



Upsetting the apple cart? Export fruit production, water pollution and social unrest in the Elgin Valley, South Africa

Matthijs Wessels, Gert Jan Veldwisch, Katarzyna Kujawa & Brian Delcarme

To cite this article: Matthijs Wessels, Gert Jan Veldwisch, Katarzyna Kujawa & Brian Delcarme (2019) Upsetting the apple cart? Export fruit production, water pollution and social unrest in the Elgin Valley, South Africa, *Water International*, 44:2, 188-205, DOI: [10.1080/02508060.2019.1586092](https://doi.org/10.1080/02508060.2019.1586092)

To link to this article: <https://doi.org/10.1080/02508060.2019.1586092>



© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 15 Apr 2019.



[Submit your article to this journal](#)



Article views: 1168



[View related articles](#)



[View Crossmark data](#)



Citing articles: 3 [View citing articles](#)

Upsetting the apple cart? Export fruit production, water pollution and social unrest in the Elgin Valley, South Africa

Matthijs Wessels^a, Gert Jan Veldwisch^a, Katarzyna Kujawa^b and Brian Delcarme^c

^aWater Resources Management Group, Wageningen University and Research, Wageningen, The Netherlands; ^bEnvironmental Technology Group, Wageningen University and Research, Wageningen, The Netherlands; ^cCentre for Water and Sanitation Research, Cape Town, South Africa

ABSTRACT

This article explores the encounter between two contrasting visions of how the hydrosocial territory of the Elgin Valley of South Africa is, and should be, constituted and the conflicts over water pollution this gives rise to. It studies how poor urban dwellers try to upset the status quo of unequal access to land and water, which is linked to broader, historically entrenched, inequalities. White commercial farmers have succeeded in upholding the dominant hydro-territorial order by emphasizing the economic importance of their sector, by reducing complex political issues to technical challenges, and by capturing 'democratic' water institutions.

ARTICLE HISTORY

Received 22 June 2017
Accepted 20 February 2019

KEYWORDS

Hydrosocial territories; rural-urban struggles; water pollution; fruit exports; South Africa

Introduction

In this article we study the interactions between white commercial fruit farmers and poor (coloured and black) urban dwellers, which we present as a contested process of reconfiguring hydrosocial territory – a confrontation between two contrasting visions of the Elgin Valley and its water use practices, but also about the ecological, socio-economic, institutional-political and symbolic spaces with which they are intertwined. To that end we study how the status quo of unequal access to resources is protected and confronted. In particular, we enquire how urban water pollution and social unrest contribute to a push to 'upset the apple cart', i.e., disturb the status quo, and how farmers defend their vested interests.

The Elgin Valley, in the Western Cape, South Africa, is characterized by strong differences in access to natural resources and public services that reflect the country's apartheid history. The fertile lands of the Elgin Valley have long been occupied by economically well-off white South Africans, who grow deciduous fruit (mainly apples and pears) for the international market. In contrast, the urban poor, living in the informal areas of the town of Grabouw, are largely black and coloured families living with limited or no economic opportunities. Fruit production in the valley, in particular during the dry summer period, depends largely on irrigation and water flows in the Palmiet River, which are controlled through six in-stream storage dams. With urban expansion, wastewater discharges have degraded the water quality in the Palmiet, and pathogens (*Escherichia coli*, *E. coli*) in the

water used for irrigation pose a threat to farmers' access to export markets, given the strict water quality requirements of their customers.

While studying the issue of water pollution and the reuse of wastewater for irrigation we realized that not only the pollution itself was contested, but also the meaning of the pollution: defining pollution problems, sources and responsibilities, as well as corresponding solutions, is a deeply political process, though often presented as merely a practical problem. Along these lines, we observe a process whereby complex social and political processes in society are 'rendered technical' to simplify them and make it legitimate to pursue 'business as usual' (Ferguson, 1994; Li, 2007). In the process, alternatives to the existing socio-natural orderings are sidelined. Complex situations, co-constituted by social, natural and political processes, are reduced to mere biophysical problems that can be solved 'objectively', concealing the often deeply political nature of the proposed solutions (Boelens, Hoogesteger, Swyngedouw, Vos, & Wester, 2016).

The case of water quality issues provides an excellent lens to study rural–urban struggles and can be understood as a process of contesting and seeking to reconfigure hydrosocial territories. Hydrosocial territories are 'socially, naturally and politically constituted spaces that are (re)created through the interactions among human practices, water flows, hydraulic technologies, biophysical elements, socio-economic structures and cultural-political institutions' (Boelens et al., 2016, p. 1; see also Hommes, Boelens, & Maat, 2016; Hoogesteger, Boelens, & Baud, 2016; Swyngedouw & Boelens, 2018; Swyngedouw & Williams, 2016). In (re)creating these configurations, also called 'hydrosocial networks' or 'waterscapes' (Linton & Budds, 2014; Swyngedouw, 1999), actors compete to establish a hydro-territorial order that is in line with their interests and convictions. As interests and territorial projects are almost always diverse and at times contradict each other, the presence of different actors and their socio-territorial projects may lead to 'territorial pluralism', in which diverse territories overlap and interact in one and the same geographical-political space (Hommes, Boelens, Harris, & Veldwisch, 2019; Hoogesteger et al., 2016).

The fieldwork for this article was undertaken between November 2015 and February 2016, with the primary aim of understanding the effects of urban water pollution on irrigation in the Elgin Valley (Wessels, 2016). Water quality analyses, in-depth stakeholder interviews, and field visits were combined in this analytical case study research. The water quality analyses were drawn from three monitoring programmes in the Elgin Valley that take year-round (mostly monthly) repeat samples at specific locations throughout the valley. The results of these analyses are only used where relevant to the focus of this article. Semi-structured interviews were used to learn about the linkages between urban water pollution and irrigation practices. We interviewed 12 commercial farmers who depend on water from the Palmiet River. Other important stakeholders who were interviewed and visited on a regular basis included the Theewaterskloof Municipality, the Groenland Water User Association (GWUA) and the Breede-Gouritz Catchment Management Agency (BGCMA). Triangulation of sources was used wherever possible to verify and validate water quality data and the interview results. Field visits to farms, sewerage and treatment infrastructure, and urban settlements were also undertaken, the latter specifically to monitor possible sewerage spillages. After completion of the field work, the research focus shifted to also incorporate the political aspects of water management and urban–rural interactions. The field

research results have therefore been complemented by desk research on the politics of (urban) water governance in South Africa, with specific reference to the Elgin Valley. We realize the limitations of using secondary sources for a part of our analysis and throughout the text indicate the sources on which our analysis is based.

The present-day urban–rural water struggles in the Elgin Valley are inseparably linked to the broader political history of access to land, water and labour in South Africa. Therefore, the following section presents an analysis of the history and current characteristics of the fruit sector in the Elgin Valley as the establishment of a hydrosocial territory. Thereafter, we explore an alternative hydrosocial perspective: that of the urban poor in Grabouw. We then analyze how urban water pollution threatens the dominant order and how farmers have guaranteed its continuity, despite water reforms that aimed to undermine their power. In the final section we draw conclusions about the reconfiguration of the valley's hydrosocial territories along the rural–urban axis, showing how these remain inextricably tied to historical patterns of power, wealth and race.

