. *Water*, 11(3), 408. doi:10.3390/w11030408
- Hoogesteger, J., Boelens, R., & Baud, M. (2016). Territorial pluralism: Water users' multi-scalar struggles against state ordering in Ecuador's highlands. *Water International*, 41(1), 91–106. doi:10.1080/02508060.2016.1130910
- Ioris, A. (2016). Water scarcity and the exclusionary city: The struggle for water justice in Lima, Peru. *Water International*, 41(1), 125–139. doi:10.1080/02508060.2016.1124515
- Johnston, B. R. (2018). Large-scale dam development and counter movements: Water justice struggles around Guatemala's Chixoy Dam. In R. Boelens, T. Perreault, & J. Vos (Eds.), Water justice (pp. 169–186). Cambridge: Cambridge University Press.
- Linton, J., & Budds, J. (2014). The hydrosocial cycle: Defining and mobilizing a relationaldialectical approach to water. *Geoforum*, 57, 170–180. doi:10.1016/j.geoforum.2013.10.008
- Lynch, B. (2013). River of contention: Scarcity discourse and water competition in Highland Peru. *Georgia Journal of International and Comparative Law*, 42, 115.
- Lynch, B. (2019). What Hirschman's hiding hand hid in San Lorenzo and Chixoy. *Water*, 11(3), 415. doi:10.3390/w11030415
- Marks, D. (2019). Assembling the 2011 Thailand floods: Protecting farmers and inundating high-value industrial estates in a fragmented hydro-social territory. *Political Geography*, 68, 66–76. doi:10.1016/j.polgeo.2018.10.002
- McCully, P. (2001). Silenced rivers: The ecology and politics of large dams. Michigan: Zed Books.
- Mehta, L. (2006). Whose scarcity? Whose property? The case of water in western India. Land Use Policy, 24(4), 654–663.
- Mena-Vásconez, P., Boelens, R., & Vos, J. (2016). Food or flowers? Contested transformations of community food security and water use priorities under new legal and market regimes in Ecuador's highlands. *Journal of Rural Studies*, 44, 227–238. doi:10.1016/j.jrurstud.2016.02.011
- Molle, F., & Berkoff, J. (2006). Cities versus agriculture: Revisiting intersectoral water transfers, potential gains and conflicts. Comprehensive Assessment Research Report 10. Colombo: IWMI.
- Nixon, R. (2010). Unimagined communities: Developmental refugees, megadams and monumental modernity. *New Formations*, 69(1), 62–80. doi:10.3898/NEWF.69.03.2010
- Osti, G. (2017). The anti-flood detention basin projects in northern Italy. New wine in old bottles? *Water Alternatives*, 10(2), 265–282.
- Özok-Gündoğan, N. (2005). 'Social development' as a governmental strategy in the Southeastern Anatolia project. New Perspectives on Turkey, 32, 93–111.

- Porter, J., & Demeritt, D. (2012). Flood-risk management, mapping, and planning: The institutional politics of decision support in England. Environment and Planning, 44(10), 2359–2378. doi:10.1068/a44660
- Radcliffe, S. (2012). Development for a postneoliberal era? Sumak Kawsay, living well and limits to decolonization in Ecuador. *Geoforum*, 43, 240–249. doi:10.1016/j.geoforum.2011.09.003
- Radcliffe, S., & Westwood, S. (2005). *Remaking the nation: Identity and politics in Latin America*. London and New York: Taylor & Francis.
- Riaz, K. (2002). Tackling the issue of rural-urban water transfers in the Ta'iz region, Yemen. Natural Resources Forum, 26(2002), 89-100. doi:10.1111/1477-8947.00010
- Roa-García, M. C. (2014). Equity, efficiency and sustainability in water allocation in the Andes: Trade-offs in a full world. *Water Alternatives*, 7(2), 298–319.
- Romano, S. T. (2017). Building capacities for sustainable water governance at the grassroots: 'Organic empowerment' and its policy implications in Nicaragua. *Society & Natural Resources*, 30(4), 471–487. doi:10.1080/08941920.2016.1273413
- Roth, D., Khan, M. S. A., Jahan, I., Rahman, R., Narain, V., Singh, A. K., [...] Yakami, S. (2018). Climates of urbanization: Local experiences of water security, conflict and cooperation in periurban South Asia. *Climate Policy*, 1–16. doi:10.1080/14693062.2018.1530967
- Roth, D., & Warner, J. (2007). Flood risk, uncertainty and changing river protection policy in the Netherlands: The case of 'calamity polders'. *Tijdschrift voor economische en sociale geografie*, 98(4), 519–525.
- Scott, J. C. (1985). Weapons of the weak : Everyday forms of peasant resistance. New Haven London: Yale University Press.
- SENAGUA. (2012). Informe detallado de los puntos solicitados por la procuraduría general del estado para la defensa del Estado ecuatoriano ante la CIDH. Quito: SENAGUA.
- Shah, E., Liebrand, J. W., Vos, J., Veldwisch, G. J., & Boelens, R. (2018). The UN water development report 2016 'Water and Jobs': A critical review. *Development and Change*, 49 (2), 678–691. doi:10.1111/dech.12395
- Swyngedouw, E. (1995). The contradictions of urban water provision: A study of Guayaquil, Ecuador. *Third World Planning Review*, 17, 4.
- Swyngedouw, E. (2004). Social power and the urbanization of water: Flows of power. Oxford: Oxford University Press.
- Torio, P., Harris, L., & Angeles, L. (2019). The rural-urban equity nexus of Metro Manila's water system. *Water International*, 44(2), 115-128. doi:10.1080/02508060.2019.1560559
- Valladares, C., & Boelens, R. (2017). Extractivism and the rights of nature: Governmentality, 'convenient communities' and epistemic pacts in Ecuador. *Environmental Politics*, 26(6), 1015–1034. doi:10.1080/09644016.2017.1338384
- Van Teijlingen, K. (2016). The 'will to improve' at the mining frontier: Neo-extractivism, development and governmentality in the Ecuadorian Amazon. *The Extractive Industries and Society*, 3(4), 902–911. doi:10.1016/j.exis.2016.10.009
- Van Teijlingen, K., & Hogenboom, B. (2016). Debating alternative development at the mining frontier: Buen Vivir and the conflict around El Mirador mine in Ecuador. *Journal of Developing Societies*, 32(4), 382–420. doi:10.1177/0169796X16667190

Warner, J. (2010). Flood planning: The politics of water security. London: I. B. Tauris.

Warner, J., Hoogesteger, J., & Hidalgo-Bastidas, J. P. (2017). Old wine in new bottles: The adaptive capacity of the hydraulic mission in Ecuador. *Water Alternatives*, 10(2), 322–340.