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# Towards a cooperative governance. Lessons learned from the only Italian “River, Lake, and Coastal” Contract

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## Abstract

This paper is a contribution to a special issue of “Interdisciplinarity and governance in water landscapes” with a critical reflection on the “Marta-Bolsena-Tarquiniia” River, Lake, and Coast Contract research experience in the Lazio Region. This Contract is the only one in Italy that covers three different water landscapes, from lake to coast (Lake Bolsena, the river Marta and the Tarquinia coastline), all in the same water basin. However, despite the ambitious premises, research shows how this Contract has partially failed. Indeed, the in-depth study offers a commentary not only to better understand what did not work in this River, Lake, and Coast Contract process, but also to suggest how to move on from a formal coalition, towards much more cooperative practices by reforming the redistribution of responsibilities, power, and knowledge.

**Keywords** River contract, Territorial transformation, Water landscape, Cooperative governance

## Introduction and research outline

Water landscapes are areas with great environmental, economic, and cultural values, as well as being a catalyst for significant challenges to territorial planning practices. River Contracts<sup>1</sup> have been introduced in the last 20 years to recover and preserve environmental resources in areas such as these (Naveh and Carmel 2002; Berger et al. 2007; Bréthaut and Pflieger 2015). As is well known, River Contracts are integrated and negotiated territorial

planning tools based on voluntary agreements specifically designed to tackle water landscape challenges.

The authors report findings from a recent research opportunity<sup>2</sup> which supports the process of the “Marta-Bolsena-Tarquiniia” River, Lake, and Coast Contract in dealing more effectively with water landscape challenges in the Tuscia area. In brief, this contract tried to respond to the complex environmental and territorial challenges of the three water landscapes through a process that

<sup>1</sup> The River Contract is a voluntary tool that applies European directives on water protection and environmental regeneration through the activation of participatory processes with local authorities, citizens, environmental associations, and local entrepreneurs. The tool is a shared commitment to pursue multi-objective interventions in a multi-actor and collaborative context (White and Howe 2003; Grindlay et al. 2011).

<sup>2</sup> The two authors supported part of the Contract’s participatory process and the construction of the cognitive analysis of the area. Two different university departments – with competencies in different but complementary disciplines – were involved in the process as expert support.

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involved both institutional and non-institutional actors.<sup>3</sup> In this context, in seeking adequate territorial planning tools, some research questions about the potential and the limits of the River Contract emerged. Indeed, this planning tool clearly: (a) encourages the appropriate redefinition of the variable target area perimeters, (b) requires the implementation of territorial participatory processes, but it usually takes the need for important governance innovations for granted.

The paper argues that it is none other than the low quality of governance in the process that led to the failure of the “Marta-Bolsena-Tarquinia” River, Lake, and Coast Contract to deal with the relevant challenges of this water landscape. Field and theoretical research output suggest practices to support this non-mandatory territorial planning tool in dealing with water landscapes by explicitly pursuing necessary governance innovations.

In conclusion, the paper is structured as follows. After an outline of the research methodology, the first part presents the theoretical framework of territorial planning approaches and tools to tackle environmental challenges, with specific reference to River Contracts. In the second part, the case study shows the main challenges of the water landscapes in the northern Lazio region, and the whole process of the “Marta-Bolsena-Tarquinia” River, Lake, and Coast Contract, clarifying the actors’ network relationships and the most critical governance issues. Finally, the paper provides findings, and more general conclusive recommendations for innovating the planning tools in water landscapes with a radical transformation of territorial governance.

### Methodological notes

The paper analyses the implementation process of the “Marta-Bolsena-Tarquinia” River, Lake, and Coast Contract, in the north of the Lazio Region (Italy). During one and a half years, from October 2020 to February 2022, the research used a qualitative methodological approach based on desk analysis, informal conversations, semi-structured interviews,<sup>4</sup> project manager shadowing, and participatory observations. In detail, participatory

observations of the process, shadowing of the project manager and informal conversations with all the participants of the process produced fieldwork notes as part of the qualitative information. The shadowing was also designed to investigate the entire network of actors from the manager’s perspective, just as the interviews and the participatory process observations improved understanding of the relationships among institutional and non-institutional actors.