The establishment of hydrosocial territory

The Elgin Valley is one of the most important deciduous fruit producing and exporting areas of South Africa, especially for apple production (Hortgro, 2016; TWK, 2015c). In this section we first analyze this sector, its history and main actors, and then show how (predominantly) white farmers perceive and portray the valley's productivity in relation to its land and water economy, crucially positioning commercial fruit farming at the centre of a hydrosocial territory with highly skewed burdens and benefits.

Access to land plays an important role in shaping patterns of income and employment in rural areas, and largely determines the distribution of wealth, status and authority in society (Cohen, 1980, cited in Mabaya, Tihanyi, & Karaan, 2011). Considering that land access, in South Africa and elsewhere, is deeply entwined with the country's political history, it is indispensable to understand the present-day agricultural sector within its historic context. In South Africa, land acquisition by white settlers during the twentieth century happened under a government focused on consolidating power in the hands of the white minority. This enabled the Afrikaner (white) farmers to secure land ownership and develop large-scale, commercial and mechanized farms (Mabaya et al., 2011; Vink & Kirsten, 2003). Black South Africans lost their land rights and became redundant to the labour needs of the commercial and mechanized farms (Thompson, 1990). In the post-apartheid period of the past several decades, land reform processes were initiated 'to return land to people who were forcibly evicted in the past and compensate them; redistribute land to people who suffered discrimination; and improve land tenure security for farm workers and others' (Boudreaux, 2010, p. 15) to create an environment conducive for them to establish emerging farms. Reform processes, however, have been slow and fallen short of both official targets and public expectations (Boudreaux, 2010; Hall, 2004; Lahiff & Cousins, 2005; Mabaya et al., 2011). Voluntary redistribution of agricultural land, as part of the Black Economic Empowerment programme, in South African commercial agriculture has had little impact to structurally transform the conditions of the people disadvantaged by unfair discrimination, and historically disadvantaged individuals (HDIs) remain enmeshed in the inheritance of inequality (Bernstein, 2013; Du Toit, Kruger, & Ponte, 2008).

In terms of water use, in 2011 the Catchment Management Agency (CMA) reported that the portion of water used by HDIs is between 2% and 5% of the water available in the Breede-Overberg Water Management Area. Plans are to increase the agricultural land owned by HDIs to 15% within five years and ultimately to 30% over a period of 15 years. These land reform processes also require the re-allocation of water rights to emerging farmers (BGCMA, 2017; BOCMA, 2011). It is unclear what the current status is, but white commercial farmers in the Elgin Valley continue to hold a strong position with regard to access to land, water, labour, knowledge and financial means, essential elements of the dominant hydro-territorial order. This organization of agriculture in relations of production in the Elgin Valley reflects the history of land tenure and commercialization, so that today the farms in the valley are predominantly Afrikaner owned and managed.

As irrigation is necessary for agricultural production during the hot and dry summer, since the 1970s several dams have been built along the 70 km Palmiet River and its 11 tributaries to secure year-round water availability for irrigation of large-scale farms (Figure 1). Farmers perceive the construction of the dam and irrigation infrastructure as a historic driver of change in the region (Peters & Wilson, 2007). The largest dam (Eikenhof Dam), located upstream of Grabouw, supplies water to most of the fruit farmers (just over 75% of the total irrigated area in the catchment) via an underground piped system. Other farms, especially those downstream of Grabouw, are not connected to the piped system and draw water directly from the Palmiet River (Bosch, 2008; DWAF, 2004). These farmers have relatively little control over the quantity and especially the quality of the water they abstract. The agricultural community is by far the largest water user in the valley, cultivating 66% of the total catchment area and using 69% of the water (BOCMA, 2011). The GWUA is the main authority responsible for the day-to-day water supply and is mandated, per the South African National Water Act (Act 36 of 1998), to charge levies for water use. Water is allocated to different users, among which are commercial farmers, municipalities, industries and a small group of emerging farmers from historically disadvantaged communities (Baleta, 2015; GWUA, 2014). Water from the Eikenhof Dam is also used for domestic and industrial purposes in Grabouw and is transferred out of the valley to the nearby city of Cape Town. According to the CMA (BOCMA, 2011), around 30% of the water in the Palmiet Catchment is used by the Western Cape Water Supply System, which serves the larger Cape Town metropolitan area. Increasing demands from Cape Town and extended dry spells over the past years have put more pressure on the availability of water in the area (BGCMA, 2017).

As mentioned above, the commercial fruit farms in the Elgin Valley are primarily Afrikaner-managed farms, owned by local families or larger companies that have several farms in the Western Cape Province and beyond. In their hydro-political mapping of the valley and its actors, Peters and Wilson (2007) found that farmers present themselves as having lived in the valley for a long time. In our interviews, too, they referred to how the histories of their farms and families, some tracing back for several generations, are connected to the land they cultivate and the infrastructural and economic development of the valley, an important basis for their hydro-territorial claims. The farm managers we interviewed often have an academic degree in agriculture and make use of external consultants for technical issues such as the management of nutrients, pesticides and water. Their orchards and vineyards are generally equipped

