NAVIGATING RIVER CONTRACTS

A process for empowering local communities or a tool for the depoliticisation of nature? Case studies from Lombardia and Veneto (Italy)

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ABSTRACT: Since the 2000s the European Union Water Framework Directive has aimed to protect and restore the chemical and ecological status of water bodies in Europe, emphasising the importance of public participation in this process. Within this framework, River Contracts (RCs) have been hailed as innovative participatory tools that enable all the stakeholders of an inland water body to take part in decision-making for the best management of water resources, thereby contributing to local development. This contribution focuses on the RCs in Lombardia and Veneto, two regions situated in the north of Italy. In these heavily industrialised areas with high hydrogeological risks and degraded waterscapes, several RCs have been developed in the last few decades. However, questions still linger regarding the extent to which riverine communities are genuinely involved in the decision-making process and whether the relative socio-cultural values of the water bodies are maintained. The two RCs analysed apply to water bodies heavily prone to flooding and have been developed with little or no involvement of the local communities. We argue that the narratives surrounding RCs do not adequately acknowledge the power dynamics and economic interests behind these processes, and that potential conflicts related to river bodies are not adequately addressed with

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1. Introduction

Water is essential for all life on Earth, playing a fundamental role in biochemical processes (Chaplin, 2001). However, due to climate change and further intensification of resource use, pressure on this precious resource is increasing, putting water security at risk – both in terms of quantity and quality –for a growing number of communities (Cook & Bakker, 2012).

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In response to this situation and to promote effective water governance, the UN General Assembly proclaimed 2018–2028 as the International Decade for Action on Water for Sustainable Development. However, the results have been mixed (if not poor), so far, and the goal of universal access to drinking water, sanitation and hygiene is still long way off (2022 Sustainable Development Goals [SDGs] Report). Italy is not exempt from the challenges of water scarcity or the impact of extreme events. Indeed, each year, most Italian regions experience either floods or severe droughts – extreme weather events that have recently intensified in both frequency and severity. These events carry a high human and social cost, significantly impacting lives, economies, and infrastructure nationwide.

Since the 2000s, the European Union (EU) Water Framework Directive has aimed to protect and restore the chemical and ecological status of Europe's water bodies, stressing the importance of public involvement. Within this context, river contracts (RCs) are seen as innovative participatory tools, enabling stakeholders around a water body to contribute to decision-making for sustainable management and local development. This study focuses on RCs in Lombardy and Veneto, Northern Italy – regions marked by high hydrogeological risk, degraded waterscapes, and industrialisation. Every season brings either floods or droughts to these contiguous regions, with corresponding stress and impacts on the territories and their communities. Despite the potential of RCs, this research explores whether these social mechanisms genuinely empower communities or merely serve to depoliticise environmental issues by marginalising and neutralising disagreement and, thereby, avoiding potential conflicts. Questions remain about the extent of community involvement and the preservation of local socio-cultural values in these processes.

Literature on environmental conflicts, particularly within the fields of political ecology and environmental justice, typically centres on the use of natural resources for value extraction. This work, however, examines how public participation can be used to pre-emptively prevent any dissent to emerge. In deeply anthropogenic landscapes, water bodies exemplify the socio-spatial dialectic (Soja, 1980), whereby human interventions in the environment and the natural environment's influence on human development shape each other in a dynamic, reciprocal relationship. This interaction is not one-directional but continuously evolving, with power dynamics playing a critical role: those who hold power determine whose needs and interests are prioritised in shaping and managing these water bodies. As a result, the interplay between human activity and environmental forces reflects not only ecological processes but also social hierarchies and control.

