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Managing water in the Segura basin: conflicts around gated communities in Murcia

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Abstract

The Segura basin in South-East Spain is characterised by massive over-use of its water resources. Groundwater resources are being depleted, desertification risk is high and the river ecosystem is near to collapse with merely 4% of its original runoff reaching the mouth. Meanwhile, the water cycle has been deeply technologised to meet the needs of a growing irrigated agriculture since the beginning of the 20th century. Today, the introduction of yet new water uses for irrigation of green spaces in gated communities priding themselves with first-class golf courses is putting further pressure on water resources. These developments are provoking conflicts between sections of society as well as between levels of the state administration. This article investigates why reactions to gated communities are so different. To do so, a constructivist approach is used that highlights actors' differing perceptions of the state of Murcia's waterscape and subsequent attitudes towards water management.

Abstract keywords: water management, gated communities, perceptions, conflicts, Segura basin, Spain, Murcia

Abbreviations:

CdP	Comunidad de Proprietarios
CHS	Confederación Hidrográfica del Segura
CRCC	Comunidad de Regantes del Campo de Cartagena
EEA	Ecologistas en Acción
EPA	Ente Público del Agua
EU	European Union
FNCA	Fundación Nueva Cultura del Agua
IU	Izquierda Unida
MAR	Mean Annual Runoff
NGO	Non Governmental Organisation
PP	Partido Popular
PR	Pro Río
PSOE	Partido Socialista Obrero de España
SMCE	Sol Mediterráneo Construction Enterprise
WFD	Water Framework Directive
WWF	World Wide Fund for Nature

Introduction

Access to water by gated communities is hotly contested within Murcia as well as in the Spanish society at large. Groups of the civil society, such as *Murcia No Se Vende*, *Pro Río* (PR), *Ecologistas en Acción* (EEA), *Greenpeace España*, and others have taken up the issue as they are concerned about the degradation of water related ecosystems and the sealing of Murcia's landscape. Moreover, the new developments are leading to conflicts among different levels of the state administration. While the regional and local political leaders see the opportunities in further economic development of Murcia through "quality tourism", the National Ministry of Environment is eager to exert tighter control on existing water uses in the spirit of demand management.

Water in Murcia and Spain is a highly politicised issue. This fact can be traced back to historical political dimensions on the one hand, and to very obvious water problems in the region on the other. Within Europe, the Segura basin in South-East Spain is one of the river basins most affected by declining water availability. Climate change is supposed to further limit rainfall and enhance its variability (cf. European Commission, 2007), therefore aggravating existing water problems.

Although managed at basin level by the *Confederación Hidrográfica del Segura*, CHS, a river basin authority which depends on the National Ministry for Environment, the environmental crisis of the river and other water-dependent ecosystems is obvious. Merely 4% of the original runoff, less than even the lowest estimates for the ecological minimum (cf. CHS, n.d. A), reach the mouth of the Segura in Valencia, groundwater tables are falling (cf. Fornés et al., 2005), and desertification risks for the whole region are subsequently high (cf. Kuderna, 2004).

To face this situation, a highly technologised water cycle has been established over the decades, in order to allow for the development of high-yield irrigated agriculture. Since 1932, when the first dam was erected at Fuensanta, the variability of the water flow in the river between years as well as within the year has been controlled by engineering works. The most important step, however, has been the transfer of Tajo water via the Tajo-Segura channel accomplished in 1978. Further, groundwater use has intensified since borewell pumping allowed easy access to the resource and ever deeper drilling (cf. Calvo García-Turnel, 2006). From the beginning, these technological developments have been embedded in a heavy-weighting context of political ideologies. Based on the movement of *regeneracionismo*, a nationalist campaign aiming at a "revival" of the Spanish society through modernisation and economic uprising, they allowed for the dedication of State finances to infrastructure and engineering works (cf. Swyngedouw, 1999). The same line of thought has broadly been followed under Franco's dictatorship (cf. Swyngedouw, 2004).