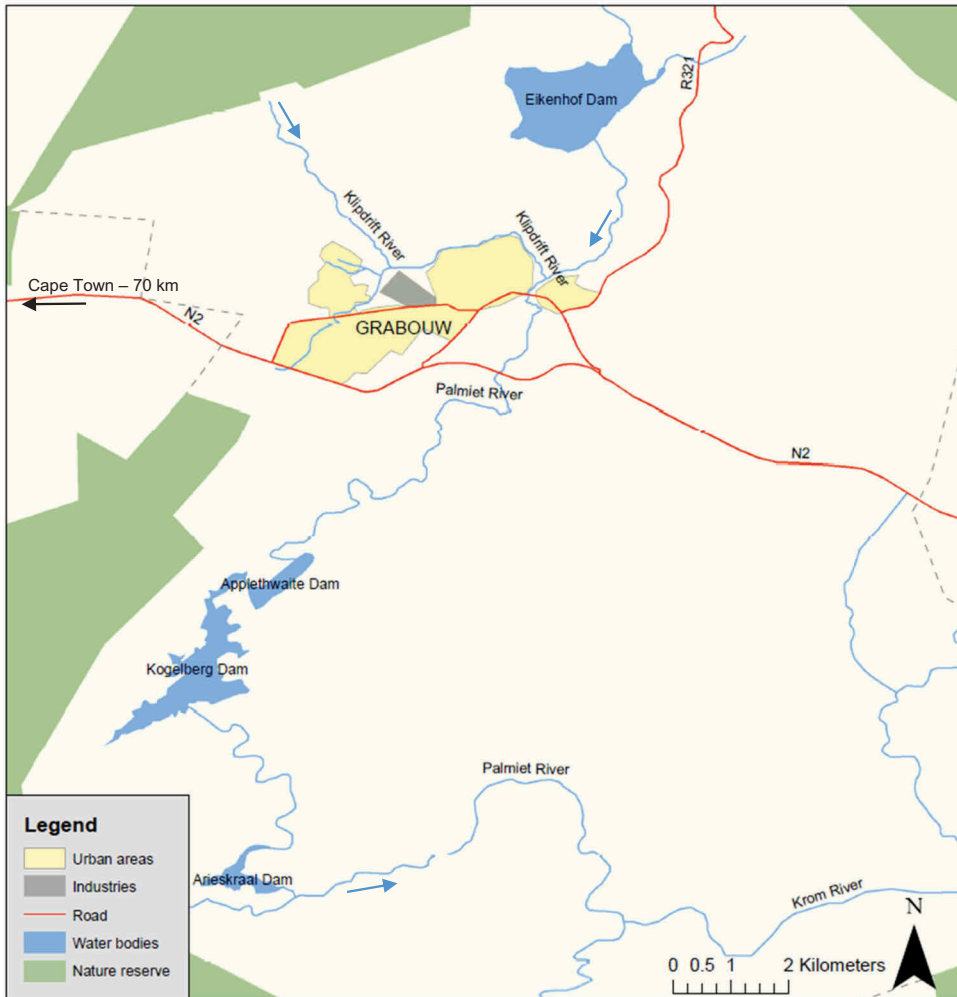


Figure 1. Elgin valley study area.

Source: own elaboration

with automated drip irrigation or micro-sprinkler systems and innovations such as new cultivars and state-of-the-art fruit-picking platforms that increase yields while reducing costs and labour dependency during the fruit-picking season.

The harvesting season runs from early January to early May, depending on the apple or pear variety and whether the season is early or late. The harvesting season is particularly labour-intensive because the time window for picking high-quality fruits is short. The estates, which range in size from 20 to 450 hectares, have yields of 60–100 t/ha of apples per year, largely sold on the global market. The harvesting of high-quality fruits during this short period requires large and reliable labour inputs. Farmers contract cheap seasonal labourers (often black African workers) from the Eastern Cape Province, who are accommodated in hostels on the farm and organized in picking

teams. After the picking season, the companies arrange transport for the workers to return home. However, in practice, many of the seasonal workers remain in the valley to seek other jobs in the fruit industry. In the first post-apartheid decade the sector saw a strong tendency towards the ‘casualisation, externalisation and contractualisation of labour’ (Ewert & Du Toit, 2005, p. 327), which effectively meant an increase in the number and share of casual labourers, re-employment under poorer conditions and the use of intermediaries for recruiting labour. Ewert and Du Toit (2005) interpret this tendency as a response to the insecurities that white farmers experienced as a result of post-apartheid governmental policies. In our interviews farmers said that they prefer to bring in new workers from outside the region every year as they are afraid that labourers from the urban settlements are more likely to initiate collective strikes during the picking season, narrowing or closing the farmers’ window for picking high-quality fruits. Using contracted seasonal workers gives the farmers a stronger position over labour organization and costs (Baleta, 2015; Haysom, 2007). According to Haysom (2007, p. 25), the seasonal workers ‘are often the most disadvantaged, earning arguably the lowest salaries in South Africa, and having the least access to benefits’.

Most farmers are members of a growers’ cooperative, through which they share a packing facility and do joint branding and marketing. In the past, the United Kingdom and mainland Europe were the primary markets for top-grade fruit, but the markets have been changing over the past decade, partly due to the economic crisis in Europe. Farmers who produce for export markets must follow strict guidelines on fertilizer and pesticide use, labour ethics and water quality, which are set by GlobalGAP (2016). These standards are more stringent than the domestic requirements and are required for export and the farmers’ economic gains. This makes water pollution a sensitive topic that local farmers are reluctant to talk about. Several water users interviewed referred to the uproar caused by a 2014 article, ‘E coli in Grabouw water’, on a South African news platform (News24, 2014), which claimed that ‘high levels of pollution, including E. coli, have been found in the water in Grabouw in the Western Cape’. The article was based on a report from the CMA and was commented on by one of their officials. The article traced the pollution back to the town of Grabouw and argued that immediate action was needed ‘to take precautionary measures and prevent damage to vital exports’. The GWUA argued that this was based on misinterpreted data, but irrespective of the strength of the empirical foundation, the article had already raised concerns among international fruit distributors. Fortunately, the concerns could be refuted, and access to Western supermarkets remained secure. The uproar caused by the article reflects the vulnerability of the agricultural sector with regard to water pollution and the potential threat to the commercial farmers’ interests if they should lose control over water management and its representation.

Commercial fruit farmers stress the strategic importance of the fruit sector for the valley, both historically and for its future. In that context, access to sufficiently clean water is portrayed as a crucial element for the valley’s vibrant economy, on which large numbers of people depend, directly or indirectly. This forms the basis of the dominant hydrosocial territory. As we explore further in the section below, however, this ordering involves a highly skewed distribution of burdens and benefits. Considering diverse perspectives, particularly those of local coloured and black town dwellers, adds different perspectives and understandings to these issues, and presents alternative hydrosocial orderings worthy of consideration.

An alternative hydrosocial perspective: the urban poor

Not everybody benefits equally from this economy, as can be observed in Grabouw, the valley's main urban centre. In this section we consider, on the basis of an analysis of secondary sources, how urban populations perceive and portray the fruit sector and its role in the hydrosocial ordering of the valley. It is shown that urban residents emphasize sanitation services and economic opportunities and thereby present a different hydrosocial perspective. Issues of water pollution from urban areas are regarded as a result of the shortcomings in sanitation services, and protests are used to challenge the inequalities in the valley.

With a population of over 30,000, Grabouw is the largest town in the valley (belonging to the Theewaterskloof Municipality) and borders the city of Cape Town (Figure 2), with a community of predominantly coloured (56%) and black people (39%).¹ In many ways it is similar to other agricultural areas in the Western Cape. Despite economic reforms to redress historic inequalities, income distribution remains strongly correlated with race (Haysom, 2007; Leibbrandt & Levinsohn, 2011). Unemployment in the Theewaterskloof Municipality is estimated at 14.9% (StatsSA, 2011), and 13.7% of the households earn less than R400 per month (about USD 1 per day) (TWK, 2016). These figures, however, are subject to the in-migration of labourers and the seasonality of the employment in the valley. In the off-season, unemployment

