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Urban thirst and water conflict: the case study of the Comunanza Agraria di Bagnara

Michele Ravaioli
Dipartimento Interateneo di Scienze, Progetto e Politiche del Territorio, Politecnico di Torino, Turin, Italy

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Abstract

Purpose – This study aims to discuss legal proceedings that occurred between a collective property institution and certain public and private actors concerning water governance and management. It elaborates place-related research on an empirical case study to provide for a deep understanding of the entanglement between water management, property relations and law-in-action.

Design/methodology/approach – This paper uses a political ecology and legal geography conceptual framework to analyse the political dimension of water governance and the mutual interactions between law and space. The research examines how law manifests itself spatially through an empirical analysis of water conflict. During the fieldwork, a series of semi-structured interviews were carried out with key spokespeople, and visual data was gathered.

Findings – The coexistence of different legal orders and property regimes shapes spaces differently in terms of conservation or exploitation, according to their socio-political characteristics. The overlap of different property arrangements promotes conflict as different regulations and visions mutually collide. The conflict contributes to the reshaping of the socio-spatial environment. This supports the idea that every territorial weave created through law in action reshapes power relations among actors.

Originality/value – The contributions lie in elaborating on empirical research into the legal geographies of property and water within the Italian context, focusing on law in action through an original case study. Assessing collective property's social, political, environmental and ethical qualities is a fruitful area of research. Furthermore, broadening the concept of legal pluralism is essential to decentralise it from its predominant application in post-colonial societies.

Keywords Legal geography, Political ecology, Water governance, Collective ownership, Environmental planning, Water conflict

Paper type Case report

1. Introduction, aim and methodology

This paper explores the relationship between environmental management, property relations and law through the lenses of legal geography (Asoni, 2024) and political ecology (Bandiera and Bini, 2020). To achieve this, it analyses Italian collective property systems, focusing on an empirical case study that sheds light on a place-related conflict which is part of a wider conflict between two different approaches to water management. Firstly, it highlights the differences between collective, public and private property. Secondly, it advances the current

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literature by exploring the relationship between space and law in relation to a specific resource and place.

The fundamental research question is as follows: what are the relations between law and property in connection to the specific case study, within the context of Italian collective property systems? This question addresses the mutual production processes between space and law, focusing on the role of property configurations. It also provides an analysis of the dynamics of socio-environmental conflict that arise from them. This is achieved by analysing a legal dispute relating to water management, which reveals the distinct yet overlapping legal regimes that determine the regulatory framework applied on collectively-owned lands. Assuming that every territorial layout is an expression of a specific social project (Raffestin, 2022), the aim of this paper is to examine how law shapes both how spaces are conceived, created, owned, used and managed and how the socio-spatial relationships are affected.

The methodology used to address the research questions is primarily based on empirical field research. This approach enabled the collection of place-related and visual data through a series of semi-structured interviews and participant observation. The fieldwork took place across the territories of the *Comunanza Agraria di Bagnara* [1] for one month in June 2023. Eleven semi-structured interviews were conducted. These lasted an average of about 1 h and involved different privileged spokespeople. These included members of the collective, non-member residents and local political representatives. The questions varied according to the context in which the interview took place – ranging from bars and houses to mountains, historical sites and social events – and the personality of the interviewee. The interviews not only highlighted important aspects of life in the collective lands, but also reflected the imaginations, desires, hopes and fears of the local population. The first two groups comprise individuals who reside in the territory and have an in-depth understanding of community dynamics and local history. The third group comprises local politicians who are similarly aware of territorial dynamics and are also involved in the water dispute. By gradually immersing themselves in the daily lives of the communities inhabiting such territories a researcher acquires specific information related to the local context (Ingold, 2021). This was primarily made possible in this study through sharing histories, activities and relationships. Section 2 will briefly discuss the conceptual framework of the research in relation to the topic at hand. Section 3 will provide a general overview of water governance and collective domains, in dialogue with the literature. It will then explore the empirical observations emerging from the case study. Section 4 will discuss these to answer the research question. The concluding Section 5 will analyse a series of research findings.

2. Theoretical framework: political ecology, water management, legal pluralism, collective property

Over the last decade, several authors have analysed the traditional forms of territorial governance characterising Italian rural areas. They have emphasised the importance of collective land management practices for local development and for maintaining fragile socio-ecological balances (Nervi, 2014; Ciuffetti, 2015; Bassi, 2016; Daici, 2021). Community-based governance – formalised and protected by the constitution of collective institutions through processes of bottom-up law production – is primarily regulated by its own legal regime, which is concurrent with that of the state. In this sense, while these peculiar land assets still respond to the ubiquitous need for territorial organisation, they constitute "another way of owning, another legislation, another social order that has descended unnoticed from centuries to the present" (Cattaneo, 1851, p. 5). Indeed, they territorialise another social order through "another way of owning" (Grossi, 1977), namely, the organization of collective property relations among community members. These

relations concern a set of collective goods, whose self-management aims to benefit the whole community. The broad subject of common-pool resources has gained academic relevance in the 1990s thanks to Elinor Ostrom's seminal work, "Governing the Commons: The Evolution of Institutions for Collective Action" (Ostrom, 1990). She challenged the concept of the "tragedy of the commons" (Hardin, 1968) by empirically and theoretically demonstrating that communities can self-organise and sustainably govern collective resources in the long term, without relying on the market or the state as the only viable solutions. More recently, Pagot *et al.* (2025) analysed the characteristics of common-pool resources and institutions across the European Alps. They demonstrated the considerable relevance of these resources and institutions in terms of diffusion and historical rootedness. They also showed their importance in maintaining rural landscapes and biodiversity, as well as in promoting sustainable development and participatory governance.