In addition, the desk analysis included local documents relating to the area and the implementation process. Reports from the Regional Environmental Protection Agency ARPA-Lazio have been used to provide data on the environmental status of the water, while reports from the National Institute of Statistics were used for the same purpose in relation to the productive system, demography, and facilities provision.

Last but not least, the research included the construction of a theoretical framework on territorial planning tools for better addressing environmental issues in large-scale planning. The theoretical framework guided the fieldwork and the analysis of the data was also helpful in reaching conclusions in other contexts beyond the case study.

### Theoretical framework

In the last thirty years, the most critical and emerging environmental issues have required new planning tools based on flexibility, interaction, adaptability, and knowledge production (Ali 2003; De Leo and Forester 2017; Lana and McDonald 2005; Hage et al. 2010; Evans 2011). This is particularly evident in the literature on water landscape management, which has reported a progressive change in the approaches used by planners (Healey and Shaw 1994; Margerum 1997; Van der Brugge et al. 2005; Schoeman et al. 2014). Indeed, the failure of traditional water management has removed the underlying assumption that uncertainty is predictable and change reversible within natural systems (Schoeman et al. 2014). Looked at it from another perspective, planning processes have considered complexity and uncertainty while looking closely at the connections between societies, economies, and the environment as an alternative approach (Pahl-Wostl et al. 2011; Martinez et al. 2011; Cook and Spray 2012). According to these approaches, tackling environmental challenges is based on the redefinition of territorial scale by accepting that appropriate treatment of environmental issues usually exceeds administrative perimeters. For this reason, national and international planning literature has long been focused on the link between the appropriateness of scales and the research and debate about the efficiency of territorial planning tools (Born and Purcell 2006; Selman 2006; Mendes 2007; Lowe 2011).

<sup>3</sup> The institutional actors consisted of 12 municipalities, the province of Viterbo, the Local Health District, and two Universities. The private actors involved in the process were: the management agency of Talete S.p.A. (private-public company) for water supply, 6 local trade associations, and one farm. Organized civil associations participating in the process were composed of 18 different grassroots organisations concerned with environmental protection, agriculture, and tourism, 3 labour unions, and an action group for local development. In addition, a number of private citizens were involved.

<sup>4</sup> More than 50 interviews were conducted, in different parts of the process, including the Contract Committee members, mayors, and the project manager.

The redefinition of scale is particularly relevant for planning where environmental challenges exist, because water, river, forest, and other resources do not respect administrative perimeters. The redefinition of perimeters around a water basin, a river or a forest involves a plurality of actors and interests on different scales (Kaika 2003). This requires different relations among actors and the new governance structures (Hering and Ingold 2012). Indeed, large-scale territorial planning and reframed administrative boundaries (the so-called territorial “variable geometries”) result in a broad reconfiguration of institutional and non-institutional actors (included or excluded) in the process. It creates new opportunities to construct territorial plans based on institutional learning and cooperative forms of territorial governance (Medema et al. 2008). In these terms, scale represents the spatial and temporal anchor to deal with a larger range of actors and issues than has influenced territorial planning so far (Swyngedouw 1997; Galland and Elinbaum 2015).<sup>5</sup>

In 2000, the European Commission established the European Water Framework Directive (Directive 2000/60/EC) based on:

- Extensive public consultation and the participation of a wide range of territorial actors,
- The identification of an appropriate scale of intervention concerning environmental resources,
- A specific focus on community action to maintain and improve the quality of water resources,
- The connection between water management, wide-scale planning, and new forms of governance.

Within this framework, the River Contract represents a set of voluntary and negotiated planning tools that implement these European directives through a comprehensive long-term project aimed at protecting nature, reversing the degradation of ecosystems, and promoting extended public arenas.

Literature on River Contracts confirms that the main points outlined above deal better with environmental issues and that the most successful River Contracts have usually produced new governance structures (Bréhaut and Pflieger 2015; Scholz and Stiftel 2005). Indeed, by overcoming administrative boundaries, this tool could strengthen the cooperation between water management

and territorial planning practices (Carter and Howe 2006; Kidd and Shaw 2007). This re-proposes the issue of the appropriateness of the corresponding planning tools, regulations, norms and, last but not least, the availability and quality of technical expertise (Carter 2007).