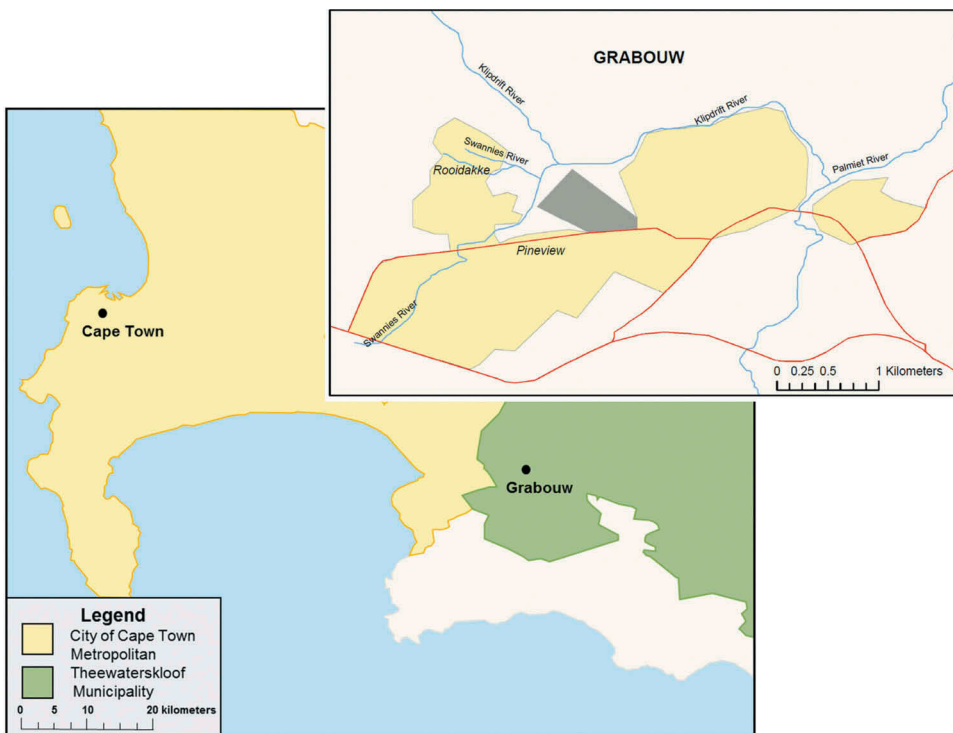


Figure 2. Location and map of Grabouw in the Theewaterskloof Municipality, bordering to the City of Cape Town Municipality.

Source: own elaboration

rates are much higher, and households in the informal areas have hardly enough food or money to live on (Haysom, 2007; Peters & Oldfield, 2005). There is a high dependence on the labour opportunities directly or indirectly linked to the fruit sector. However, the tendency of the commercial farmers to bring in new seasonal workers every year results in growing unemployment in the low-income areas and limited economic opportunities for residents. The municipality lists the influx and high percentage of 'unemployed and unskilled indigent people' as its top strategic risk, adding significant pressure to service delivery (e.g., waste collection, education) and reducing tax revenue (TWK, 2015a, p. 35). The municipality aims to establish more permanent work through local economic development to reduce unemployment in winter and integrate people into the existing communities.

The people from other provinces who initially come for seasonal work on the fruit farms but then stay in the valley have mainly settled in the informal areas on the outskirts of the town, where public services, such as sanitation and solid waste management, are minimal or absent. There are strong contrasts between the different neighbourhoods of Grabouw in socio-economic characteristics, racial composition, levels of formalization and access to sanitation. The formal settlements are characterized by high living standards, while the informal settlements have low living standards, with sub-standard housing and poor access to municipal services. The situation has changed little since Peters and Wilson noted in 2007, 'There is a distortion in service provision [in Grabouw] based on race that reflects the apartheid history[...]. Apartheid planning, combined with the recent migration of people and, limited resources within the municipality, impacted on the extension of bulk infrastructure to previously un-served (and predominantly black) areas' (p. 290). The lower-income coloured and black households largely live in state-subsidized or informal houses. There are also big differences in the water supply and sanitation facilities: while some areas have private taps and toilets, others have communal taps and toilets, and in at least three neighbourhoods the facilities are so poor that 'people resort to using the surrounding bushy areas [for open defecation]' (p. 290). Residents in the low-income areas are pressuring the municipality for housing development and service delivery to redress the strong imbalance in living conditions. Grass-roots protests have emerged in the Elgin Valley, and across South Africa, as a key mechanism for this and are discussed below.

Housing construction and the formalization of informal settlements is one of the municipal responsibilities to redress the infrastructure inequalities created under apartheid, but housing development and the construction of basic water and sanitation infrastructure in Grabouw are not keeping up with its growth (TWK, 2015b, 2016; Western Cape Government, 2015). Newly constructed sewer networks have been connected to the existing municipal network, overburdening the main sewerage lines that convey wastewater to the Grabouw Wastewater Treatment Plant. According to municipal officials and the GWUA, the sewer system is frequently unable to convey all the wastewater, and as a result, considerable amounts of raw, untreated wastewater end up in the Swannies and Klipdrift Rivers (tributaries of the Palmiet River that flow through town). The Theewaterskloof Municipality indicates that it is trying to improve the downstream water quality, having upgraded the wastewater treatment plant, by being active in housing development, and by closely monitoring sewage spillages. The latter is also done by the GWUA to quickly identify any spills and lobby

the municipality to fix blockages in sewer lines. The municipality explicitly points out the critical link between the farmers' labour strategies and the challenges related to service provision in Grabouw: the labour strategies of the commercial farmers endangers the municipality's financial viability and sustainability because the influx of seasonal workers, the low wages, and the seasonality of labour increases the burden on the provision of housing and basic services for people who are not able to pay for services (Baleta, 2015; TWK, 2012).

The violent mass demonstrations in the area are a sign of the tensions and dissatisfaction with the persistent inequalities in the Elgin Valley (Marais, 2014). Local political protests around service provision are not unique to the area and are a recurring phenomenon throughout the country. Attempts to analyze their occurrence in time and space on the basis of policy registration have limitations, as they lack specifications of the reasons for social mobilization or are defined by physical police intervention (Alexander, Runciman, & Maruping, 2016; Nyar & Wray, 2012). Protests are used to draw attention to the quality of service delivery and form an important element in grass-roots political strategies (Alexander, 2010; Booysen, 2007). Although detailed information on the frequency of local protests in (peri-)urban Grabouw is lacking, they have occurred at least annually in recent years. Marginalized groups of black and coloured residents organize themselves in grass-roots organizations such as the Grabouw Elgin Civic Association to demand their rights and challenge existing inequalities. Over the past few years, there have been various marches and protests in the Elgin Valley, which have blocked the national N2 highway and, on one occasion, caused the looting and burning down of the Grabouw traffic department office. An example of protests is the urban settlement of Siyanyanzela in Grabouw (Box 1). The main reasons for discontent and demonstrations are the shortcomings of service delivery, lack of housing, and minimum wages for farm workers. The protests aim to pressure the authorities to improve service provision (e.g., access to adequate sanitation infrastructure) and people's economic prospects. These emphasize very different understandings of what constitutes 'proper sanitation' and 'economic opportunities' than those emphasized by the commercial fruit farmers. Connected to the urban protests are conflicts within the agricultural sector about seasonality of work, the security of their contracts, housing and social exclusion (TWK, 2015c), resulting in wage strikes, labour conflicts and violence. Such farm workers' protests have also occurred at different places outside the Elgin Valley (Wilderman, 2015).