The technological control of water availability has not, however, been able to satisfy Murcia's rising water demands. Meanwhile, the political debate at national level has shifted towards ecological discourses, supported by Spain's adherence to the EU and subsequently to the EU Water Framework Directive which focuses on the protection of ecosystems and demand management. Enhancing supply in the described manners has therefore touched a ceiling: in 2001, a minimum quantity of 240 hm³ in the Tajo reservoirs has been established by law below which a transfer to the Segura basin is no longer allowed (cf. WWF, 2003). This caused the transfer to be interrupted for the first time since 26 years in the summer of 2006 (cf. El País, 30.09.2006). A proposed Ebro-transfer has been rejected by the national government in 2004. Moreover, the groundwater is in constant decline and shows heavy qualitative degradation so that future use of the aquifers is becoming questionable (cf. Fornés et al., 2005; Martínez Fernández & Esteve Selma, 2000; Greenpeace España, 2005).

Today, new solutions are thus sought for and partly put into practice. While new ways of enhancing water supply through waste water recycling and sea water desalination are being realised, some claim that this is not enough and approaches with a stronger focus on

demand management are an urgent need. Other groups, however, still want to establish a new transfer from the Ebro basin.

Against this background of already tense discussions on future water management options, socio-economic change is occurring in the region: the current situation is further complicated by the introduction of new water uses in the form of gated communities centred on golf courses. One of these has been chosen for detailed investigation, and is given the name of Sol Mediterráneo in the following. Consumers of these new developments are on the one hand European upper middle-class citizens who want to invest in second residencies or decide to emigrate to Spain altogether. On the other hand, Spanish citizens have equally bought real estate in gated communities, even though to a lesser extent. Moreover, Spanish citizens of surrounding areas have started to use golf facilities during leisure time in cases where golf courses are accessible to the public.

These changes in Murcia's waterscape are accompanied by arising conflicts, which are the subject of this article. The three different informal coalitions of actors that have formed over the dispute will be presented with their respective perceptions of the water situation, and their derived policy preferences. It is the aim of the article to explain why reactions to gated communities are so different, and to understand what lies at the foundation of conflicts over water in Murcia.

Methodology

The analysis is based on a qualitative methodology, which allows focusing on actors' perceptions and the consequences that these have for their opinions as well as actions. In a situation of highly politicised discussions on water, the constructivist approach that goes along with qualitative data collection can retrace actors' views of reality and describe their argumentation in the processes of negotiation and conflict (cf. Lamnek, 2005; Reuber & Pfaffenbach, 2005).

In order to investigate these issues, a gated community in Murcia was chosen. Its access to water was documented relying on government reports, Environmental Impact Assessments, media reports, unpublished letters and juridical documents. Subsequently, 12 semi-structured interviews were conducted with the main actors that are involved in the conflicts and play a major role in the expansion of the phenomenon 'gated community' and in the water management of the basin, i.e. representatives of

- the water management unit of the construction company that built Sol Mediterráneo (to be called Sol Mediterráneo Construction Enterprise, SMCE)
- the *Ente Público del Agua* (EPA) of the Regional Ministry for Agriculture and Water of Murcia
- the Municipal Councils for Environment and for Town Planning of the relevant municipality where Sol Mediterráneo is located
- the *Confederación Hidrográfica del Segura* (CHS)
- the Organisation of Irrigation Farmers (*Comunidad de Regantes del Campo de Cartagena*, CRCC)
- AQUAGEST Región de Murcia
- *Ecologistas en Acción* (EEA)
- *Pro Río* (PR)
- *Greenpeace España*
- the residents of Sol Mediterráneo

Moreover, the analysis is based on 2 group interviews with further residents of Sol Mediterráneo and 4 informal interviews with a member of the Residents' Community of Sol Mediterráneo (*Comunidad de Proprietarios*, CdP), an employee of SMCE golfing unit, the technical engineer of the town where Sol Mediterráneo is located, and a journalist of *La Opinión de Murcia*. Due to the high tensions between different actors and the confiding atmosphere of the interviews, interview partners' names shall remain anonymous. The author further observed a two-days workshop on water (*Jornada sobre el Agua*) in Albacete

in 2006. The data were analysed by thematic coding (cf. Flick, 1995; Flick, 2004; Reuber & Pfaffenbach, 2005) allowing for comparisons between different actor groups.