In Italy, right from the first experiences (Barbanente and Monno 2005; Magnaghi 2008; Pizziolo and Micarelli 2011) to the most recent ones (Caruso et al. 2020; Pappalardo 2021; Pisano and Lingua 2021), the River Contract has been considered a useful tool to: (a) overcome the limits of the sector plans (Magnaghi 2008); (b) integrate the management of water resources with a wider governance dimension (Bobbio and Saroglia 2008); (c) call for an integrated perspective of the territory, which would otherwise not be visible on a local scale (D’Onofrio 2011).

The national debate has largely focused on the redefinition of planning scales by considering a possible intermediate level of government between regions and municipalities<sup>6</sup> (Barbieri and Giamo 2014; Governa 2014). The debate highlighted how the supra-municipal scale is much more appropriate for handling complex issues, especially those related to environmental challenges. Nevertheless, in the Italian context, the definition of the most appropriate perimeters has struggled to translate into different and collaborative forms of governance. Even the most exemplary cases demonstrate that collaborative and cooperative processes tend to remain exceptional and temporary, struggling to promote new and flexible governance configurations (Marchigiani 2006). It would require a considerable investment of economic, social, and cognitive resources to improve coordination practices between actors and policies (Fregolent 2006). Indeed, in most regional and sub-regional Italian contexts, research have confirmed that collaboration and cooperation are critical aspects of territorial planning processes (Gabellini 2018). This stems from various factors. At the regional level, especially in the specific context of the Lazio Region, the traditional Region’s dependence on the Capital would suggest that the territorial processes would be more conditioned by the central level rather than the local one with consequences in planning (Cremaschi 2009).<sup>7</sup> At other levels, the literature has identified a negative attitude towards collaborative and cooperative practices among municipalities, accompanied by a general weakening or even absence of

<sup>5</sup> Although there is no room here to discuss controversies or conflicts, it is well known that there is extensive literature that criticizes the communicative or collaborative planning practices (e.g., Forester 1987; Healey 1992) for relying too heavily on consensus and cooperation. Due to the number of instances of land usage, urban planning, public space, and landscape, the controversial nature of these processes have been explored in Italian literature by, among others, Bobbio 2011; De Leo and Lo Piccolo 2015; Fregolent 2015.

<sup>6</sup> In planning, the regional level, albeit with differentiated manners, declines the national framework and provides guidelines for the territories. With respect to River Contracts, the regions have defined the regulatory framework in order to encourage the use of the Contract tool in a consistent way with national guidelines within the different territories.

<sup>7</sup> For deepening the role of the Lazio Region in local planning, see Cremaschi 2009.

provincial and inter-municipal territorial planning tools (Lingua 2016). At the local level, the small size of technical offices and the limited diffusion of planning practices and attitudes represent crucial factors in the public action (Xilo and Baldi 2012).

In conclusion, the selected theoretical framework serves to underline that environmental challenges require governance reform and change (Fonseca and Ramos 2008; Grävingsholt and von Haldenwang 2016; Zwet and Ferry 2019; Mattila et al. 2020; Göransson et al. 2021) that River Contracts could support and deliver. Since the River Contract may provide an opportunity to extend planning practice beyond administrative boundaries and sectoral approaches (Eckerberg and Joas 2004; Magnaghi and Giacomozzi 2009; Bastiani 2011), the following analysis of even a failed process might be useful for highlighting key elements and understand how to improve this planning tool for the water landscape.

### **The case study of the River, Lake, and Coast Contract in the Lazio Region**

#### **The context: three water landscapes, challenges and problems**

The “Marta-Bolsena-Tarquinoa” River, Lake, and Coast Contract includes three different water landscapes in a complex ecosystem that stretches from the hinterland to the coastal territory: from the lake (the Bolsena) to the river (the Marta), and to the coast (of Tarquinia). Although inherently different, the three systems interconnect in terms of hydrogeological, social, and spatial relations (Coccosis 2004). The area of the Contract includes 12 small and medium municipalities<sup>8</sup> within three different water landscapes: the lacustrine landscape in the most inland areas, the fluvial landscape, and the coast. These landscapes are a product of different but interconnected evolutionary histories, both from the naturalistic-geological and the anthropic-settlement points of view. The pressure on the infrastructure, settlement, and mobility systems affects the three water landscapes, which already struggle with delicate socio-ecological balances.