Low-income households thus have a very different understanding of the valley's hydrosocial territory and emphasize the structural inequalities in service delivery and economic opportunities that exist in the valley. Though they consider themselves dependent on the agricultural sector, they also recognize that it does not provide a stable income, proper housing or access to basic water and sanitation.

Box 1. Siyanyanzela urban settlement.

A settlement in Grabouw that has been of recurring interest in the media because of clashes between residents and law enforcement is Siyanyanzela ('forcefully' in Xhosa), which has grown to around 1000 informal homes. Residents have occupied vacant land here because the other low-income (informal) areas in Grabouw are overcrowded. They currently rely on makeshift water and electrical connections, there are no official collection services for household waste, and open defecation is common. Residents have repeatedly called on the municipality to provide running water, toilets and electricity, but the municipality condemns the 'illegal' land occupation and denies the residents access to basic services (Gontsana & Kelly, 2016; Kalipa, Mazantsi, & Lepule, 2016; Mnyakamak, 2017)

Urban water pollution threatens hydro-territorial order

The quality of water in the Palmiet River has considerably degraded over recent decades (River Health Programme, 2003, 2011). This section analyzes the nature and extent of water pollution in the Elgin Valley and shows that there are different perceptions of what is the core problem, which reflect differences in the understanding of how the valley's hydrosocial territory is and should be constituted. Low-income households emphasize the inadequate sanitation and waste management services in the areas where they live. Commercial fruit farmers foreground the potential threat of water pollution to the economic vitality of the valley.

As part of the research by Wessels (2016), the results of three monitoring programmes were combined to identify the sources of pollution, their severity and their fluctuations over time. The sampling points are both upstream and downstream of Grabouw and cover the tributaries flowing through the urban areas of Grabouw. The analysis shows a clear pollution hotspot of anthropogenic pollution in and around Grabouw. In the upper stretch of the Palmiet River, near the Eikenhof Dam, the water quality is generally good.² Moving downstream, it deteriorates, especially in summer, when much water is abstracted from the river for irrigation. *E. coli* levels in the mid-section of the Palmiet increase towards the end of summer (March and April). This indicates faecal contamination in the river, a health risk if transmitted to consumers of the irrigated produce (WHO, 2006). High concentrations of suspended solids and chemical oxygen demand in the Swannies and Klipdrift Rivers indicate domestic and industrial waste in the water. Further downstream, the water in the Kogelberg Dam is once again of good quality, as indicated by low levels of *E. coli* and chemical oxygen demand, illustrating the self-purification of the river and the dilution of the pollutants by inflows of relatively clean water from tributaries. The variation in water quality shows the risk of water pollution specifically for irrigated agriculture downstream of Grabouw during and towards the end of the water-scarce summer.

Based on the quantitative data as well as interviews with municipality officials and farmers and field visits with municipal workers, one of the primary sources of pollution is the discharge of untreated urban wastewater from low-income areas, such as Rooidakke and Pineview (Figure 2). The waste management problems in these areas are the result of personnel shortages, mixed waste streams, blurred district municipality functions and insufficient equipment (Delcarne, 2017). Other sources of pollution relate to the overloading of the sewer system and treatment plant, industrial effluent exceeding the discharge standards, direct industrial runoff into the environment, and wastewater discharge from workers' houses in farm compounds. The analysis shows that the wastewater treatment plant just downstream of Grabouw has been a source of pollution (Wessels, 2016), but the farmers, the GWUA and the Theewaterskloof Municipality indicate that the plant is functioning better since it was upgraded, although this cannot be verified by the water quality measurements, since there is limited post-upgrade data. Sewage overflows remain a common problem and are a result of solid waste causing blockages and overloading of the sewer system. As a result, raw wastewater sometimes ends up in the river and can account for a relatively high share of the total river discharge, especially during the drier summer months, when water is used for irrigation (Wessels, 2016).

The commercial farmers describe the water pollution issues in Grabouw as threatening their export markets. Access to clean water for irrigation is presented as a requirement for agricultural production and thus crucial for the economic vitality of the valley, on which many people depend. Residents in the low-income areas, however, see pollution from the urban areas as a result of the dire conditions in which they live and the limited economic opportunities in the valley. The labour strategies of the commercial farmers and structural imbalance in economic prospects are presented as main reasons for the water pollution challenges related to service provision in the low-income areas. The analysis of water quality (Wessels, 2016) finds that the direct application of river water to the crops would endanger access to export markets, particularly in the summer and in the area directly downstream of Grabouw. Elevated levels of pollution in the river, largely resulting from urban areas, thus threatens the dominant hydrosocial territory, structured around the interests of the commercial fruit farmers.

Water reforms to redress inequities and fruit farmers' defensive responses

Discussions and actions concerning water quality in the Elgin Valley do not result only from supposedly 'natural-technical' conditions but are embedded in political-institutional and social processes at various scales. In this section we analyze how farmers have dealt with the threat of losing control over water (quality) management in the context of post-apartheid water reforms that aimed to upset the status quo and redress long-standing racial, socio-economic and political inequalities. As we demonstrate below, fruit farmers actively operate to maintain control over the institutionally changing environment in a political-institutional context that is shifting as a result of different water reforms meant to decentralize and democratize decision making about water access and control. Besides political-institutional strategies to maintain and improve water quality in the river system, fruit farmers also take individual technical measures to protect the quality of their water sources and prevent losing access to export markets. Both are part of a strategy to protect their economic and political interests in the dominant hydro-territorial order.

The National Water Act of 1998 aims to ensure that water resources in South Africa are protected, used, developed, conserved, managed and controlled in a sustainable manner, and to explicitly redress apartheid-era water inequities, though the interpretation of what this means has evolved over time (Movik, 2014). The purpose of the act is to manage the nation's water resources, taking into account (among other things):

- (a) meeting the basic human needs of present and future generations;
- (b) promoting equitable access to water;
- (c) redressing the results of past racial and gender discrimination; ...
- (g) protecting aquatic and associated ecosystems and their biological diversity;
- (h) reducing and preventing pollution and degradation of water resources; ...
- (k) ... and for this purpose, to establish suitable institutions and to ensure that they have appropriate community, racial and gender representation. (RSA, 1998, p. 18)

The National Water Act established CMAs as part of its strategy to retrench and contest existing inequalities through new democratizing institutional structures, yet

two decades on structural inequalities still persist (Movik, Mehta, van Koppen, & Denby, 2016). CMAs were tasked with the development of catchment management strategies to protect, develop and control water resources. CMAs were on the one hand made independently responsible for securing the lawful use of water, but on the other remained under strict guidance of the Department of Water and Sanitation. Among other things, they are empowered to recover all reasonable costs from those responsible for illicit water pollution. For the Elgin Valley, the Breede-Overberg CMA became operational in 2007, and its management strategy was signed in effect in 2014. In May 2014, the Breede-Overberg CMA merged into BGCMA, as part of the process of reducing the number of CMAs from the original 19 to just 9. Due to the changes in its structure, the BGCMA lacked the capacity to actively engage with water issues in the Elgin Valley, resulting in a situation where, at the time of field work, no organization had the capacity to investigate and prosecute cases of unlawful water use (personal interview with a BGCMA official; Meissner, Funke, & Nortje, 2016).