Research Area

The Segura basin is characterised by a semi-arid climate (cf. Kuderna, 2004). While median rainfall is 299,4 mm/a, potential evapotranspiration is as high as 700-1100 mm (cf. Sánchez Muniosguren, 1995), leading to relatively low overall availability of water (positive estimates of surface as well as groundwater availability count 1120 m³ per person, cf. Cabezas Calvo-Rubio, 1995; Senent Alonso & Aragón Rueda, 1995). To improve water availability, the Tajo-Segura Transfer was inaugurated in 1978. This system transfers a maximum 650 hm³/a to the Segura basin (cf. Nicolás Martínez, 1995). Including this volume, surface and renewable ground water availability is estimated to be 1343 hm³/a. However, actual consumption exceeds this available renewable resource by 416 hm³/a (cf. CHS, n.d. B), this volume being met through ground water extraction so that ground water resources are declining (member of CHS, personal communication). A second transfer from the Ebro River was projected by the *Partido Popular* (PP), but was cancelled in 2004 after the Socialist Party (*Partido Socialista Obrero de España*, PSOE) won the national elections. The PP, today the opposition party, still holds on to this project, as we shall see below.



Figure 1: The Segura basin (source CHS, n.d. D).

The management of the basin is the responsibility of the *Confederación Hidrográfica del Segura*, CHS, founded in 1926. It depends on the National Ministry for Environment, as the river crosses several Autonomous Communities, namely, Castilla la Mancha, Valencia, Murcia and Andalucía (cf. Fig.1). Its task is to control the utilisation of all water resources by means of an elaborate system of concessions that are determined in time span of the use, quantity and purpose. Concessions are granted for different uses according to their ranking in the Spanish Water Act, which gives highest priority to the supply to the population, and least priority to transport and leisure uses. It is into this last priority that the discussed golf courses are falling (cf. Spain 2001: Art. 60.3).

Today, Murcia finds itself in a situation, where water concessions in the Segura basin are limited to the amount of water extracted in 1985 (cf. Turrión Peláez, 2005). New concessions can be obtained from “new” water only, i.e. from desalinated sea water or purified waste water. The only other possibility to legally access water for others than the granted uses is through a petition for usage change of an existing concession (“cambio de uso”), on which the CHS decides. In the 1990s, these constraints led to the then deputy director for hydrological planning of the Water Commissariat of the CHS allowing for so-called drought wells to be used under a preliminary authorisation (cf. FNCA, 2004), therefore evading quantitative restrictions as well as the prioritisation procedure. Some of these are still in use today, a fact that is widely criticised by environmental NGOs.

Besides, the CHS has the task to issue statements on available water for new building developments in the region. These statements are not binding in the actual Water Act though, i.e. even with the CHS stating that there is no water available for new developments these can still be built. However, the statements might become binding in the future, as this measure is discussed for an Amended Water Act. Such a decision would give the national administration significant control over regional developments – among others on the distribution and number of gated communities in Murcia.

New water uses – gated communities in Murcia

The Comunidad Autónoma Región de Murcia covers 59.3% of the Segura basin, and is itself drained to 98.6% by the Segura system (cf. Cabezas Calco-Rubio, 1995, see Fig.1). Traditionally, water consumption in Murcia is dominated by agriculture (cf. CHS, n.d. B). With the rise of industrialised models of agricultural production and the opening of the European and global market for Spanish products, water use increased due to the extension of large-scale irrigation (cf. Pérez Picazo, 1999). The irrigation area has tripled since 1953 (cf. Calvo García-Turnel, 2006; Gómez Espín, 2003).

However, in the search for development models outside of agricultural activities, the Murcian waterscape is confronted today with the introduction of new kinds of water uses. Gated communities with golf courses of 9 to 18 holes are being built in the region at vertiginous speed. Identifying their exact number proves difficult, as new projects are being announced almost every day. In the beginning of 2007, the number of planned communities with golf courses was as high as 145, out of which roughly one third was claimed to be gated, i.e. closed to the public although gating is not always handled in a strict way. Murcia is leading in the vending of golf-related real estates in Spain since 2003, and the rise in sales is continuing till present: for the year 2006/2007, a further increase of sales by 17% was predicted (cf. Diario Línea, 22.08.2006).

The investigated Sol Mediterráneo is a typical, although rather small gated community featuring 750 housing units on 700.000 m². It is mainly inhabited by British citizens, who mostly use their property as part time homes. Only 200 houses are used as permanent residencies. Maybe because of this part-time use of the resorts facilities, private golfing alone did not result in expected profits. In 2006 the course was therefore opened to the public, to the dissatisfaction of house owners (residents, personal communication). The golf course in Sol Mediterráneo extends to 24.86 ha and has 9 holes (Sol Mediterráneo homepage).