In Italy, the phenomenon of collective land ownership has been formally recognised through Law No. 168 of 2017 on "collective domains" [2]. This regulation was introduced thanks to the constant presence of local communities that have developed their own legal order and their own institutions to manage the lands over centuries. These embody a specific property arrangement, i.e. an intergenerationally-solidaristic co-ownership. As a result, such lands are legally inalienable, indivisible and dedicated in perpetuity to agro-silvo-pastoral purposes (Grossi, 1990). They usually comprise forests and pastures, but also cultivated fields, water bodies, buildings and roads, that the entire community can use in accordance with the rules approved by the assembly (Gobbi, 2005). The "anthropological foundations" (Grossi, 1990, p. 507) behind this spatial, social, political, economic and ecological scheme refer to two fundamental principles, i.e. the primacy of the community and the primacy of the land. The idea is that collective goods are essential for the community's present and future life, so ownership is attributed to a living community over time.

The theoretical framework within which these experiences are situated lies at the intersection of political ecology and legal geography studies. In first instance, political ecology studies focus on the political and theoretical engagement described by Perreault *et al.* (2015) to reveal the interplay between environmental management and politics. This article revisits the political ecology of water by focusing on the interrelationships between social, economic, political and environmental processes, as expressed through the organisation of water systems (Swyngedouw *et al.*, 2002). In this sense, key themes of water political ecology include water planning and engineering, rights to water and water governance (Rodríguez-Labajos and Martínez-Alier, 2015). Thus, the article demonstrates how water management is inextricably linked to political choices, while also promoting virtuous socio-ecological practices that inspire alternative forms of water governance. As water resources are managed according to economic and political interests, they constitute a "field of contention" (Faggi and Turco, 2001). Such processes generate expropriation, conflict and socio-environmental injustice. In the face of various attempts to depoliticise environmental conflict (Pellizzoni, 2011), it is important to demonstrate the inseparability of environmental laws, policies and politics. Moreover, it is important to conceptualise environmental conflict as a generative process (Martinez-Alier, 2002). As planning, policy-making, decision-making and management cannot be separated from their intrinsic political nature, it must be acknowledged that planning and regulatory practices over any kind of space contribute to shaping it physically and symbolically, as well as producing and conveying specific ideas about the future. Planning is an enduring social project (Sandercock, 2004) and its related activities are primarily concerned with the future, with the presumed aim of providing a better future (Ratcliffe and Krawczyk, 2011). But what kind of

better future is being imagined? Who is it being imagined by and for? The answers to these questions reveal the political dimension of planning and regulatory activities.

Meanwhile, legal geography represents an interdisciplinary field of research between geography and law, examining the interrelationships between space and law (Braverman *et al.*, 2014; Delaney, 2015). Within this field, the concept of "legal pluralism" (Griffiths, 1986; Tamanaha, 2000; Benda-Beckmann, 2002) refers to the existence of multiple legal regimes within the same socio-political space (Asoni, 2024). On one side, it refers to the coexistence of multiple legal orders and different sources of law resulting from forms of socio-political organisation that are independent from the state (Robinson and Graham, 2018; Schenk, 2018). On the other, it refers to conflictual issues arising from the restrictions imposed by environmental law local people's access to and governance of their territories (Agius *et al.*, 2007; Eagan and Place, 2013; Shoemaker, 2019). Legal pluralism is closely linked to property rights. In this regard, the legal manoeuvres of nation-states have often promoted the usurpation of lands that have been collectively-owned by local communities through customary law (Benda-Beckmann, 2002). Such phenomenon should not be considered unique to colonial societies and non-Western indigenous groups. Rather, it should be identified also across the Global North. Indeed, Italian collective property institutions were dispossessed of their land through national regulations that fostered the enfranchisement, liquidation and dissolution of collective ownership. This has occurred despite the lands being *ad immemorabili* – that is chronologically remote and indeterminable – co-owned and managed by local communities through their own regulations issued by the local assembly. These processes exemplify the idea that law creates property through practices of categorisation and exclusion (Blomley, 2015). Property formation through legal practices is a performative artefact of the state, attempting to isolate it from the relations that make it complex and situated. This framing operation is crucial. State law creates a disentangled surface of property as if it could be defined in a neutral way, independent of the historical context in which it was produced. Instead, it is a series of intertwined sociopolitical and normative relationships from which it cannot be separated. Therefore, legal property is neither neutral nor natural, but rather a form of sociopolitical organisation connected to historical and contextual relations.

These ideas are closely related to Cristy Clark's (2025) fundamental work on water management and legal geography. The key point is that water is part of social, economic, cultural and legal networks of relations. This has relevant implications as different legal configurations produce specific geographies of access, exclusion and vulnerability in relation to water.

The articulation of the multiple and multilateral relationships between actors within a space represents the process of social production of territory (Brighenti, 2006). It follows that specific territorial configurations stabilise specific patterns of relations. Thus, property should be intended not as a mere legal category, but as a structuring relation that mediates social relations and everyday interactions – ultimately shaping the social production of territory. This means that property constitutes diverse geographical arrangements of relationships that influence people's behaviours (Blomley, 2016).

3. The case study of the *Comunanza Agraria di Bagnara*

This section will provide a general overview of water governance in Italy. It will then illustrate the differences between collective, public and private property, offering insights into the collective domains' water governance. Finally, the case study will be contextualised for discussion by providing an account of events and dynamics concerning it.