Under the CMA, water user associations (WUAs) operate at a local level and are considered cooperatives of individual water users that undertake water-related activities for their mutual benefit. The existing irrigation organizations of white commercial farmers (irrigation boards) were seen as a starting point for the establishment of WUAs, while the legal guidelines on the transformation of irrigation boards into WUAs emphasized the need for the inclusion and representation of HDIs in these associations (DWA, 2000). Though these reforms aimed to also overturn power structures and give HDIs influence in water management decisions, in many instances powerful players used the WUAs to maintain the status quo. Studies from other sites in South Africa show that water struggles between commercial farmers and communities and decision making within WUAs tend to reflect existing power relations at a local level, since all the initiatives of new water users need to be discussed and agreed on in the WUAs, which are dominated by white commercial farmers and where emerging farmers from historically disadvantaged communities are still marginalized (Förster, Downsborough, & Chomba, 2017; Kemerink, Mendez, Ahlers, Wester, & Van der Zaag, 2013). The GWUA was based on the former Groenland Irrigation Board as part of the decentralization process instigated by the National Water Act. In practice, it functions as an advocacy group for commercial farmers' interests regarding water. The majority of the management committee of the GWUA consists of white commercial farmers, and interviews with farmers and GWUA representatives confirmed that the association is effective at representing their interests.

To secure access to good-quality water, commercial farmers employ both technical and institutional strategies, ranging from adjusted farming practices to collectively pressuring state authorities to act according to the economic interests of the valley. Although this is not their legal responsibility, the GWUA has appointed someone to actively monitor water quality in and around Grabouw. This person is a (part-time) commercial farmer, well known and well respected by the farmers, the municipality and the GWUA board. His activities are acknowledged by all to have had a significant impact on the quick resolution of sewage spills over the last years. By doing this, the GWUA monitors the sewage network in the urban areas of Grabouw and puts pressure on the municipality to fix sewage spills. The association is also planning to construct an artificial wetland in the

Palmiet River, downstream of the Klipdrift River, that will reduce contamination from the Swannies and Klipdrift Rivers, with the main objective of preventing pollution incidents affecting the irrigation practices of downstream farmers.

Because of the high level of dam development in the Elgin Valley, water can be stored and released in response to downstream demand. These dams are managed by the GWUA. In summer, water flows are often minimized to the legally required (environmental) flow. Thus, when sewage spills occur, the concentration of pollutants exceeds the local standards. When the river quality deteriorates because of a pollution event, it is possible to increase the discharge from the Eikenhof Dam and flush the river so that farmers pumping from the river are not too badly affected. These practices show that WUAs have allowed commercial farmers to maintain control over water flows and thereby at least partially mitigate water quality problems, without challenging the underlying structural issues and inequalities related to water access, control and decision making, or the existing labour regime. In other words, the technical-managerial measures of the GWUA reduce a complex situation that is co-constituted by social, natural and political processes to a mere biophysical problem that can be solved 'objectively'. The deeply political nature of the problem and the proposed solutions is concealed, leaving the hydro-territorial order intact and in line with commercial farmers' interests. The democratization of water management, as intended by the water reforms, remains limited.

Besides trying to protect the quality of water sources through the WUA, farmers have several other strategies to secure their access to export markets. First, there are rumours that farmers have manipulated the water quality monitoring test results on which their accreditation and market access depend. In interviews it was suggested that farmers have been known to collect water from locations other than their own irrigation source or to order specific results from collaborating laboratories. The BGCMA reported that some commercial laboratories in the Breede-Gouritz area have lost their licences because of such incidents having been discovered. Nowadays, accreditation processes require external companies to do the sampling to minimize fraud. Second, pollution in the water source does not automatically end up in the apples and pears. Various risk-reduction layers exist that reduce the risk and minimize the adverse effects of using polluted water in crop production and its potential impact on health (and access to export markets). For example, in late summer farmers pump water from deep below the surface of one of the dams, as the water quality near the surface is often poor at that time of year. At the farm level, filtration systems are used in combination with localized irrigation systems (drip and micro-sprinklers). While these filtration systems were primarily installed to prevent clogging, they also help remove pathogens. On-farm water reservoirs, originally built for storage, also enhance pathogen removal and reduce the risk of water contamination. Lastly, the fruits that are harvested, packed and marketed go through chlorine drenches before leaving the packing facility, to eliminate any pathogens that may be on the surface of the fruits. Such measures effectively provide layers of risk reduction, and this study did not find any measurable risk to consumers (Wessels, 2016). In this way, the farmers' access to financial resources, technologies, institutions and water control allows them to maintain their economic-political position in the valley. Despite the political-institutional water reforms that aimed to upset the power balance, the way commercial fruit farmers in the Elgin Valley

have dealt with these reforms is another example where in practice the reforms reasserted farmers' power. Through a combination of technological and institutional strategies, hydrosocial dynamics are maintained despite ongoing contestation.

Conclusions: overturning the hydro-territorial order?

In this article we have explored the encounter between divergent ideas and contestations around water and pollution flows in the Elgin Valley through the lens of hydrosocial territories. We have analyzed why and how relatively impoverished (coloured and black) urban dwellers of Grabouw continue to lack access to basic water and sanitation services, fair working conditions and economic opportunities alongside, and in contrast to, a vibrant commercial fruit sector dominated by white commercial farmers and large agricultural export companies.

Studying the case from a hydrosocial territories perspective puts the emphasis on processes of building, maintaining and protecting of territory, i.e., constructing convincing and dominant imaginary and socio-environmental materializations of spatially bounded heterogeneous water networks. The heterogeneity of these networks relates to the transformation of interlinked biophysical, technical, legal, institutional, cultural, discursive and symbolic arrangements in the aim of establishing and/or protecting order. Obscuring the political nature of these processes, among others, by rendering them technical, is part and parcel of successful territorialization.

Also, in the Elgin Valley the dominant hydrosocial territory is maintained by the entwinement of discursive, institutional and technical practices. The valley's welfare is *discursively* portrayed as dependent on fruit exports, to which water pollution poses a major threat. *Institutionally*, the WUA and the CMA, introduced as part of water reforms with the aim of advancing the power of HDIs, became dominated by commercial farmers and their interests. 'Inclusion-oriented' policies thus came to reinforce the dominant hydro-territorial order rather than opening it up (cf. Boelens et al., 2016). *Technically*, irrigation water quality is tackled mainly at the field level and by emergency responses to sewage spills, instigated by farmers' surveillance practices, bypassing the municipality. By presenting water quality as a 'practical challenge' farmers render technical a set of deeply political questions regarding skewed wealth distribution and development opportunities with a history of violent resource capture and political oppression along class and racial lines, which continue to be manifest in the living conditions of large groups of urban poor that contrast to the commercial interests of a relatively small group of high-tech commercial farmers. Moreover, certain elements of the associated political economy are backgrounded – notably problems related to living conditions for the seasonal workforce, who relocate to nearby informal settlements during the off-season. The lack of suitable infrastructure to serve those communities presents potential risks for public health and water quality, and associated threats to the economic activities in the valley. Although the precise source of pollution is not necessarily known, certain issues and possibilities are emphasized, and others minimized, reflecting the power dynamics of the valley.