A broad look at the three-landscape system shows that, in terms of territorial relationships and mobility, the Contract area is well connected with the main cities of Rome and Viterbo, while the connection with minor centers is weaker. The proximity to the metropolitan City of Rome and the fragmented infrastructural system has erosive effects on the quality of life in some of

the small urban centers. The poorly organized transportation and dispersed education and health systems have increased passive mobility to neighbouring centers in Umbria, Tuscany, and the Capital for the supply of services (Fig. 1). As to the productive system, the whole landscape is characterized by an agricultural and proximity economy presently in crisis, which includes hazelnut monoculture, vineyards, olive groves, and other local agricultural produce (Fig. 2). The abandonment of some agricultural areas and the resulting loss of land values has led to uncontrolled conversion to photovoltaic fields, with potential consequences for the environment. Where agriculture survives, it is experiencing the intensification of monocultures while the presence of the Biodistrict<sup>9</sup> pushes towards organic production. Another poorly planned economic sector is seasonal tourism, prevalent in the hinterland close to the lake and along the Tyrrhenian coast.

Looking at each landscape in greater detail, the water of Lake Bolsena is subjected to ongoing deterioration due to a concentration of pollutants, with a consequent increase in environmental risks. Lake Bolsena has no tributaries and the renewal of water in the lake is slow (estimated at approximately 300 years). It takes in liquid sewage through a collector connected to municipalities around the lake. The collector provides the most important protection against pollution. However, its maintenance is irregular, with consequent spillage<sup>10</sup> adding to the unofficial dumping of sewage.

Since the 1960s, urban settlements have represented a system polarized between historical areas with medieval settlements in the northern part of the basin and contemporary expansion with nineteenth and twentieth century settlements in the southern part. For example, the most recent buildings impact the lake by influencing the quality of water and landscape. Unrestricted tourism has led to building expansion as well as the establishment of campsites and holiday accommodation. The anthropogenic pressure resulting from these activities negatively affects the lacustrine landscape, further exacerbating the already fragile balance of the lake.

With regard to the river Marta (Fig. 3), its proximity to the lake—of which it is an emissary—links the two water bodies inseparably in respect of pollution problems and environmental risks. Indeed, the slow rate of water renewal of the lake negatively affects the ecological and chemical quality of the water.<sup>11</sup> The sewage

<sup>8</sup> Municipalities range in population from about 1000 to 3000, with the obvious exception of the capital municipality of Viterbo (67488 pop.), Tarquinia (16269 pop.), Vetralla (13978 pop.), Montefiascone (13053 pop.) and Tuscania (8323 pop.).

<sup>9</sup> The Biodistrict of Lake Bolsena is not part of the process. It represents a specific area where farmers, citizens, tourism operators, associations and public administrations agree to safeguard organic land.

<sup>10</sup> To this end, reconnaissance activities are already planned for a census of untraced discharges by Talete S.p.A.

<sup>11</sup> ARPA-Lazio Report (2021). La qualità delle acque dolci superficiali destinate alla vita dei pesci della regione Lazio - Triennio 2018-2020, p. 10.

treatment plant collector connected to the lake should protect the outflow, but it suffers from the same maintenance problems as mentioned above. Moreover, the river has been experiencing a quantitative water emergency due to extraction for irrigation, especially in the summer (Fig. 4). In general, the river landscape is characterized by medium-sized hills and some mountains, where the human settlements are mainly distributed along the roads connecting the coast to the hinterland in perpendicular lines.

The coastal landscape includes protected areas<sup>12</sup> of great environmental value, characterized by complex environmental relations (Fig. 5). However, it is also affected by the anthropic pressures mentioned above, including trawling, anchoring, beach tourism, all of which increase environmental risks.<sup>13</sup> Moreover, the coast is affected by erosion caused by the subtraction of sand for construction materials, the destruction of vegetation and coastal dunes due to the construction of port facilities, and the degradation of the ecological system for the supply of fresh water from the aquifer. The settlement system on the coast also influences the environment and the quality of water. It is mainly informal buildings along the coast and around the original centers. The perpendicular roads leading off the main coastal road are the main connections to the hinterland.