This contribution is based on several years of engagement by the authors in observing and analysing RC processes. Our research methodology includes a comprehensive review of relevant academic studies and grey literature, providing a contextual foundation and insight into the existing body of knowledge on RCs. This analysis is further enriched by in-depth interviews conducted with key stakeholders involved in these processes, including policymakers, local government officials, and representatives from environmental organisations. These interviews offer firsthand perspectives on the practical challenges, achievements, and complexities within RC initiatives, enabling a nuanced understanding of both the strategic and operational aspects of RCs. The article begins with an introduction to European environmental governance (in particular, the Water Framework Directive), followed by a critical analysis. The following section seeks to challenge the underlying nature of this perspective of RCs in Lombardy and Veneto. The article then provides a comparative overview and analysis, outlining its core principles, political dynamics and practices. Finally, the discussion moves on to explore the primary issues and debates surrounding this type of participatory tools in the concluding sections.

2. Contemporary European Environmental Governance: the case for the Water Framework Directive

Contemporary environmental governance in EU is increasingly defined by a holistic approach based on the interplay between sustainability, green growth and participatory mechanisms (Di Quarto & Zinzani, 2022). This type of approach aims to address pressing environmental challenges while promoting economic resilience and social equity, as contemporary (not only European) societies find themselves amidst climate change, biodiversity loss, and resource depletion. This comprehensive strategy is aimed at fostering a "sustainable future", as recently also stated in the 8th Environmental Action Programme (EAP):

> *there is a unique window of opportunity for the Union in the next decade to show global leadership on sustainability by tackling the urgent sustainability challenges that require systemic solutions… to achieving its environmental goals up to 2030 and achieving the UN 2030 Agenda and its SDGs.* (EU, 2023, §4).

Key aspects of such a transition are therefore based, first of all, on the sustainability paradigm which relies on the need to balance ecological integrity with economic and social well-being, ensuring that current and future generations can thrive. In this sense, the EU has established various policy frameworks (such as the European Green Deal and the Biodiversity Strategy) with the aim of reducing greenhouse gas emissions, enhancing biodiversity, and promoting sustainable resource use. Also, the 'green growth' principle – today shifted to the goal of a 'circular economy' – is considered to be central to sustainability effort (having the aim of reducing waste, reusing materials, and recycling), thereby minimising the environmental impact of production and consumption through individual consumers' practices and the 'ecological modernisation' (EM) process.

The core idea is that economic development can be decoupled from environmental degradation through technology and consumers' adjustment choices, resulting in economy and ecology no longer being mutually exclusive (Baeten, 2000). EM has been characterised by investments in renewable energy, sustainable agriculture and green technologies (as the EU has committed to becoming climate-neutral by 2050), with the aim of reaching a win-win situation, having also the potential for new jobs creation in sustainable sectors and full use of clean technologies, enhancing economic competitiveness and sustained growth. Moreover, environmental governance, in particular, increasingly relies on participatory mechanisms that engage citizens, stakeholders, and local communities in decision-making processes (EEA, 2023), since public participation (PP), fostering transparency and accountability, may empower citizens to have a voice in environmental policies that affect their lives. This is particularly relevant in the context of the EU, where public trust in European institutions has always been at risk (Schout & Jordan 2005; Rauschmayer, Paavola & Wittmer 2009; Newig & Koontz 2013). Engaging various stakeholders – including businesses, NGOs, and local authorities – PP aims at more comprehensive and effective environmental policies through collaborative approaches that may orient diverse perspectives and expertise to innovative solutions (EEA, 2014). In accordance with the Aarhus Convention (2003):

> *access to environmental information, public participation in environmental decision-making, and access to justice, including transparent engagement with and between public authorities at all levels of decision-making, non-*

> *governmental actors and the broader public… are important for ensuring the success of the 8th EAP*. (EAP, 2022, §35).

As much scholarship has asserted, participatory mechanisms that enhance public awareness and understanding of environmental issues and involve communities in monitoring, conservation efforts and local planning help build a sense of ownership and responsibility toward the environment (Grodzińska-Jurczak & Cent, 2011; Lundmark & Johnsson, 2013; Hedelin, 2015; Jager et al., 2016).