3.1 Water governance(s) in Italy

Water governance refers to the overall framework and processes that govern decision-making and the implementation of policies related to the use and management of water resources (WAREG, 2023). In Italy, it is defined as the system of structures, regulations and processes that govern decisions about the management and use of water resources. This system includes a wide range of actors, from national and local governments to regulatory agencies, non-governmental organisations, communities and private companies. Water governance is the foundation of the policies, laws and regulations that govern the allocation and distribution of water resources. Within this context, the state primarily acts as the custodian of water resources, although water governance is a multi-level system involving both national authorities and regional/municipal management bodies (Alberton, 2021).

Nevertheless, Italian law provides management models that include not only fully public companies, but also private operators identified through public procedures and mixed companies. However, the ownership of water networks and infrastructures must remain public (Briganti, 2012). This principle establishes a dichotomy between ownership and management, raising concerns about the privatisation and expropriation of collective goods to the detriment of local communities. Despite that, communities may be key actors in defining water governance through collective ownership. The property of the water bodies and surrounding lands allows them for directly being part of the decision-making process. In addition, such dichotomy contrasts with the legal recognition of access to water as a fundamental right that cannot be satisfied through the market and as a public service that everyone should have access to. Even though the Italian people voted in favour of a referendum for ensuring public management of water in 2011, it has not yet been implemented. Evidence shows that Italian water governance is not only inefficient but also profit-oriented, and these negative tendencies regarding water governance in Italy are supported by data. According to Facchini (2019), water service rates have increased over the last 10 years by more than 90%, compared to a 15% increase in the cost of living. Furthermore, over 91% of profits between all the profits generated by water management companies were distributed as dividends, rather than being reinvested to improve water systems. This shows the profit-oriented nature of Italian water governance. Moreover, considerable water losses in municipal drinking water networks confirm the inadequate state of water infrastructure and the lack of investment in maintenance and development (ibid.). This reflects the contradiction between the actions and agendas conceptualising water as a public good and those valuing it as a profitable commodity (Johnston, 2003). Such important issues are exacerbated by urban agendas constantly focusing on growth-oriented logics that rely on high water consumption.

Meanwhile, Southern Europe is experiencing increasingly devastating droughts and floods. It is therefore necessary to develop alternative water governance models. In the face of the current ecological and climatic crisis, which threatens the stability of socio-ecological balances, it is crucial to identify social processes that can rebalance socio-environmental relations. The construction of collective and direct governance mechanisms, for instance, has been widely addressed in mountain studies, often in relation to traditional forms of collective property dispersed across Italy. As will be shown in depth in subsection 3.2, such collective governances cannot be reduced to conventional tensions between public and private law. This reveals a third element that transcends public and private categories. Collective property and governance have been in contrast with both public and private visions of water. With reference to the former, the two diverse conceptions of water management – the central level of the state with its peripherical administrative articulations across the territory and the communitarian level with its customary rules – have collided due to the tendency of national

states to cover the entire space of legal regulations. As a result, processes of unlawful dispossession and mismanagement of water and land have been carried out to the detriment of the collective property of the local community. Moreover, collective land tenure systems constitute socio-political ecologies that do not consider natural elements exclusively for their productive value, but rather for their value they have within the socio-ecological relationships of the territory to which they belong. This peculiar bottom-up approach to manage water resources collectively is rare in Italy, where water resources are legally considered the exclusive property of the state. In her analysis of the legal acts regarding hydric networks ownership, Costantino (2012) argues that Italian water networks belong solely to public bodies, thus confirming the public nature of water and its infrastructures. This idea relates to what Griffiths (1986) termed "legal centralism", that is the forced identification of law solely with the laws of the state. In this sense, collective domains highlight alternative forms of law production, territorial governance and management.

If the territorialisation of any property arrangement constitutes an evolving social project linked to specific values (Blomley, 2016), then the difference between these types of arrangement lies in how different values are promoted, and how spaces and people are conceived and socialised as a result. In particular, the coexistence of diverse legal orders concerning water governance within the same space is precisely what is broadly defined as legal pluralism. On one side, such differentiation of governances and management models reflects different ideas and principles regarding water futures, highlighting their political nature. On the other, it produces different territorial layouts. Their overlap tends to foster socio-environmental conflict.

3.2 Italian collective property systems and water

The main distinction between state water governance and collective water governance lies in property relations and rights. Collective domains are legally recognised as owners of certain water bodies and infrastructures, within the framework of a solidarity-based collective ownership. Through collective ownership, local communities have been able to self-define the characteristics of decision-making processes, as well as implementing their own policies on the use and management of water resources. It is important to clarify how collective property differs from public and private property. The debate is divided between those who consider collective property to be a distinct category, such as Paolo Grossi, and those who view it as a form of group-based private property, such as Elinor Ostrom. The latter group argues that collective goods are non-public, group-owned private goods or goods owned by a group of private citizens. This article, however, takes the former stance. As Grossi (1997) argued, collective land tenures defy public-private dichotomy – inherited from the Roman legal tradition – representing a *tertium genus* within Italian law, in which the two dimensions overlap. On one side, they are not a pure public ownership. This is demonstrated by the legal personality of the collective institutions – which have been private law entities since 1994 – and by the fact that the enjoyment of civic rights over the collective patrimony is exclusively reserved to those who belong to the community. Therefore, the legal regime of collective rights is characterised by a certain degree of exclusivity based on medium- or long-term residence in the territory, or even on the belonging to certain historical families. On the other, they are not a pure private property either.