In this context, the historical lack of regulations has exacerbated the negative effects in terms of ecological-environmental risks (authors 2022; 2023). In addition, anthropic pressure due to mobility, unauthorized urban expansion, touristic vocation of some areas, etc., abandonment of agricultural lands, unplanned photovoltaic installations, and a lack of control of water system leaks has contributed to a complexity of risks in a landscape already compromised by climate change (Bizikova et al. 2014; Webb et al. 2017).

### The contract process: timeline, actors, and actions

In 2015, the Lazio Region officially joined the National Charter for the River Contracts.<sup>14</sup> In 2017, the Region, together with the University of Tuscia, met with the mayors of the municipalities overlooking Lake Bolsena to propose a way to create the partnerships required by

the Contract.<sup>15</sup> A group of associations for the protection of Lake Bolsena organized a meeting to define common goals for the Contract. At the end of the same year, in the Province of Viterbo, an initial Manifesto for proceeding with the Lake Bolsena Contract was signed. After its publication and public presentation, other local authorities, including the municipalities of Tuscania and Tarquinia, as well as numerous associations in the area, applied to participate. Thus, in December 2018, the Lake Bolsena Contract became the *Contract of Lake Bolsena, the river Marta and the Tyrrhenum coast around Tarquinia*, with the signing of an additional Manifesto of Intent<sup>16</sup> which consisted of:

- Motivations, specific criticalities, working methods, and general objectives,<sup>17</sup>
- Definition of governance structure for the process, coordination committee, steering committee, manager, etc.

In the second phase, the Universities elaborated the Integrated Cognitive Analysis to support the definition of the medium-to-long term goals in the Strategic Document. During this phase, the implementation process was slowed down by the onset of the pandemic, which limited the actors involved to meeting online. The last phase was to define the terms of the Action Programme, including obligations, schedules, implementation modalities, and financing.

The actor network involved reflects a variety of requirements and issues as well as different fields of expertise. The two Universities, with their participating departments, contributed to the interdisciplinarity of the process. In particular, the Department of Territorial Planning supported the definition of the participatory process for integrating expert and technical knowledge with already existing expertise and that available at a local level. In addition to the Universities, the public sectors and institutions involved were the municipalities and the province of Viterbo. The public investment company

<sup>12</sup> There is one “Special Protection Area” – to safeguard the habitats of migratory birds – and two “Sites of Community Importance” – for the maintenance of biological diversity.

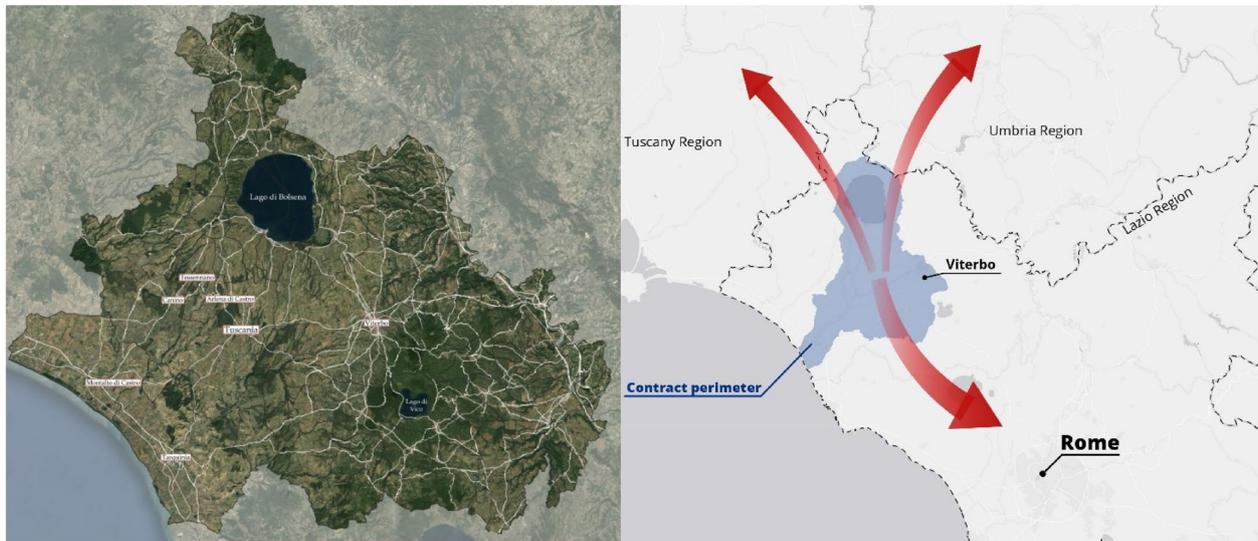
<sup>13</sup> One effect is the regression of the *Posidonia* plant, which has safeguarded a good balance of biodiversity and oxygen, as well as mitigating the erosive phenomena of the sea on the coast.