A striking example of European legislation that might be characterised as over-reliant on PP is the Water Framework Directive (WFD), adopted in 2000, as a cornerstone of European environmental governance aimed at ensuring sustainable water management across the EU. It is a prime example of an environmental document embodying the principles of sustainability green growth, and participatory mechanisms. Nevertheless, while advancing the management and protection of Europe's water resources and water governance, it has been also criticised for its lack of concrete ecological goals, the depoliticisation of water basins' subdivision and its technocratic approach (Di Quarto & Zinzani, 2022; Paige & Kaika, 2003). In fact, despite the WFD supporting a holistic perspective on water resource management, it creates further bureaucratic compartmentalisation and fragmentation of responsibilities and obscures political accountability (Kaika, 2003; Melo-Zurita et al. 2015). This is mainly due to the transformation of water management into integrated river basin organisations, representing a shift from administrative to hydrological principles. The most direct consequence of such an arrangement is an increase in the number of actors who are either granted or stripped of jurisdiction and responsibilities over the management of water, resulting in a de-politicisation of the sector (Di Quarto & Conte, 2021). The WFD also, for the first time, fixes ecological targets for these contiguous regions – i.e. emissions limits and standards for water quality – in European water bodies. Nevertheless, the directive still poses important issues related to such topics: it has to rely on other, neighbouring policies to ameliorate ecological targets (Wiering et al, 2020); ecological and hydrological indicators are monitored by different institutions, therefore generating irregular timings and purposes (Arrighi et al, 2021); and the directive has not reduced diffuse pollution in many river basins, as a very intensive mode of production still persists in the agricultural sector (Bouleau et al, 2020). Moreover, recently, it has been necessary to revise the lists of additional pollutants in surface and ground waters to meet the quality standards initially set by the directive (EC, 2023).

For our concern, it is important to highlight how the WFD strongly encourages participatory mechanisms and stakeholder involvement, putting a major emphasis on public participation in order to include diverse perspectives in decision-making processes. As for other participatory tools, transparency is considered to be pivotal to make information available to the public regarding water quality, management plans, and progress towards achieving good ecological goals. Accountability is aimed at fostering trust among stakeholders, active participation and creating (or recreating) a sense of ownership over water resources (EU, 2014). This is considered to be effective in empowering communities to protect and manage their water bodies, even if more sustainable outcomes are not associated with more participation. The WFD lacks clear definitions about the logics of public participation to be implemented though. As a consequence, over the last 15 years, critical scholars have highlighted the limits and even degenerations of the directive actors' involvement. Local civil society stakeholders are in fact often excluded from decision-making processes, severe power asymmetries persist and, in some cases, a pre-decided participation – often aiming at

neutralising dissent – exacerbates power and decision-making asymmetries between stakeholders (Di Quarto & Zinzani, ibid; Valinia et al, 2012; Kaika, 2003).

3. River Contracts: a comparative analysis

The Water Framework Directive (WFD) relies on citizens' consultation and active participation, considering the geographical scale of the river basin/hydrographic district as optimal. This approach underlies the logic that enabled the creation of RCs as new forms of governance where local communities play pivotal roles, as main actors "in protecting rivers as collective resources, stopping the degradation and disappearance of natural landscapes, maintaining biodiversity and the environment, and achieving more efficient use and sustainable management of these valuable resources" (UNESCO, 2015, p. 14). First introduced in France and Belgium in the 1990s, in 2000 they were identified at the international level as suitable processes for promoting the sustainable development of territories at the river basin scale. They constitute voluntary agreements between stakeholders for managing water bodies and involve participatory, evidence-based action plans, with the aim of improving ecological and socio-economic regeneration (Scaduto, 2016; Brusarosco & Visentin, 2023; Venturini & Visentin, 2024).Both public and private sector interests commit themselves to implementing a consensus action programme, where all participants (including local authorities, public departments and agencies, water users and NGOs) come together in a river committee, as common ground where views can be expressed and discussed (Bastiani, 2011). In Italy:

> *Since their introduction in 2003, more than 2500 municipalities have been involved in the river contract processes… local communities lie at the centre of a participatory and governance process; they become the main actors in protecting rivers as collective resources, in discontinuing the degradation and disappearance of natural landscapes, in maintaining biodiversity and the environment more generally, and in achieving a more efficient use and sustainable management of these valuable resources.* (Fasoli et al., 2021, p. 476)

Due to their flexibility and adaptability to different local legislations, they have become popular internationally. In Italy, since 2003, Lombardy and Piedmont have pioneered RCs as "tools for identifying shared strategies, actions and rules for the horizontal and vertical integration of policies, programs, action plans, for the purposes of fostering the participation of local communities and re-qualifying each river basin, even from socio-economic, landscape and environmental standpoints" (Scaduto 2016, p.7). There are currently more than 190 RCs announced or being developed in Italy, but only about 30 have been signed and are under implementation (Fasoli et al, 2021). Despite regional differences, the RC process follows a structured framework divided into distinct phases. Certain procedural steps are mandatory for all RCs to complete before the final signature. These include RC assembly of stakeholders ratifying of various key documents, such as a memorandum of understanding, a preliminary investigation, a strategic document and a program of actions.

3.1 RCs in Lombardy

In Lombardy, the RC has been adopted to address several challenges, such as water pollution and hydraulic risk, habitat restoration, and the development of tourist itineraries along rivers. In 2004, the Lombardy Region launched the first Italian RC, for the Olona-Bozzente-Lura

subsystem in the area of the Lambro-Seveso-Olona basin (Milan area), where the concentration of pollution issues, hydraulic risk, ecosystem quality and fruition was unparalleled. Subsequently, more RCs were signed: Seveso, Lambro, Mincio, Adda, Mella Oglio. At present, 12 RCs are on-going, with 7 contracts signed. Examples of actions include a new water management plan, new regulations for the sewerage system, a drains survey carried out by the Regional Environmental Protection Agency, and fluvial re-naturalisation projects (Regione Lombardia, 2017). Bocchi et al (2007) underline that this process, for the Olona case in particular, generated the involvement of several public bodies in the basin region for the first time ever. In this instance, local differences in the process shape differentiated strategies and actions.

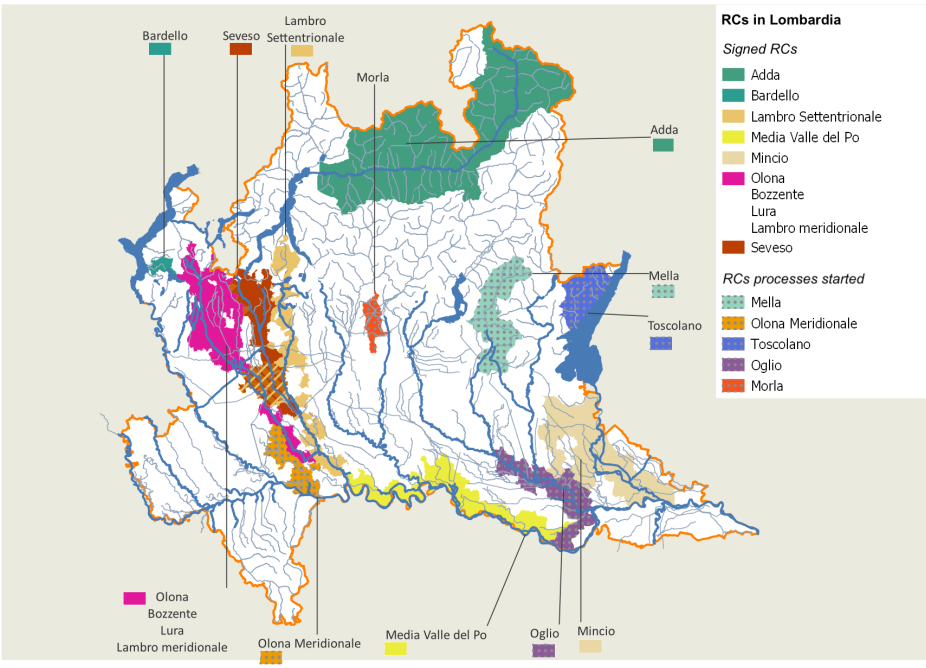

Figure 1 – RCs in the Lombardia region (https://www.contrattidifiume.it/it/contratti-di-fiume/contratti-di-fiume/)