Legally, collective ownership is not based on private contractual relationships, but rather on territorial ties of belonging. This is linked to historical processes of original land acquisition or to acts issued by higher authorities granting such acquisition. In any case, and unlike temporary private joint ownerships, it is the community the collective subject that appropriates the assets and thus becomes the collective owner. This is translated into a legal

regime that removes these assets from the availability of individuals to pass them on to future generations. No individual within the community has the authority to dispose of their share as they would do with private property. However, the tendency of modern national states to cover the entire space of legal regulations has resulted in all forms of ownership being pigeonholed within the public-private dichotomy of the national legal system. Collective properties cannot be categorised within such dichotomic scheme. They constitute a fusion of personal, patrimonial, family and community projections, where members grow up with the awareness of being co-owners in relation to their belonging to a specific territory (Grossi, 1990). This supports Blomley's idea that property cannot be reduced to disentangled legal categories created *ad hoc* by state law, since it is a form of social and political organisation connected to historical and contextual relations.

Italian collective property systems are directly connected to issues such as the right to water, water governance and management, since water has always been a vital resource for agricultural, forestry and pastoral activities. In Italy, there are various examples of collective domains that have managed water systems for centuries. For instance, in the Apennines of Marche, some *Comunanze Agrarie* own, maintain and manage self-built aqueducts via the local assembly, providing the community with free water and significant economic benefits. In addition to these paradigmatic cases, many collective domains across Italy plan and implement restorative interventions to water systems to secure their territories. These interventions include the construction of check dams and canals, as well as other productive measures relating to farming and livestock.

3.3 Water conflict in Bagnara (Umbria)

The village of Bagnara originated from a small settlement near the source of the Topino River. The first document to mention it calls it "Bagnariae", a term that reflects its abundance of water. It is located 640 metres above sea level. It has 237 residents, 119 of whom are male and 118 of whom are female. The origins of the *Comunanza Agraria di Bagnara* dates to 1343, when the first document mentioning the *Universitas Hominum Bagnariae* was published. This act marks the formal birth of the *Università degli Uomini della Balìa di Bagnara* [3]. It was established as a closed collective property, and only families descended from the 12 original lineages listed in the document are eligible for membership of the institution. From this date onwards, there are numerous documents concerning it. They show its centrality in relation to the community that has created it. The first documented minutes of the general meeting of the *Università degli Uomini della Balìa di Bagnara* show that it was originally established, organised and governed by its own Statutes. They also show that it owned various assets known as *Bona Comunalia*, which could not be sold, donated or transferred outside of the *Balìa* by the individual members without authorisation from the institution [4]. Although initially limited to the descendants of the original families, the *Università Agraria* removed all differentiations between natives and non-natives through the approval of a new statute in 1938.

The *Comunanza Agraria di Bagnara* owns a collective patrimony of approximately 750 hectares, managed by about 250 users. This is mainly located in the mountains surrounding the village of Bagnara and predominantly consists of high-altitude woods and pastures. It also includes the contested Bagnara springs, the surrounding lands and a section of the Topino River. Regarding water, this collective domain has been the main governing body of local water resources since its inception, as water serves many purposes in meeting the community's basic needs. These have included irrigation, providing drinking water for farm animals, drinking fountains, springs, mills, woodworking, washing clothes, processing wool and hemp, fishing and preparing lime. The capillary presence of an extensive network of streams and canals in the surrounding territory is testament to this. Although nowadays many

of these uses have ceased, water is still important for irrigation and for the ecological wellbeing of the ecosystem. Moreover, the Topino River is extremely important for local identity and sense of belonging. Since the end of the 19th century public actors have attempted to take direct control over Bagnara's water resources to satisfy the water demand of Perugia (see Figure 1). The municipal territory of Perugia covers an area of 449,92 km^2, one of the largest in Italy, with a population density of 363,38 inhabitants per km^2. The territory is part of the Nestore Valley, and the Municipality is crossed by the Caina, Genna, Nestore and Tevere Rivers. The population of Perugia amounts to 162,241 residents. The companies registered in the Municipality mainly belong to the services macro-sector (71%), while the industry sector (19%) is mainly focused on the textile, clothing, food and confectionery sectors. Companies related to agriculture account for only 4% of the total. Recently, the issue of the public appropriation of the waters of the Topino River has emerged within the context of litigation between the *Comunanza Agraria* and the public and private actors involved in the dispossession and exploitation of such waters. Lorenzo, the current president of the institution, states that:

> The authorities took away the water from the Topino River with the aqueduct. In the 1970s, they built a second one. They took away everything they needed and gave us nothing in return. They