The quantity of water used by these communities can only be calculated approximately. Different estimates are available for the water needed for irrigation of golf courses in Spain's South-East and vary between 149.131 and 350.000 m³/a for a 9 hole course (cf. Escorza Doblas, 2001; Espejo Marín, 2004; Sanz-Magallón, 2005). Apart from that, it can be stated that the seasonal population of concerned municipalities rises in certain cases as much as 25% leading to an increase in water consumption in the household sector. Moreover, housing models provide the residents with private as well as public swimming pools, and the communities are equipped with extensive green areas requiring irrigation. In the Sol Mediterráneo Community water use for irrigation was estimated to be around 256.274 - 457.143 m³/a for total irrigation needs (member of CdP, personal communication; cf. CdP unpublished data; Escorza Doblas 2001:230; Espejo Marín 2004:96; Sanz- Magallón 2005:99).

Mostly, gated communities are being built on previously agricultural land. As stated above, the new water users therefore need to apply for a change in water use purpose ("cambio de uso") at the CHS if they want to take over concessions previously granted for agricultural use. Other options consist in building own desalination facilities, or pleading for a new concession for desalinated seawater or purified waste water, keeping in mind that leisure uses get least priority in allocation of concessions. Legally accessing ground or surface water for irrigation is thus difficult for gated communities, which results in cases of illegal ground water extraction (cf. FNCA, 2004; Turrión Peláez, 2005; TVE2, 2004).

Sol Mediterráneo is currently using two different ground water sources (member of CdP, personal communication) for irrigation, although guests of the resort are informed otherwise by panels stating “irrigation by waste water”. In 2004, the CHS warned the Ministry of Environment of the Region that the community was illegally using ground water under a permit for agricultural use for its golf course. On March, 14th of 2007, the CHS opened an investigation on the matter (cf. 20MINUTOS 14.03.2007).

Con registro de salida de este Organismo de 15 de Julio de 2004 se le comunica a [] la resolución del
Presidente de este Organismo consistente en :

1. Revocar la autorización provisional otorgada con carácter provisional a la []

[] el 3 de Noviembre de 1.998 para la extracción de aguas subterráneas salobres y su posterior desalación, de un volumen máximo anual de 356.400 m3/año con destino único el de riego de 70 Has., en el paraje “ []”, término municipal de [] (Murcia), al haberse comprobado que:

- a. Las aguas se vienen utilizando para riego de un campo de golf, y no de cítricos como se reflejaba en la autorización, estando esa modificación de uso expresamente prohibida en la Condición Cuarta de la mencionada autorización al decir expresamente que el riego autorizado es para cítricos.



Figure 2: Extract of the letter of the CHS to the regional Ministry of Environment from July 15th, 2004, asking for immediate revocation of the authorisation to use ground water, as the water was found to be used for the irrigation of a golf course instead of citrus fruits (highlighted by the author) (unpublished source from the Environmental Impact Assessment for the Golf Course).

The example shows how access of gated communities to water is a contested issue in the region. The following section will show how this contestation is rooted in conflicts over more than just the allocation of a natural resource. The Murcian society as well as different levels of the State administration find themselves divided on the very basis of their perception of water and its limited availability in the region.

Actors and their perception of the water situation

What is water in 21st century Europe, amidst a highly technologised water cycle and growing demand for a services industry that caters to the needs of a specialised tourism? Answers to this question can be broadly categorised along an axis that shows water as part of an ecosystem on the one hand, and water as part of a social system on the other.

In the formulation of their perceptions, actors draw on several strands of discourses originating from different historical contexts in Murcian and Spanish society. First we find opinions that go back to arguments formulated during the era of *regeneracionismo* that has briefly been presented above. As explained, at that time natural challenges were thought to be met through man-made large-scale infrastructure as water management was to contribute to modernisation of the country (cf. Swyngedouw, 1999). A national “hydraulic mission” (Allan, 2003) had to be accomplished. In opposition to this paradigm, reflexive modernity has gained momentum in European societies towards the end of the 20th century, based on an interest in ecological and institutional problems in water management (cf. Allan, 2003). While domination of nature was at the heart of modernistic thought, new social movements started to claim that societies should adapt better to their natural environments and prevent their economies from interfering in negative ways into ecosystems’ functioning.