In contrast to the dominant hydrosocial territoriality, grass-roots movements of urban low-income households emphasize the inequality in housing provision, municipal sanitation services and low-wage and seasonal farm jobs and stress the structural

imbalance in economic opportunity and service delivery. Their protests remain largely reactive to immediate injustices, and they appear to be struggling to make inroads into the political process or to create counter-images of how the social-natural could be ordered (cf. Hommes et al., 2016). Their counter-narrative seemingly does not mobilize to advance an alternative territoriality that could claim and materialize institutional and symbolic spaces and that might politicize infrastructure investment priorities and recast what is of essential value for the valley. Though the dominant order is contested by different ideas of how the Elgin Valley and its water use practices are, and should be, constituted, these ideas have so far been incapable of upsetting the proverbial apple cart. The dominant understandings of water problems and solutions facilitate the stabilization of the political order and ‘actively depoliticize ... inequality, misrecognition, and political exclusion’ (Boelens et al., 2016, p. 10).

Whereas most studies about rural–urban water struggles relate to water quantity issues with transfers from rural to urban spaces, this article presents a conflict over water quality in which not the urban but the farming community has strong control over water resources. Through our analysis of events, actions and representations of water quality issues, this case thus illustrates how urban and rural areas can be interlinked and be interdependent in very diverse ways. Passing through urban and rural areas in the Elgin Valley, water takes on (pollution) characteristics that link urban living conditions to commercial farming practices, spaces that are otherwise discursively and politically largely disconnected. Also, one and the same person may play different roles in the rural and the urban space. Many urban residents are dependent on income and employment opportunities from the agricultural sector, but at the same time they observe the farmers’ labour strategies and the structural imbalance in economic prospects they face. When looking at cases of water pollution and the reuse of urban water in a rural setting, water flows and pollution interlink the rural and the urban in unexpected ways.

As shown in this article, a hydrosocial territories lens contributes to understanding the diversity and dynamics of actors’ interests and how they transform interlinked socio-technical, political-institutional and discursive-symbolic arrangements to establish and maintain territorial order in relation to rural–urban water struggles, especially when these are shaped around water quality more than around quantity issues and when rural rather than urban actors are in a position of power.

Acknowledgments

We thank the International WaTERS Network for financially supporting this research. The guest editors of this special issue and two anonymous reviewers have contributed significantly to improving this article. We are grateful to Nick Parrott of TextualHealing.eu for his careful language editing of the text.

Notes

1. Black, coloured, Indian and white were the four official racial categories in South Africa during apartheid.
2. The quantitative analysis in Wessels (2016) uses a water quality classification (good, fair, poor) based on the National Water Act (DWA, 2013; RSA, 1998).

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by the International WaTERS research and training network SSHRC grant [890-2013-0020];

References

- Alexander, P. (2010). Rebellion of the poor: South Africa's service delivery protests—A preliminary analysis. *Review of African Political Economy*, 37(123), 25–40. doi:10.1080/03056241003637870
- Alexander, P., Runciman, C., & Maruping, B. (2016). The use and abuse of police data in protest analysis South Africa's Incident Registration Information System (Iris). *South African Crime Quarterly*, 58(1), 9–21. doi:10.17159/2413-3108/2016/v0n58a1513
- Baleta, H. F. (2015). *The concept of shared risk in public and private sector water security: A case study of Grabouw and the Elgin Valley, Western Cape, South Africa*. Cape Town: University of Cape Town.
- Bernstein, H. (2013). Commercial agriculture in South Africa since 1994: 'Natural, simply capitalism'. *Journal of Agrarian Change*, 13(1), 23–46. doi:10.1111/joac.12011
- BGCMA. (2017). *Catchment Management Strategy for the Breede-Gouritz Water Management Area*. Worcester: Breede-Gouritz Catchment Management Agency.
- BOCMA. (2011). *Breede-Overberg Catchment Management Strategy*. Worcester: Breede-Overberg Catchment Management Agency.
- Boelens, R., Hoogesteger, J., Swyngedouw, E., Vos, J., & Wester, P. (2016). Hydrosocial territories: A political ecology perspective. *Water International*, 41(1), 1–14. doi:10.1080/02508060.2016.1134898
- Booyesen, S. (2007). With the ballot and the brick: The politics of attaining service delivery. *Progress in Development Studies*, 7(1), 21–32. doi:10.1177/146499340600700103
- Bosch, D. (2008). *A history of the palmiet river*. Grabouw: Groenland Water User Association.
- Boudreaux, K. (2010). Land reform as social justice: The case of South Africa. *Economic Affairs*, 30(1), 13–20. doi:10.1111/j.1468-0270.2009.01967.x
- Delcarme, B. (2017). *Situational analysis of waste management practices of municipalities situated in the Breede-Gouritz Water Management Area*. Cape Town: Centre for Water and Sanitation Research.
- Du Toit, A., Kruger, S., & Ponte, S. (2008). Deracializing exploitation? 'Black economic empowerment' in the South African wine industry. *Journal of Agrarian Change*, 8(1), 6–32. doi:10.1111/j.1471-0366.2007.00161.x
- DWA. (2000). *Guide on the transformation of irrigation boards and certain other boards into water user associations*. Pretoria: Department of Water Affairs.
- DWA. (2013). *Revision of general authorisations in terms of section 39 of the national water act, 1998 ((Act No. 36 of 1998), No. 665. Government Gazette)*. Pretoria: Department of Water Affairs
- DWAF. (2004). *Breede water management area - internal strategic perspective*. Pretoria: Department of Water Affairs and Forestry.
- Ewert, J., & Du Toit, A. (2005). A deepening divide in the countryside: Restructuring and rural livelihoods in the South African wine industry. *Journal of Southern African Studies*, 31(2), 315–332. doi:10.1080/03057070500109524
- Ferguson, J. (1994). The anti-politics machine. *The Ecologist*, 24(5).