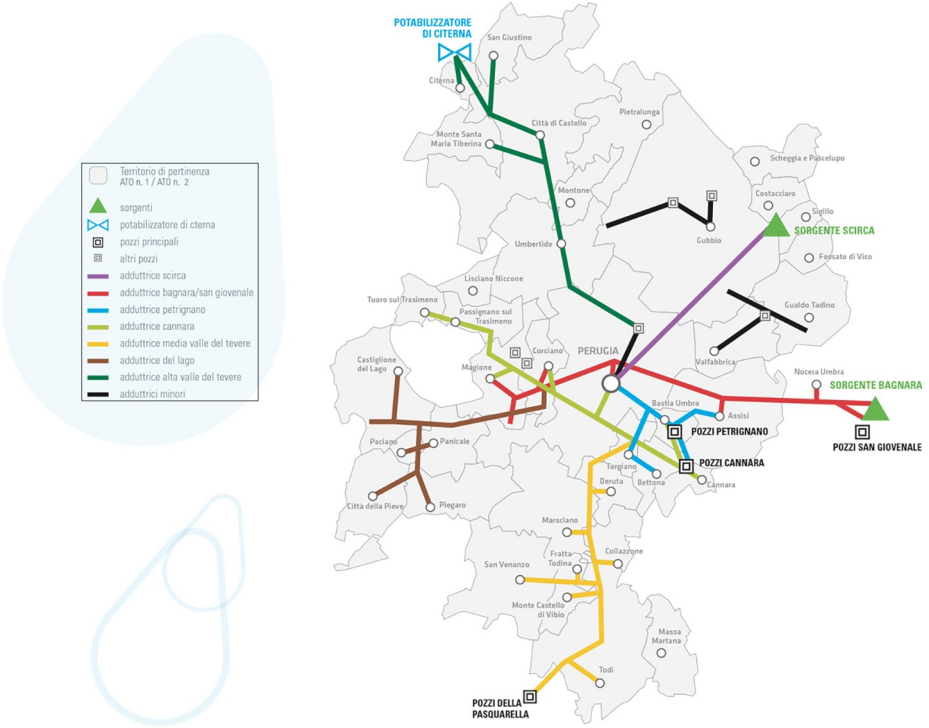

Figure 1. Map of drinking water supplies in Umbria; the red line represents the water flow from the Bagnara springs to Perugia and its hinterlands
Source: UmbraAcque S.p.A.

> expropriated the land. Now there is a lawsuit that began on May 22 at the Commissioner for Civic Uses [5], who is studying the case and must rule on it. We are waiting. What is certain is that they have taken away a lot of water, enriched Perugia, and impoverished us here. I have sometimes spoken at conferences in Perugia where sustainability and mutual exchange were discussed, and I said to them, "You talk a lot about this and that, but then you only take and give nothing." In fact, we pay more for water than those downstream.

This is a centuries-old issue dating back to the late 19th century when the *Comunanza Agraria* first opposed the Municipality of Perugia's plans to capture the waters of the Topino River to meet the demand of the entire municipal area. Documents from 1898 showed the existence of a negotiation process between the actors involved. This established that the Municipality of Perugia could withdraw 22.7 litres of water per second, upon payment of a fixed one-off sum, while leaving the remainder for the civic uses of the local population. Following this agreement, the construction of a large water collection tank near the source began, together with an adjoining aqueduct for distributing water throughout the whole municipal area. In 1953, another agreement was reached between Perugia Municipality and the collective institutions, whose members have changed over time. This new agreement allowed the withdrawal of 210 l/s until 2025. From that moment on, the situation deteriorated rapidly. By the 1970s, a second aqueduct had been built, with no involvement of the *Comunanza*. This happened even though it is the legal owner of the waters. As a result, the various aqueduct management bodies (AURI, Umbra Acque, VUS) have increased water withdrawals dramatically, to almost 400 l/s. This is in breach of the 1953 agreement. These massive withdrawals have made it impossible to guarantee the river's minimum vital flow. Furthermore, the current council of the *Comunanza* has revived some irregular expropriations carried out by Umbria Region, which were linked to the construction of the second aqueduct. They are illegitimate because the nature of ownership must first be changed before the use of collectively-owned or civic-use lands can be changed. Moreover, such changes must be compensated for by paying those who are deprived of the right to continue exercising civic use rights. Both procedures were not followed by public authorities. Thus, a petition was sent to the Commissioner for Civic Uses by the *Comunanza Agraria*. According to Lorenzo and Peppe (the vice-president):

> With this lawsuit, we hope to see some return, not in terms of money, but at least in terms of public works, something for the community, because the point is that here in Bagnara there are great resources, and we want to manage them ourselves, not people from outside, so that we can leave them to future generations. We want to safeguard and improve our patrimony, perhaps even enhance it, for those who will live in this area in the future.

Even more paradoxical is the fact that, after urging local actors to report potential abuses in the area, the Umbria Region has taken legal action against the *Comunanza Agraria* for reporting the unlawful expropriation. In essence, the negligence of public authorities – regarding the agreements made, the procedures concerning civic uses and the guarantee of the minimum vital flow – has produced a situation of water scarcity that is damaging all the communities bathed by the river. In response, the Municipality of Nocera Umbra (the most affected municipality) has established an inter-council commission to set up a technical committee to carry out a hydrogeological study and assess the environmental damage caused by such interventions. More importantly, the *Comunanza Agraria di Bagnara*, which is also part of the commission, initiated the litigation in May 2025, which concluded in September of the same year.

All the abuses and violations carried out by public and managing bodies – namely, the illegal excessive water withdrawals over time, the unlawful expropriation of land to build the aqueduct, the lack of compensation for such irregular procedures and the damage inflicted to

the river – constitute the reasons that brought to such litigation. Thus, an environmental conflict has emerged. Specific local factors at play in Bagnara, such as the customary community water governance implemented through collective ownership and the series of abuses and irregularities suffered by the community, reveal a more general pattern at the national scale. It concerns three main aspects. Firstly, the forced legal centralism implemented by the state and its ramifications, which act in a top-down inefficient and profit-oriented manner, to secure an exclusive water management. Secondly, the friction between two diverse conceptions of water. On one side, a community-based approach aimed at the intergenerational preservation of the resource, intended as a collective good in relation to the local community that has historically conserved it. On the other side, a less conservative approach motivated by the idea of a universal common good, which focuses on the essential needs of humanity, rather than on the needs of a local community. However, in this case, such a contrast does not arise naturally, but is rather connected to the mismanagement of public bodies. Thirdly, the existence of bottom-up water governance experiences which must be taken into consideration for their legal legitimacy. Since many water infrastructures in Italy are located on collectively-owned land, water governance at the national level must necessarily deal with the collective institutions that own them. The specific case of Bagnara, which culminated in this conflict, brought this reality to light. The outcome of the specific lawsuit, which will be analysed in the following sub-section, confirms this general issue regarding water governance.