According to their attitude towards these opposing paradigms, three different coalitions of actors have formed in the discussed conflicts that go beyond Murcia, bringing together actors all over Spain and even Europe. The first is formed by the regional and local governments, regional construction companies, and international water service providers as well as international – mainly British and German – clientele for gated communities’ real estates. Large-scale irrigation agriculture mainly shares the values of this coalition. The second comprises local, regional, national as well as international NGOs and relies partly on support

by the leftist party *Izquierda Unida* and the European Greens. The third, finally, is a coalition between the National Ministry of Environment and the CHS, although, as we shall see, the latter seems internally divided when it comes to political values.

At the heart of the conflicts is the first coalition between regional and local governments, private companies, and (potential) home owners in gated communities. Cooperation among them is mainly due to complementing interests in the rise of the regional economy, private profit and the quest for sunshine residences on the Spanish coast. Local government officials welcome the economic diversification and increased tax income gated communities can offer (member of the municipal council of Environment, personal communication), and regional government officials appreciate the economic growth the construction industry has been experiencing in the region in general (member of EPA, personal communication). Both attitudes allow for the accumulation of wealth by private companies, and offer Northern European citizens the possibility to spend part of the year in second residences in the South. The coalition has a purely technological view on water. For them, water is mainly a part of the private economy that has to serve as means of production (member of CRCC, personal communication). The normative goal is that water should first serve human populations, and the value of water is defined according to its contribution to regional economic growth.

The actors' perception of Murcia's limited availability of water is predicated upon the concept of water scarcity, which is expressed in terms of a structural deficit basically due to geographical factors (member of EPA, member of SMCE water management unit, member of the municipal council for town planning, member of Aquagest Región de Murcia, personal communications).

The second coalition we find includes actors at basin, national as well as European scale. Involved groups are mainly NGOs, some of which operate at a basin-wide level, while others are national branches of international NGOs such as Greenpeace, or national NGOs such as *Fundación Nueva Cultura del Agua* (FNCA). The leftist party *Izquierda Unida* partly joins the coalition, and members of the green faction of the European Parliament support it, too.

Water is seen by them as primarily forming part of ecosystems. Actors complain that rivers are appreciated rather as mere channels transporting valuable water, and not as the habitat and integrated life-supporting system they are (journalist of La Opinión de Murcia, personal communication). For this coalition, any human use of water gets second priority.

The water deficit is understood as a result of human agency, such as excessive and partly illegal water use, and wrong water management. The roots of the problems are seen in large-scale infrastructure: the Tajo-Segura channel would have led to high expectations among agricultural entrepreneurs, therefore encouraging further extension of irrigation. The same would be happening now regarding sea water desalination, as hopes for an easy solution to water shortage were leading to rising demand in gated communities and elsewhere. The resource is seen as artificially run short by the illegal transformation of Spain's South-East through speculation in real estate (members of EEA, Greenpeace, PR, personal communications).

The third coalition that has been identified in the conflict comprises the national Ministry of Environment and the CHS. Their problem analysis follows broadly the lines of NGO's perceptions with some significant exceptions concerning the role of gated communities. The causes of the crisis are sought for in human agency: Especially the rapid economic as well as demographic growth is seen as responsible for today's problems, and their beginning is dated back to the 1970s. However, golf courses and gated communities are seen as absolutely unproblematic (member of CHS, personal communication).

Actors in Conflict

The above section explained how fundamentally different perceptions of the existing water problems are among actors in Murcia and Spain. Likewise, their reactions and proposed

solutions to the described new water uses and the consequences they have on the Murcian waterscape are not the same.

Legitimacy of water allocation

According to the perceptions, legitimacy of different water uses, and even more problematic, the legitimacy of the existing water law are assessed in conflicting manners.

The coalition of actors that opposes gated communities does so primarily because it claims that human water extraction is legitimate only to the point that natural ecosystems are not endangered. Rivers, following this line of argumentation, will not be able to maintain their functions if further extractions take place. Water consumption by the society therefore urgently needs to be reduced, instead of allowing for a further increase, allowing at least for the ecological minimal flow of the river (10% of the MAR, according to CHS, n.d. C). As long as this is not guaranteed, de facto water allocation is highly illegitimate. This point of view is expressed in a humoristic manner by changing the omnipresent slogan of the regional government “Agua para todos” (water for all) in “Agua pa’ las ranas” (water for the frogs) (see Fig. 3).