Despite their positive outcomes, RCs faced different challenges, such as fragmentation of interests, differences in priorities between stakeholders and the need for adequate financial resources. In particular, the lack of accountability and the poor participatory mechanisms have given rise to local conflicts, especially for the Seveso River (Di Quarto & Conte, 2021; Osti, 2017).[1] In other cases, RCs stopped working as they were not able to obtain initial goals (i.e. water quality) or due to structural impasses. In the case of the Mella River, for example, water quality remained highly compromised even after more than 10 years of the RC, as the whole area still suffers from historic pollution resulting from the Caffaro chemical complex (Beretta, 2021, p. 166), an Italian Site of National Interest (SIN). In the Mincio River, the contract is proceeding but issues connected to lack of communication among institutional partners (Beretta, 2021 p. 181) and the presence of another SIN have hindered its full potential

[1] It is worth mentioning that the Seveso RC was signed only by institutional actors.

and, so far, it has been used in a technocratic manner (Galli & Bracchi, 2021). In the case of the Olona River, the first RC in Italy, the process has shaped numerous actions indicated by the contract, which pursue common objectives like reducing pollution and hydraulic risk and upgrading the environmental and landscape systems connected to the river (Tosi, 2021). Nevertheless, actions along the river are affected by fragmented approaches that are not always able to integrate a common integrated goal, as in other contracts.

3.2 RCs in Veneto

Veneto is a water-rich region, famously home to Venice, a unique city literally built on water. However, landscape changes resulting from high urbanisation levels and inadequate water management infrastructure are leading to increasing water-related issues (Zaccariotto & Ranzato, 2009). Combined with the rising frequency of extreme weather events, this has resulted in persistent flooding that heavily impacts both local territories and communities (Sofia et al., 2017), making the region "an unpredictable territory" (Anguillari 2013, p. 3). The first RC in Veneto began in 2012, and as of August 2024, sixteen RCs are underway, as shown in Figure 2. Nine RCs have been formally signed: Area Umida Laguna di Caorle, Area Umida Laguna Nord, Fiume Meolo-Vallio Musestre, Fiume Marzenego, Foce Delta del Po, Lago di Garda, Risorgiva, Fiume Mincio and Fiume Alto Livenza.

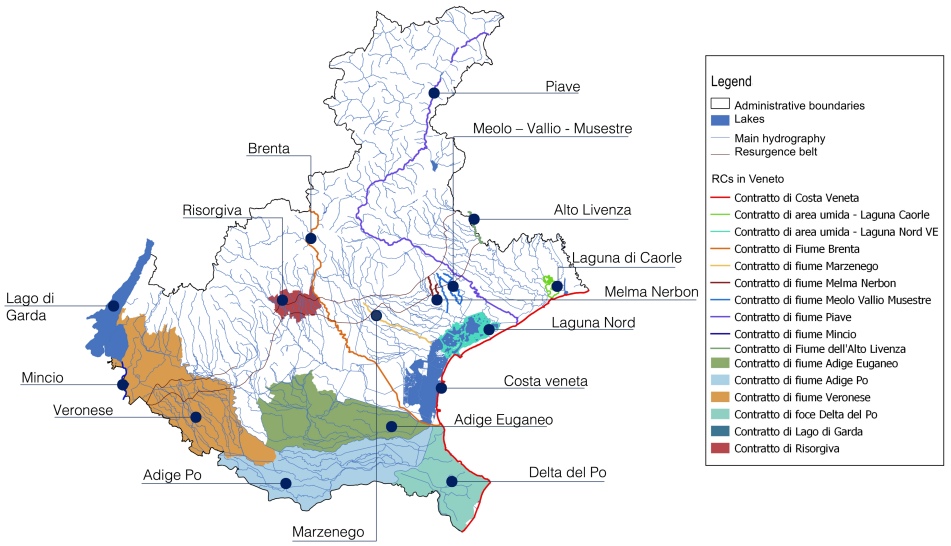

Figure 2 – RCs in the Veneto region (Direzione Ambiente Veneto).