3.4 The judgement No. 37 of 8th September 2025

Recently, the Commissioner for civic uses of Lazio, Umbria and Tuscany has issued a judgement of critical importance – No. 37 of 8th September 2025 – within the context of the litigation initiated by the *Comunanza Agraria di Bagnara*. This dispute involves a series of actors (see Table 1), namely the Municipality of Perugia, the Umbria Region, *Agenzia del Demanio* (responsible for state property), *Umbra Acque S.p.A.* and *Consorzio Acquedotti Perugia s.r.l.* (mixed public-private entities competent for municipal and regional water management).

Such a judgement has significant implications for understanding the political ecologies and legal geographies of collective property systems in general, and connected water management in particular. It recognises that the (water) governance of collective goods must be defined and implemented by the collective domain because it is the legal owner. This decision recognises the unlawful actions carried out by public (Umbria Region and Perugia Municipality) and private actors (water management bodies) because they have not followed the rules regarding the specific legal regime of collective domains. This has resulted in a

Table 1. Mapping the main actors, following Dente's (2013) model on policy decisions

Actor	*Comunanza Agraria di Bagnara*	Municipality of Perugia	Umbria region	*Agenzia del Demanio*	*Umbra Acque S.p.A.*	*Consorzio Acquedotti Perugia s.r.l.*
Legal nature/type of actor	Collective domain (community institution for managing collective property)	Public municipal body	Public regional body	Public body responsible for state property	Mixed public-private company	Mixed public-private company
Dimension of the interest	Local	Regional	Regional	National	Regional	Regional

declaration of nullity for the expropriations carried out in 1897 and in 1936, with the consequent illegality of all water withdrawals that exceed the limit of 22.70 l/s. The judgement also states that what characterises collective ownership is the indivisibility of the shares and their inalienability by individual owners. This demonstrates the difference between collective and private property, where the latter is characterised by the fractional use within ordinary joint ownership. In addition, the civic use restriction is enforceable not only against private individuals but also against the state. Therefore, the encumbered lands could not be freely alienated or expropriated for public use without release from the restriction through the legitimising changes in property and use. These procedures were not implemented in relation to the land subject to the judgement. As a result, the judgement not only confirms to "the original community of Bagnara collective ownership over the Bagnara Springs, surrounding lands, and a section of the Topino River, and recognises the right to civic use of surplus water as in the past", but also states that "in accordance with the civil law rules on accession, the buildings on the land subjected to the proceedings must therefore be declared acquired by the collective property of Bagnara". Consequently, it declares that "it is therefore up to the collective domain to establish the methods of water use" (Judgement 8th September 2025 No. 37).

This last decision opens to unprecedented possibilities for implementing alternative environmental governances in general and water governances in particular, recognising the historical rights of local communities to self-govern and self-manage their own lands. In this sense, rural customs constitute a "living law" (Grossi, 2020) – intended as a factual and concrete dynamic legal dimension – which is produced through vital and structural customary facts, in opposition to the abstractness and staticity of state law. Thus, community-based governance emerges today not only as a practice rooted in the Italian socio-cultural tradition but also as a bottom-up law that is distinct from that of the state. Furthermore, the judgement declares the principle of inseparability of water from collective property – including both surface water and groundwater. This principle means that no component of the holistically-protected landscape through collective ownership can be excluded, least of all the water bodies that are functional to the life of communities, animals and crops.

This is a crucial judgement in terms of recognising the legally legitimate character of customary community-based governances, that do not regard only Bagnara but the whole world of Italian collective property systems. In this sense, the Commissioner makes another crucial claim [6], going beyond the case of Bagnara, when saying that:

> […] since Italian municipalities acquired legal personality distinct from that of citizens very late in history and were considered for centuries to be Universitas Civium, whose assets belonged to them precisely as civic and promiscuous assets, it is therefore necessary to presume that municipal assets according to its normal and customary origin, and until proven otherwise, as an original and civic asset, regulated by the legal regime of the era in which the asset's belonging to the Universitas Civium was consolidated (Judgement 8th September 2025 No. 37).

This legal principle is indicative of the original appropriation of the land by the population, which reflects the main process leading to the formation and institutionalisation of collective property systems. Therefore, the judgement not only recognises such a bottom-up form of (water) governance but also identifies collective domains in all municipal assets that are not otherwise identified. In other words, this document is extremely relevant not only for the legal recognition of alternative – but historical – bottom-up ways of owning and managing the lands, but also for reaffirming the collective nature of municipal assets across Italy.

4. Discussion: Urban thirst and water conflict

The case study has illustrated the entanglement between property relations, law and environmental governance in a place-referenced manner. This entanglement involves the various ways in which these relations, regulations and governance systems are organised by different socio-political actors, who have turned the environment and its resources into fields of contention. A crucial concept related to the case study is that of "urban thirst" (Menga, 2025). It refers to the structural and socio-political phenomenon of growing demand for water from urban systems, resulting from contemporary urban capitalism. In this sense, urban thirst does not simply refer to an imbalance between supply and demand, but is a condition created and reproduced by the capitalist system. It relates to cities' increasing dependence on intensive and extensive water flows. This recalls the "legal geographies of water" (Clark, 2025) by showing that water is part of social, economic, cultural and legal networks of relations.