- Förster, J. J., Downsborough, L., & Chomba, M. J. (2017). When policy hits practice: Structure, agency, and power in South African water governance. *Society & Natural Resources*, 30(4), 521–536. doi:10.1080/08941920.2016.1268658
- GlobalGAP. (2016). *Quality Management System Checklist*. Cologne: GlobalGAP.
- Gontsana, M., & Kelly, S. (2016). *Grabouw: "We are sitting here, lost"*. Retrieved from <http://www.groundup.org.za/article/grabouw-we-are-sitting-here-lost/>
- GWUA. (2014). *Constitution of the Groenland Water Users Association*. Grabouw: Groenland Water User Association.
- Hall, R. (2004). A political economy of land reform in South Africa. *Review of African Political Economy*, 31(100), 213–227. doi:10.1080/0305624042000262257
- Haysom, G. G. D. (2007). *Project proposal for transforming Grabouw, Western Cape, into a sustainable community*. Stellenbosch: Stellenbosch University.
- Hommel, 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
- Hommel, L., Boelens, R., & Maat, H. (2016). Contested hydrosocial territories and disputed water governance: Struggles and competing claims over the Ilisu Dam development in south-eastern Turkey. *Geoforum*, 71, 9–20. doi:10.1016/j.geoforum.2016.02.015
- 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
- Hortgro. (2016). *Key deciduous fruit statistics 2016*. Paarl: Hortgro.
- Kalipa, S., Mazantsi, S., & Lepule, T. (2016). N2 closed due to Grabouw protest mayhem. *Cape Argus, Cape Times and Daily Voice*. Retrieved from <http://www.iol.co.za/news/crime-courts/n2-closed-due-to-grabouw-protest-mayhem-pics-2020223>
- Kemerink, J., Mendez, L., Ahlers, R., Wester, P., & Van der Zaag, P. (2013). The question of inclusion and representation in rural South Africa: Challenging the concept of water user associations as a vehicle for transformation. *Water Policy*, 15(2), 243–257. doi:10.2166/wp.2012.127
- Lahiff, E., & Cousins, B. (2005). Smallholder agriculture and land reform in South Africa. *IDS Bulletin*, 36(2), 127–131.
- Leibbrandt, M., & Levinsohn, J. (2011). *Fifteen years on: Household incomes in South Africa*. Cambridge: National Bureau of Economic Research.
- Li, T. M. (2007). *The will to improve: Governmentality, development, and the practice of politics*. Durham, NC: Duke University Press.
- Linton, J., & Budds, J. (2014). The hydrosocial cycle: Defining and mobilizing a relational-dialectical approach to water. *Geoforum*, 57, 170–180. doi:10.1016/j.geoforum.2013.10.008
- Mabaya, E., Tihanyi, K., & Karaan, M. (2011). *Case studies of emerging farmers and agribusinesses in South Africa*. Stellenbosch: African Sun Media.
- Marais, P. (2014). *What lies behind Grabouw riots?* Retrieved from <https://www.iol.co.za/news/what-lies-behind-grabouw-riots-1753176>
- Meissner, R., Funke, N., & Nortje, K. (2016). The politics of establishing catchment management agencies in South Africa: The case of the breede-overberg catchment management agency. *Ecology and Society*, 21(3). doi:10.5751/ES-08417-210326
- Mnyakamak, M. (2017, June 8). *Land occupiers in Grabouw demand services*. Retrieved from <http://www.groundup.org.za/article/land-occupiers-grabouw-demand-services/>
- Movik, S. (2014). A fair share? Perceptions of justice in South Africa's water allocation reform policy. *Geoforum*, 54, 187–195. doi:10.1016/j.geoforum.2013.03.003
- Movik, S., Mehta, L., van Koppen, B., & Denby, K. (2016). Emergence, interpretations and translations of IWRM in South Africa. *Water Alternatives*, 9(3), 456–472.
- News24. (2014). *E coli in Grabouw water*. Retrieved from <http://www.news24.com/Green/News/E-coli-in-Grabouw-water-20140606>

- Nyar, A., & Wray, C. (2012). Understanding protest action: Some data collection challenges for South Africa. *Transformation: Critical Perspectives on Southern Africa*, 80(1), 22–43. doi:10.1353/trn.2012.0050
- Peters, K., & Oldfield, S. (2005). *The paradox of 'free basic water' and cost recovery in Grabouw: Increasing household debt and municipal financial loss*. *Urban Forum*, 16(4), 313–335. doi:10.1007/s12132-005-0009-9
- Peters, K., & Wilson, Z. (2007). Chapter 12: Grabouw Case Study. In *Second order water scarcity in Southern Africa*. London: Department for International Development.
- River Health Programme. (2003). *State-of-rivers report: Diep, Hout Bay, Lourens and Palmiet river systems*. Pretoria: Department of Water Affairs and Forestry.
- River Health Programme. (2011). *Rivers of the breede water management area*. Pretoria: Department of Water Affairs and Forestry.
- RSA. (1998). *National water act (Act No. 36 of 1998)*. Cape Town: Republic of South Africa.
- StatsSA. (2011). *Grabouw Census 2011*. Pretoria: Statistics South Africa.
- Swyngedouw, E. (1999). Modernity and hybridity: Nature, regeneracionismo, and the production of the Spanish waterscape, 1890–1930. *Annals of the Association of American Geographers*, 89(3), 443–465. doi:10.1111/0004-5608.00157
- Swyngedouw, E., & Boelens, R. (2018). "... And not a single injustice remains": Hydro-territorial colonization and techno-political transformations in Spain. In R. Boelens (Ed.), *Water justice* (pp. 115–133). Cambridge: Cambridge University Press.
- Swyngedouw, E., & Williams, J. (2016). From Spain's hydro-deadlock to the desalination fix. *Water International*, 41(1), 54–73. doi:10.1080/02508060.2016.1107705
- Thompson, L. M. (1990). *A history of South Africa*. New Haven, CT: Yale University Press.
- TWK. (2012). *3rd Generation IDP 2012–2017: First revision 2013/2014*. Caledon: Theewaterskloof Municipality.
- TWK. (2015a). *Annual report 2013/2014*. Caledon: Theewaterskloof Municipality.
- TWK. (2015b). *Integrated development plan 2012–2017: 3rd annual revision 2015/2016*. Caledon: Theewaterskloof Municipality.
- TWK. (2015c). *Theewaterskloof's economy - an overview of the theewaterskloof municipal economy and economic development strategy 2015*. Caledon: Theewaterskloof Municipality.
- TWK. (2016). *Integrated development plan 2012–2017: 4th annual review 2016/2017*. Caledon: Theewaterskloof Municipality.
- Vink, N., & Kirsten, J. (2003). Agriculture in the national economy. In *The challenge of change: Agriculture, land and the South African economy* (pp. 3–20). Pietermaritzburg: University of Natal Press.
- Wessels, M. T. (2016). *Understanding urban-rural linkages in water reuse for irrigated agriculture in the Elgin Valley, South Africa*. Wageningen: Wageningen University and Research.
- Western Cape Government. (2015). *Socio-economic profile theewaterskloof municipality*. Cape Town: Western Cape Government.
- WHO. (2006). *Guidelines for the safe use of wastewater, excreta and greywater: Wastewater use in agriculture* (Vol. 2). Geneva: World Health Organization.
- Wilderman, J. (2015). *Farm worker uprising in the Western Cape: A case study of protest, organising, and collective action*. Johannesburg: University of Witwatersrand.