A detailed discussion of RCs in Veneto highlights several critical issues. Of the signed RCs, only four have implemented the required control and monitoring actions, indicating a lack of sustained interest following the formal agreement. This is concerning, as key actions (particularly control and monitoring) are essential at this stage. Furthermore, inconsistencies and significant shortcomings are evident across various RCs. Indeed, Pattaro (2023) presents a bleak overview of RCs in Veneto. As an active participant since the earliest processes, he notes that despite the participatory framework, there have been numerous interferences from institutional actors. Additionally, many initiatives have been compromised by the overlapping

political and technical roles of certain stakeholders, well summarised that in a participatory process in which "one is either a referee or a player" (Pattaro, 2023, p. 220). Furthermore, regional government actions have sometimes undermined the legitimacy of RCs, especially when certain decisions within these processes were questioned.

The Marzenego RC, signed in 2015, included 64 planned actions, yet only 37 found responsible stakeholders, with the last recorded activity being in 2017. Similarly, the Meolo-Vallio-Musestre RC, signed in 2022, faced setbacks when key participants – two municipalities, the University of Padua, the Water Management Consortium, and the Veneto Regional Agency for Environmental Prevention and Protection – ultimately withdrew their support and did not sign. The Piave River merits special attention due to its cultural, economic, and geographical significance. Although the RC process for the Piave began in 2014 and reached the *Programma d'azione* stage, it stalled before signing due to numerous controversies along the river. As in many other similar cases in Italy (Osti, 2017), there was no public debate regarding the highly contested construction of detention basins during the process. Four RCs initiated between 2015 and 2016 (Adige Euganeo, Melma-Nerbon, Tra Adige e Po and Veronese) progressed only to the second phase – preliminary investigation – before halting. In an effort to revitalise the RC processes in Veneto the first Regional Assembly of RCs was held in 2023, aimed at fostering connectivity among regional initiatives. Despite its positive intentions, the assembly faced criticism for not including all relevant stakeholders in the process. Seven RCs are led by reclamation consortia, a decision that, as Carlo Carraro, the Secretary General for the Environment of the Veneto Region, notes, was made because these entities "operate daily within the hydrological challenges of the territories" (Carraro, 2023, np). However, this does not directly translate to more efficient processes: only two of these contracts have reached the signing stage, while the others have been stalled for years. This choice reflects a technocratic approach to water management that does not effectively engage local communities on issues extending beyond hydrological challenges or support the completion of the RC process.

4. How effective are RCs?

RCs have emerged as a collaborative mechanism for managing riverine issues, aiming to balance ecological goals, social equity, and economic interests. However, these type of governance tools must be analysed with regard to the interplay between environmental issues and social power dynamics: RCs are influenced by existing power dynamics among stakeholders, including government bodies, corporations, local communities, and NGOs. Water resources are not just natural assets but are deeply intertwined with social relations (Linton & Budds, 2007; Swyngedouw, 2005). In many cases, RCs may reinforce existing inequalities by prioritising the interests of some stakeholders (which may change during time), potentially marginalising local communities' interests. As promoted by European legislation (EEA, 2014), integrating local knowledge and addressing the concerns of riverine communities requires effort to actively involve all the actors in the negotiation and decision-making processes. Ensuring meaningful participation from all stakeholders can be difficult with regard to issues where power imbalances already exist. Also, as direct consequence of WFD's river basins re-organisation, multiple jurisdictions and stakeholders complicate the implementation of cohesive actions. Lastly, but most importantly, RCs are focused on ecological fixes, potentially neglecting long-term social and political dimensions of water management. Moreover, concerning the regional disparity (Lombardy and Piedmont being the most prolific), Fasoli et al. point out how in the mountainous region of Val D'Aosta, no RCs have been signed, as "conflicts related to hydropower production… have made local