With reference to the case study, the main causes of urban thirst are linked to two dynamics, namely the growing population and the increasing touristic fluxes in Perugia. This is shown by the fact that water withdrawals from Bagnara springs are mainly used for Perugia's domestic purposes. From 1951 to 2016, the population of Perugia increased by around 60%, rising from 95,310 to 166,676 residents, although it has since decreased slightly to 162,241. Tourist numbers increased by around 20%, from approximately 903,000 in 2019 to nearly 1.08 million in 2025. Similarly, arrivals increased by more than 10%, from around 357,000 to almost 399,000. Within this context, Perugia's water tariffs are among the highest in Italy, with an estimated cost of approximately €511.79 per year for a family of three people, showing significant increases in recent years (Madeddu, 2025). The set of criteria, rules and procedures are nationally defined by the Regulatory Authority for Energy, Networks, and Environment. Then, the actual tariffs are locally established by the Area Government Bodies (i.e. mandatory public bodies, established by the Regions, responsible for the management, planning and control of the integrated water service). Finally, the water service managing body – in this case *Umbra Acque* – collects the amounts paid by families and tourists. Within such an unstable legal framework (Guerrini and Romano, 2013), the conflict between a public authority acting in a top-down manner and a group of citizens attempting to care for local territorial resources has emerged. On one side, the urban community of the Municipality of Perugia has benefited from the water withdrawals. On the other, both the mountain community of Bagnara and the ecosystem of the river have suffered from such withdrawals.

Moreover, the operations of water extraction have ignored not only the legal agreements and the specific rules regarding collective property, but also the claims made by the Bagnara community. At the same time, the ecosystem of the river has been damaged by the excessive withdrawals and the infrastructurisation of the environment. This highlights that defining water as a public good has created a strong imbalance of power. In sum, the relationship between Perugia and the community of Bagnara is one of subordination and resource extraction, suggesting inter-organisational conflict between public authorities and the community.

With reference to the research question, we saw that property rights over lands, strictly related to law, allow such actors to (semi-autonomously) plan how to organise the space according to specific values and principles, resulting in the imagination and implementation of a specific future. For instance, state-based public planning and governance, even if multi-level, represents a top-down process that local communities undergo without being directly involved. It has been also based on the hegemonic principle of infinite economic growth, as the case of Bagnara showed. This demonstrates that environmental planning and governance

is intrinsically political, being guided by specific interests, values, principles, ideologies and objectives that shape binding relations of access, inclusion, superordination and subordination among actors. This has to do with the issue of allocation, so that space itself is political (Lefebvre, 1974).

This specific case study also highlights that state-based planning conveys ideas of the future which are imagined by technicians and politicians who elaborate the projects, whose interests, values and goals are evidently not aligned with environmental protection. This is not a general assumption but is rather linked to what happened to the Bagnara community. In fact, the Italian legislation recognises some forms of local autonomy and defines collective land tenures as environmental systems that must be protected. However, such recognition must be grounded in practical facts to be effective, but this does not find correspondence in relation to the case study. Arising from legal indications and restrictions, public plans and regulations have conveyed an idea of water as a public good that must be shared with the urban population, but this resulted in an overwhelming appropriation to the detriment of the local community. They have also physically (re)made the space through the construction of pipes, channels, tanks and other infrastructures, determining a considerable environmental damage to the river. Finally, they have even shaped land ownership – and consequently the ways of using and managing it – by unlawfully occupying collectively-owned lands which suddenly became public.

Unlike public planning and governance, collective property systems allow local communities to directly take decisions on their lived environments, enabling them to imagine and implement the future they aspire to. In the case of Bagnara – as normally in every collective domain – such a future is based on environmental harmony, social aggregation and direct participation of people. This reflects their guiding principles, namely the primacy of the community, the primacy of the land and intergenerational solidarity. Again, this bottom-up form of planning is inherently political as it represents a social project aiming at organising spatial relationships. Differences concern how such governances affect the space and the relationships. The *Comunanza Agraria di Bagnara* has conveyed an idea of water bodies as natural elements to be safeguarded for a better present and future, which should not be excessively exploited for the imperative of growth. It reflects the common sensibility of local inhabitants rather than being imposed from the outside. This finds echo in the constant maintenance of such spaces, in the conservation efforts at play and in the planning policies aiming at minimising any impacting intervention. Finally, the judgement 8th September 2025 No. 37 has (re)shaped again the considered spaces – in terms of ownership, use and management – by contesting the previous legal actions that had already contributed to their recent shaping.

Furthermore, these two different forms of planning, governing and managing mediate how spatial relationships develop. The first one shows a rather important asymmetry of power relationships by concentrating political competences in the hands of a restricted elite, whereas the latter builds a cooperative and solidaristic framework for relationships in which the community has his own say. These differences are strictly linked to property configurations. Hence, the fundamental role of law in shaping spaces and relationships emerges in an empirical place-related perspective.