<sup>14</sup> From the perspective of institutional action, 21 projects were initiated for homogeneous territories, both in terms of morphological, geographic, and spatial characteristics and weaknesses in the urban-territorial guidance and intervention system.

<sup>15</sup> The initial proponents of the project were the municipalities close to the lake. In December 2017, the first signing involved: 7 public bodies, including the Province of Viterbo, 3 trade associations, 1 agricultural company, and 10 civil associations.

<sup>16</sup> Later in the creation of the Lake, River, and Coast Contract, 6 municipalities, 3 labour unions, 8 new associations, 3 additional trade associations, 5 private citizens, one Local Action Group, the Local Health District of Viterbo, and the authors’ University joined. In addition, new applications have recently arrived and will be processed at the earliest possible date.

<sup>17</sup> Also established for the pursuit of obligations under Article 4 of Directive 2000/60/EC and subsequent directives.



**Fig. 1** The province of Viterbo (left),—Contract Area and mobility flux (right). Elaborated by the authors



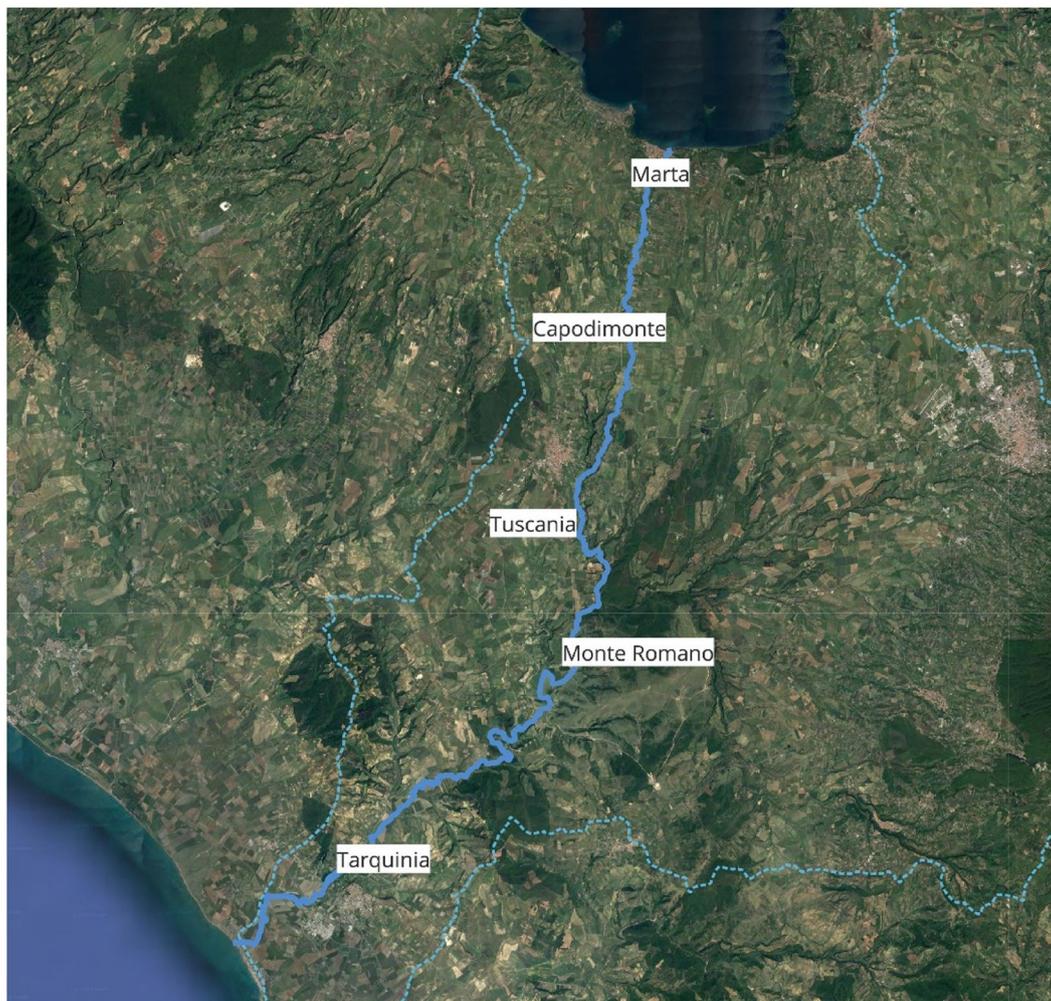
**Fig. 2** Landscape near to the Lake of Bolsena. Author 2022