Figure 3: Official claims at the City Hall of Murcia, and small-scale protest in the city’s busy pedestrian area (photos: A. Zimmer).

Defining water as a good primarily producing economic wealth leads to another path of argumentation followed by the regional government and its coalition partners. They hold that any quantity discharged into the sea is lost to society, so that extraction up to the drying out of the river channel is justified.

Following these thoughts on legitimacy of current water allocation, actors’ assessments of the Spanish water law differ greatly, too. Open criticism of the Law by the coalition around gated communities is rarely heard. However, the fact that its rules are seen as illegitimate, and impracticable, can be seen by the fact that illegal water use has been identified in Spain in several cases, and recently, gated communities have been involved in these accusations (Cadena Ser, 2004; FNCA, 2004; Turrión Peláez, 2005). Existing rules are thus ignored, and ongoing ground water extraction has to be understood as silent protest against allocation procedures.

NGOs, on the other side, see the existing water law very positively (“We have a wonderful water law”, member of Greenpeace, personal communication). According to them, it is the main instrument for regulating water use and should be applied to the letter. Strategies of NGOs thus mainly include investigations into possible illegal water extraction by gated communities. Furthermore, legal objections against the construction of gated communities are formulated according to laws such as the Real Decreto Legislativo 1302/1986 which lays out the principles that regulate the preparation of Environmental Impact Assessments, and Decreto no. 693/72 dating from 9 March 1972 which protects existing irrigation areas.

Water management paradigms: supply vs. demand orientation

These positions lead to the coalitions subscribing to opposing water management paradigms – supply versus demand management – with the national level of State administration being caught in what Bryant & Bailey (1997) describe as the dual role of the State as developer and protector of natural resources, thus opting for a middle path of a combination of both (cf. Chatel, 2006).

The first coalition that includes the gated communities themselves favours supply-side solutions to the prevailing problems. Following this line of thought, it is mainly a lack of interregional and national solidarity that inhibits good water management in Spain, as the problematic geographical factors make it a necessity for policy to correct them. Especially government officials thus still hope for a future Ebro transfer as the only solution that seems viable to them (member of EPA, personal communication). This view is shared by members of the irrigation agriculture association of Murcia, claiming that water courses in Spain should be connected “like the electric grid” (member of CRCC, personal communication) for more fair distribution. The interviewed member of SMCE’s water management unit favours sea water desalination instead as he questions the economic viability of long distance water transfers (personal communication). Demand management is viewed as a marginal option that can only accompany supply-side solutions. It is as such that the law on water saving that the Government of Murcia adopted in 2006 has to be interpreted (cf. Comunidad Autónoma de la Región de Murcia, 2006).

Solutions proposed by the second coalition of actors comprise as a first step the establishment of a correct inventory of water uses necessary to then impose strict demand management regulations. It is a lack of political will to implement relevant existing rules which is seen as a basic bottleneck for good water management. NGOs further demand a moratorium to be pronounced on new irrigation surfaces and golf courses (member of EEA, personal communication). IU proposed such moratorium in the regional parliament in 2007 but the attempt failed (cf. En Cieza Digital 04.03.2007).

The third coalition combines both approaches in its recent policy. Supply-side solutions are supposed to come from sea water desalination and enhanced waste water recycling only, whereas transfers are not considered after the Government’s decision in 2004 to cancel the Ebro-transfer. However, the Ministry of Environment favours options of demand management as promoted by the EU and the ruling PSOE, such as the modernisation of irrigation technologies. The CHS takes a different stance here, as it is mainly run by engineers that have been trained to design prestigious large-scale infrastructural solutions. Unlike NGOs, the CHS does therefore not mention demand management when discussing possible relief from the actual situation (member of CHS, personal communication). Different sections and employees of the CHS seem to identify themselves with competing aims, however: while some show solidarity with regional economic actors, others search for strict application of the water law. On the one hand, the CHS is a service provider to the regional economy; on the other hand, its role is the protection of the public hydraulic domain. Its actions are thus contradictory and its role difficult to discern. The coalition seems to be divided deeply between modern and postmodern paradigms of water management.

Ecology and Economy in Modern Societies

The adherence to these water management paradigms is embedded into an even deeper conflict about the type of society that is aimed for and about today’s meanings of notions such as development and modernity.