The modality through which this develops may be well-explored by applying the concept of "legal pluralism". The overview provided for both the collective property systems in general and the *Comunanza Agraria di Bagnara* already described the situation of coexisting, distinct yet overlapping, legal regimes. Such legal regimes not only produce diverse forms of ownerships, governances and regulations – which promote specific forms of land planning, use and management – but also convey specific symbolic value-based

meanings. This is a tangible and intangible process that affects both the material and social dimensions. On the concrete side, it tends to result in a variable range of interventions on the environment, for example from essential infrastructural projects to high-impacting infrastructural projects. On the immaterial side, it tends to result in a variable range of behaviours, from no political involvement to direct political involvement or from ecological disengagement to ecological engagement. These are not general universal theories but rather tendencies, which might produce multiple different configurations of both interventions and behaviours according to empirical conditions. However, what is crucial to note is that the different forms of property arrangement constitute different geographical orderings of relationships. This recalls both Brighenti's (2006) argument that territorial configurations – here connected to ownership, governance and regulation – stabilise specific patterns of relations over time, and Blomley's (2016) idea that property is a structuring relationship that mediates social relationships and everyday interactions, ultimately shaping the social production of territory. As a consequence, these tendencies tend to differently affect how land planning, use and management is organised.

Such property arrangements are not siloed compartments, but rather they overlap. It is in their overlap that conflict emerges. In relation to the case study, the overlap of rules and regulations produced by different actors caused the initiation of the litigation. On one hand, public authorities followed basic legal procedures for expropriating the water bodies and the surrounding lands ignoring the peculiar proprietary nature of those elements, to which a specific legal regime applies. This shows the conflictual overlap of different legal regimes and regulations. On the other hand, the litigation reflects the tension between different visions, sustained by different values and desires. While urban actors have been driven by urban thirst to capture as much water as possible ignoring the socio-environmental implications of such process, the local community was focused on the ecological protection of the river. Although prone to share its waters with Perugia, this should have occurred in a transparent, fair and mutually beneficial way. This reveals another kind of overlap, that of different imaginaries of socio-environmental futures, which is also a major cause of conflict and directly speaks to the political dimension of water governance.

5. Conclusions

This article explored the topic of collective land ownership in Italy through an empirical place-related analysis to provide for a deep understanding of the political ecologies and legal geographies of water with reference to such peculiar land tenures. In Section 2, a theoretical introduction of the theme was provided, in dialogue with the key concepts of political ecology and legal geography studies. These comprehended the political ecology of water, the environment as a field of contention, legal pluralism, and the legal geographies of property and water. Section 3 was divided into sub-sections. In subsection 3.1 water governance(s) in Italy was examined through such perspectives. In subsection 3.2, a differentiation between public, private and collective property regimes in Italy was provided, with a focus on water management. In subsection 3.3, an account of events and dynamics concerning the case study of the *Comunanza Agraria di Bagnara* was provided. In subsection 2.4, the judgement No. 37 of 8 September 2025 was analysed to gain an empirical place-related illustration of the relations between space and law. In Section 4, the observations emerging from the case study were discussed to answer the research question. In this section it was showed that environmental planning and governance is an inherently political process mediated and affected by law, with a focus on property rights.

The empirical application of the concept of "legal pluralism" allowed investigation of how law shapes both how spaces are conceived, made, owned, used and managed, and how the socio-spatial relationships are affected. The main findings are that law manifest itself spatially in many ways. Firstly, the coexistence of different legal orders and property regimes shapes spaces differently in terms of conservation or exploitation, according to their socio-political characteristics. Secondly, the overlapping of such different orders and regimes promotes socio-environmental conflict as different regulations and visions mutually collide. The conflict contributes to newly (re)shape the socio-spatial environment, in this case through litigation that ended up with a relevant judgement. This has recognised the collective ownership on water bodies and surrounding lands, confirming the historical community-based governance. Law in action – i.e. a theoretical and practical approach that studies how legal norms actually operate in society, as opposed to written rules –has thus (re)territorialised a collective form of ownership, governance and management. This has (re)spatialised power relationships in a way that is favourable to the *Comunanza Agraria*. In this sense, an illustration of how every territorial weave made through law in action (re)shapes power relations was provided. The implications of such findings support the idea of the relational nature of property and water. This stimulates the rethinking of legal relationships between people, communities, property and water, allowing for the valorisation of fairer water governance practices and bottom-up legal production processes.

In conclusion, some limitations and potential avenues for future research emerge. The former concern the specificity of the case study. As it regards a small local community and highly peculiar theme – though significant within the Italian context – the findings must be considered according to these limitations. In other words, they must be framed within the specific dimension of Italian collective property systems and in relation to the specific case study. Nevertheless, they reflect broader aspects which may be found elsewhere. The latter regard the potentialities of developing further empirically-based and decentralised research on legal pluralism. As it is generally applied in the context of indigenous post-colonial populations located in what is defined as the Global South, such phenomenon is still under-researched in the Global North.

Notes

[1.] *Comunanze Agrarie* is a term that indicates collective domains widely spread across the Umbrian-Marche Apennine.

[2.] Law No. 168/2017 explicitly cite water bodies within the list of natural elements composing the patrimony of collective domains, so that they are to be considered collective goods (not public goods!) by law.

[3.] The medieval term "balìa" meant authority and indicated an administrative circumscription, that, in this case, was administered by the *Università Agraria di Bagnara*.

[4.] The term *Universitas* refers to a specific collective entity that governs itself within certain areas and has certain traditional powers, albeit in (inter)dependence on a higher authority. *Università Agraria* and *Comunanza Agraria* are synonyms. However, regarding Bagnara, it was initially indicated as *Università Agraria*, while today as both *Università Agraria* and *Comunanza Agraria*.

[5.] It is an Italian supra-regional special court, created in the 1920s, competent for verifying the existence, dimension and diffusion of collective uses on lands, as well as resolving controversial issues relating to them.

[6.] Recalling the ruling No. 2598 of July 16th of 1958 issued by the Joint Divisions of the Court of Cassation.

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Corresponding author
Michele Ravaioli can be contacted at: michele.ravaioli@polito.it