Taleta S.p.A.,<sup>18</sup> which is the managerial operator of the territory's Integrated Water Service, was involved. Other territorial actors from civil society, were grassroots organisations belonging to the sectors of agriculture, environmental protection, and tourism. In addition, the

process was also open to private citizens. All together, the stated interests included environmental protection, water management, monitoring and maintenance of sewage collectors and the quality of water, and the development of agriculture and tourism.

Participatory observations and the shadowing of the project manager revealed a general absence of active and responsible institutional actors throughout the entire process. In particular, the province turned out to be hardly involved in the process. This strongly discouraged

<sup>18</sup> The Lazio Region, the Province of Viterbo and all the adhering Municipalities co-fund the company (By Act No. 17 of 31/07/2003, the Conference of Mayors No. 1 Lazio Nord, see Taleta's official website available at: <https://www.taletespa.eu/it>).



**Fig. 3** The Marta River and the municipalities crossed by the river, source: GoogleMaps, elaborated by the authors

municipalities from assuming an active and propositional role. Moreover, the technical and administrative staff showed a low level of participation due to being understaffed in most municipalities.

As to the water issue, the managing Authority (Talete S.p.A.) was evasive, and the institutional actors had a defensive response by referring to managerial inefficiencies with: “it’s Talete’s fault”. The saying “it’s Talete’s fault” was the mantra throughout, even though Talete is co-financed by public funds. This was one of the factors that limited the change in dynamics and relations between local authorities.

Even if the process was open to the involvement of the local population, there was a low level of participation. From the interviews, one reason has been attributed to “difficulties in involving the traditionally non-active

part of the citizenship”,<sup>19</sup> which, in fact, remains on the margins of any public process. However, a recurring issue, that emerged from the participatory process as relevant is the centrality of collaboration among institutions, administrations, and citizens for an effective resolution of the main problems. Indeed, participants referred to “a lack (...) of and necessary active presence of local institutions in that kind of process”.<sup>20</sup> Thus, the fieldwork showed difficulties in collaboration not only among institutional levels as the theoretical framework enlightened but also between institutions and citizens. On the one hand, the presence of local institutions was limited to essential meetings and mostly absent in the

<sup>19</sup> From interview with PM, in October 2021. The involvement of citizens was through public promotion of the process.

<sup>20</sup> From interviews with participants, in October 2021



**Fig. 4** Olive groves and vineyards near the Lake and River. Author 2022

participatory process. On the other hand, albeit low participation of the citizenry called institutions back to their role as participating actors in the process.

Despite the small number of participants, the heterogeneity among them resulted in the emergence of transversal themes related to various fields, including environmental protection, public health, the economic and productive system, as well as the system of knowledge, culture, and conscious citizenship..

During the participatory process, contrasting positions emerged, mainly concerning agriculture. The most critical issues discussed during public meetings were controversies over hazelnut monoculture and the photovoltaic transition on agricultural land.<sup>21</sup> On the one hand, pressures from the transition-to-organic group clashed with those supporting intensive agriculture. On the other

<sup>21</sup> 05-12-15/10/2021 public meeting where the conflict emerged and was recorded.