authorities particularly cautious towards participatory processes" (2021, p. 478). In a twisted manner, then, the PP process is neglected in order to avoid (conflictual) confrontation between local communities. In this sense, such mechanisms may actually *reinforce* traditional systems of governance and exploitation and existing power dynamics or practices in a manner that may not fundamentally work to find solutions for the urgency of the current environmental crises. In this sense, RCs might be seen as a response to a post-ecological paradox: a situation where the urgency of environmental crises simulates solutions to the environmental crisis by keeping on 'sustaining the unsustainable' (Bluehdorn & Welsh, 2007; Bluehdorn, 2014; 2016). Many RCs address immediate environmental issues but do not engage with the underlying causes of ecological degradation (e.g. land consumption). The solutions offered may only provide temporary relief rather than a long-term transformation.

Concerning the democratisation of governance, Venturini & Visentin (2024) explore the dual dichotomy between top-down and participatory approaches and whether an RC is viewed as a territorial management project or as a participatory process. They highlight that RCs can involve different combinations of these categories, but it is only when an RC is developed as a highly participatory process that citizens become effective territorial actors. There is broad agreement in the literature that RCs can contribute to effective water management. Brusarosco & Visentin (2023) highlights how RCs can foster renewed community interest in local water bodies, and similarly, Venturini & Visentin (2024) emphasise that RCs can help cultivate a community-based sense of place. Venturini & Brusarosco (2023) identify several key factors that facilitate successful RC processes, including the social context of the area, political will and engagement, dedicated staff, familiarity with participatory processes, effective communication, thorough stakeholder mapping and analysis, a well-established coordination structure, organised on-the-ground activities, and robust scientific and technical support. The presence of these elements can significantly enhance the RC process, while their absence can impede its successful completion.

In summary, RCs have potential benefits such as:

- *Improvements in water quality and governance among institutional actors*: RCs can facilitate coordinated efforts among institutions, leading both to enhanced water quality and more effective governance. By aligning goals and establishing clear responsibilities, institutions can work together to address specific issues or develop possible actions in cooperation.

- *Better information sharing on water issues (identifying who does what*): a RC encourages transparent communication and data sharing among stakeholders, helping clarify roles and responsibilities. This improves coordination by making it easier to identify which organisations or individuals are responsible for specific aspects of water management, reducing overlaps and gaps in efforts.

- *Increased community interest in water bodies*: by engaging local communities in water management discussions and decision-making, RCs can foster a greater appreciation and sense of stewardship for nearby water bodies. This community involvement can lead to stronger advocacy for sustainable water practices and initiatives.

- *Integrated planning:* RCs promote an integrated approach to planning that considers the interconnectedness of different actors around the water body. In theory, this

enables stakeholders to potentially create more cohesive and sustainable development plans, balancing ecological health with community needs and economic growth.

However, it is worth questioning to which extend these results are achieved. At the same time, RCs do pose important issues, such as:

• *Fragmented water management*: water management in RCs is often distributed across various organisations and administrative bodies, leading to disjointed planning and execution. This fragmentation can result in competing priorities, inconsistent policies, and inefficiencies in managing water resources. Without a cohesive approach, efforts to address water quality, flood control and economic development can become stuck, reducing the effectiveness of the RC and making it difficult to implement long-term solutions.

• *Shifting responsibilities dilute accountability*: in the context of RCs, responsibilities for water management and conservation often shift between different local authorities, regional bodies, or private stakeholders. This lack of a stable, clear structure can dilute accountability, making it challenging to hold any single entity responsible for outcomes or failures. Such shifting roles can weaken the RC's overall governance structure, making it difficult to build trust and achieve consistent results.