NGOs criticise the regional and local governments as well as construction enterprises for relying on a development model which, according to them, is extremely short sighted. Depleting the water resources is seen as synonymous to endangering the survival of the whole region (member of Greenpeace, personal communication). Instead, a New Water Culture is claimed which encourages new ways of organising the economic and social

development of the basin, including new patterns of production and consumption (cf. Olmo Bau, 2000).

The construction company sees this opposition as a general rejection of modernity which is going to lose out sooner or later (member of SMCE's water management unit, personal communication), and ridicules the NGOs attitudes as backward. The representative of the regional government follows the same line of argument. Moreover, he sees NGOs criticism as rooted in a Marxism that does not acknowledge freedom as the superior human value and claims that their attitude is being destructive. For him, the conflict is one between competing ideologies: liberalism and marxism (member of EPA, personal communication).

Conclusion

The Region of Murcia finds itself in a situation, where accepted paradigms of water management differ greatly and ideological divides make communication about the raised issues difficult. Water plays diverse roles in the various conflicts that crop out due to the rapid spread of gated communities. According to meanings and values assigned to it by the actors, according to their subjective constructions of the water scarcity Murcia is facing, opinions vary on how to allocate and manage the precious resource.

The main opposing coalitions agree that the water management problems are highly politicised. However, they differ in their explanations as to what exactly is being politicised: While one party identifies regional identities and egoistic interests to be interfering with "rational" management practices, the other claims that natural geographical factors such as limited availability of water are presented as unfair in order to demand "irrational" political solutions to the water crisis. The CHS, in contrast, takes a rather depoliticising stance, holding that technical solutions have to be found to accommodate different stakes of the society.

Further dialogue is needed amongst different stakeholders, as discourses exist in quite separate spheres of society and exchange seems difficult due to ideological divisions. This exchange is needed, however, in order to preserve ecosystems and take economic needs of the region seriously at the same time. The first question to discuss in this regard is the question which kind of development is wanted in the region, and how different ideas on development can be accommodated within the area. Facing climate change and recurring "extreme" droughts, golf tourism in luxury settlements does not seem to be the best option for the region to exclusively base its economic growth on. As economic development, especially if drawing on the natural beauty and attraction of an area, is depending on its environmental state, precautionary leaders should be open to search for a more sustainable manner of developing its resources, be it land or water. Murcia, instead of encouraging yet another water intensive economic activity should therefore use its economic dynamic to shift its economical pattern towards water extensive activities.

It is now Spain's national challenge to formulate a consensus on water policy that can bear further than until the next elections. Spain, as a member to the EU and a democratic, federal State, has to strike a difficult balance: on the one hand, the goal of the EU Water Framework Directive (WFD) to reach a "good status" of all European water bodies by 2015, has to be met, on the other hand, regional politics have to be accommodated that shape the water demand and aim at further economic development of the traditionally agricultural region. While the EU WFD, the National Water Act, and Murcia's Law on Water Saving are quite progressive when it comes to the protection of the environment and the sustainable use of the resource, traditional and new economic elites of Murcia and abroad are rather reticent to let go of modernistic paradigms of water harnessing. We are thus confronted with progressive legal provisions, and rather short sighted actual developments on the ground.

Certainly, the time of large scale river diversions in Europe has touched its end, as possible positive outcomes come at too high a price. For a start, developments that are potentially harmful to water depending ecosystems should be watched extremely closely as for their accordance with existing rules and regulations. An important measure in this regard is an

enhanced transparency of the CHS and its concession policy which allows for public participation in the allocation process. Moreover, internally reported infringements of the laws should be made public in order to encourage discussion on consequences of actual policies, and prosecuted timely.

Speaking from a North-West European perspective, the role inhabitants of gated communities play in societal dialogues on Murcia's water related conflicts has to be addressed. As integration of older citizens immigrating to southern Europe is in more often than not refrained by little knowledge of local languages and lack of economic activity, and even more difficult when living in gated communities, engaging in this dialogue can be a way of taking actively part in Murcia's society. Also, the clientele of gated communities should use their economic weight to call for ecological standards and a less consumptive use of Murcia's appreciated landscape in the development and management of these resorts. In this way, their interest in South-East Spain could play a constructive role in attenuating Murcia's water conflicts instead of fuelling them further.

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