**Fig. 5** The coastal area with different land use and the mouth of the Marta River, source: GoogleMaps, elaborated by the authors

hand, declining agricultural land values have favoured the uncontrolled expansion of photovoltaic land use. The promoters of the “Biodistrict”—even if not formally involved—collided with the farmers over the use of pesticides and the shortsightedness of Province and Lazio Region politicians. In addition, dedication to tourism in some areas clashed with demands for nature protection, leading to opposing factions.<sup>22</sup>

The value of the landscape did not emerge amidst the production of social, economic, and ecological values. Despite the complexity of the three landscapes, interconnected by water, the creation of a shared knowledge system took center stage while the importance of water remained in the background. Moreover, interviews did not highlight water scarcity as a concern, but rather focused on issues related to pollution and environmental degradation. In all the participatory meetings, members of environmental associations emphasized that “the coast (...) are subjected to degradation problems due to tourism”; when talking about the lake, every participant in the process denounced “problems with the collector which increase pollution”<sup>23</sup> and the lack of responsibility

of public institutions and Talete SpA. All this evidence demonstrates that neither institutional nor non-institutional stakeholders changed their approach to water, continually reflected in a posture that was almost defensive rather than cooperative.

### Findings and recommendations

The research showed that the implementation of the River Contract in the studied area did not result in the adoption of new approaches to improve interventions in these water landscapes. Despite the “Marta-Bolsena-Tarquiniia” River, Lake, and Coast Contract’s ambitions, environmental problems persisted, and significant issues remained unresolved.<sup>24</sup> Neither institutional nor non-institutional actors considered the interconnectedness of the trio of lacustrine, fluvial, and coastal landscapes within the same water basin. The divisive nature of the water theme demonstrated the lack of collaboration among the various territorial actors, the absence of institutions in the participatory process, and the weakness of local community interests, resulting in a lack of trust in

<sup>22</sup> From online meetings in June 2021 and public meetings on 05-12-15/10/2021

<sup>23</sup> From interviews conducted in September 2021 and the notes taken during the participatory process.

<sup>24</sup> For example, hazelnut monoculture vs. other local agricultural productions; use of pesticides in traditional agriculture vs the promotion of the “Biodistrict”; moves to protect the environment vs. the interests of the tourist industry in some areas.

the Contract and no impacts on environmental risks and challenges.

The institutional representatives of the promoting actors, including the Province and the Municipalities, did not alter their internal or external relationships with each other or with the citizens. The limited involvement and commitment of local institutions did not establish a long-term structured engagement mechanism for inter-institutional collaboration. This impeded potential learning processes and networking capabilities. As a result, coordination and collaboration skills remained concentrated in external subjects, such as project managers, visionary pensioners, and third sector protagonists, rather than becoming a shared public heritage.

Finally, the general resistance to deeper integration and inter-institutional collaboration has revealed the limitations of the Contract as a tool, which would benefit from a greater culture of cooperation and co-responsibility among all the institutional and non-institutional actors involved.

In addition, this case study suggests that the potential of the voluntary nature of the Contract has not been fully realized. On the one hand, the voluntary nature of the tool has an innovative potential to protect water resources, considering:

- The absence of formal boundaries and the opportunity of integrating water landscapes whose interrelationships are often underestimated and difficult to address,
- The construction of participatory and multi-level arenas to take charge of the unavoidable environmental and anthropic issues of a vast and deeply interconnected area.

On the other hand, the continuity of its goals within a programmatic territorial vision strongly depends on the commitment of the elected representatives. Therefore, a commitment to large-scale planning would allow for more tenacious long-term processes and programs.

Moving forward, it is necessary to intentionally transform territorial governance in a more targeted way than hitherto. The selected theoretical framework and the critical reflection on the case suggest:

- Prioritizing increasing the capacity of institutions to cooperate with each other and with civil society,
- Reallocating public responsibilities, including those for the environment and landscape, within the territory,
- Structuring permanent (and not contingent) collaborative processes to build a critical population that shares knowledge, skills, abilities, and responsibilities.

That having been said, we propose a transition from a “formal managerial coalition” to “real cooperative governance”. This entails improving the capacity of all actors, including local, political, and institutional, to share information, responsibility, knowledge, and power. The findings and the suggestions above-mentioned provide valuable pointers for redirecting cognitive, financial, and staff resources<sup>25</sup> towards a “real cooperative governance”, thereby addressing the weaknesses identified in the territorial process. It is only through a culture of cooperation that tools such as the Contract can become more effective in addressing the relevant issues posed by water landscapes today.

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<sup>25</sup> According to this perspective, the public and private sectors (thus, also Talete S.p.A.) as well as citizens are part of the actors involved in the redirection of resources.

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