• *The voluntary nature of contracts*: lack of political obligations hinders effectiveness. RCs are voluntary agreements without binding political or legal obligations, meaning that participants are not required by law to follow through on commitments. This voluntary nature can undermine the effectiveness of RCs as stakeholders may deprioritise RC goals in favour of other interests. Without enforceable mandates, some actors may withdraw from responsibilities or ignore specific actions, weakening the RCs' impacts.

• *Weak community participation:* RCs often suffer from limited community engagement, enabling powerful stakeholders to dominate the agenda and sidestep local interests. These influential actors may avoid discussing controversial projects or decisions, using technical or engineering language to control the discourse and obscure the implications of certain actions. This exclusionary approach marginalises local voices and reduces opportunities for meaningful community involvement, leading to outcomes that may not align with the needs or values of the affected water bodies and communities.

• *Engineering supremacy (the 'ones who know better')*: the expertise of engineers and technical professionals is often given precedence in RCs, with local knowledge and community concerns viewed as secondary or irrelevant. This 'engineering supremacy' can alienate local residents and reinforce a perception that decisions are being made solely by experts without genuine consideration of local needs. Over time, these dynamics foster distrust, as communities feel sidelined by an approach that prioritises technical solutions over locally informed, socially inclusive perspectives.

• *Schizophrenic narratives/policies around (un)sustainable territorial configurations and emergency narratives that leads to citizens' lack of trust towards institutions*: RCs can reflect conflicting narratives around sustainable versus unsustainable land and water use, often swinging between environmental preservation and emergency-driven

development policies. These contradictory approaches can confuse and frustrate citizens, who may perceive a lack of coherent vision or long-term strategy from institutions. This inconsistency, combined with emergency-driven rhetoric, weakens trust in institutions and can lead to public disillusionment with the RC process, ultimately affecting its success.

5. Conclusion

Two clear themes arise from our discussions: whether the promise of RCs will be fulfilled and whether this is enough to really empower local communities for a sustainable future. Building on our work, we wish to highlight several interconnected reflections. First, as previously demonstrated, RCs can be effective for improving water quality and raising awareness about water bodies under certain conditions. However, a deeper analysis reveals that they are ultimately limited in their ability to reshape existing socio-ecological systems and configurations in any transformative way. These limitations stem from inherent power imbalances and the fact that RCs operate within the constraints of the current legal system, rendering them unable to fully challenge entrenched power structures. Besides, there is a trend towards decentralisation and depoliticisation of water issues in the name of pragmatism framed within a capitalist paradigm where the socio-economic model based on growth remains non-negotiable (Busso, 2015; Swyngedouw, 2005).

RCs often can give the impression that they represent spaces for contestation where, however imbalanced, power dynamics persist. For instance, one of the co-authors of this paper, a precariously employed researcher, was reprimanded by the senior research staff of his department for appearing with academic affiliation on the program of a public event to discuss the potential and challenges of using RCs in water management. The controversy arose because the event was part of a campaign opposing a regional government-sponsored megaproject on a river – ironically, initiated by the same governmental body that funds and promotes RCs.

Without genuine accountability and inclusivity, these contracts may merely serve to pacify local communities without addressing the broader, often conflicting, interests at stake. In other words, RCs may lead to improvements in water quality and habitat restoration, but these changes occur within the confines of existing socio-economic structures rather than challenging the status quo and not engaging with the underlying causes of ecological degradation. Without tackling systemic issues, the solutions offered are far from systemic. Also, while promoting collaboration, they may still prioritise the interests of powerful stakeholders – such as industrial users or large agricultural enterprises – over riverine communities. This can perpetuate inequalities in resource distribution and decision-making power. In summary, RCs represent a pragmatic approach to managing water resources with limited public participation by facilitating collaboration and addressing specific ecological issues. As shown in the case of Lombardy and Veneto, they can lead to incremental improvements that contribute to more sustainable water governance. However, to truly navigate the current 'post-ecological era,' it is essential to recognise the limitations of these processes and strive for broader systemic changes while navigating the socio-spatial dialectic of water bodies.

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