

Ribeira Sacra Waterscape

Nomination of
Ribeira Sacra Waterscape
for inscription on
the World Heritage List

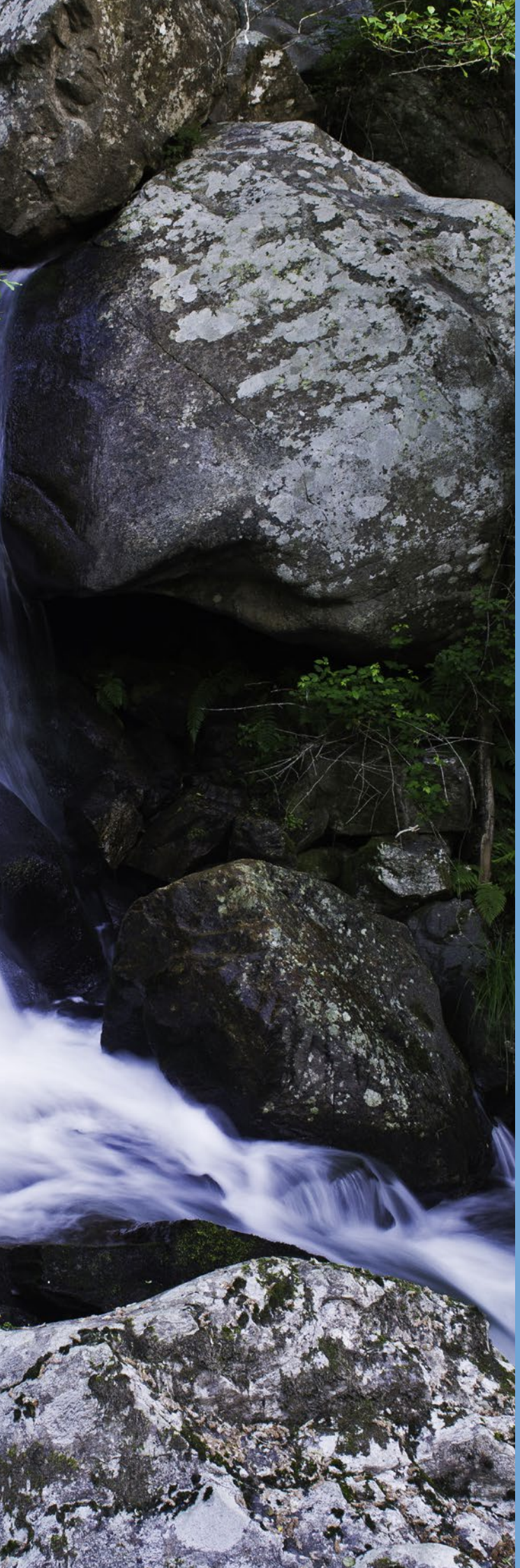
XUNTA DE GALICIA

GOBIERNO DE ESPAÑA
MINISTERIO DE CULTURA

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Ribeira Sacra Waterscape

Executive summary

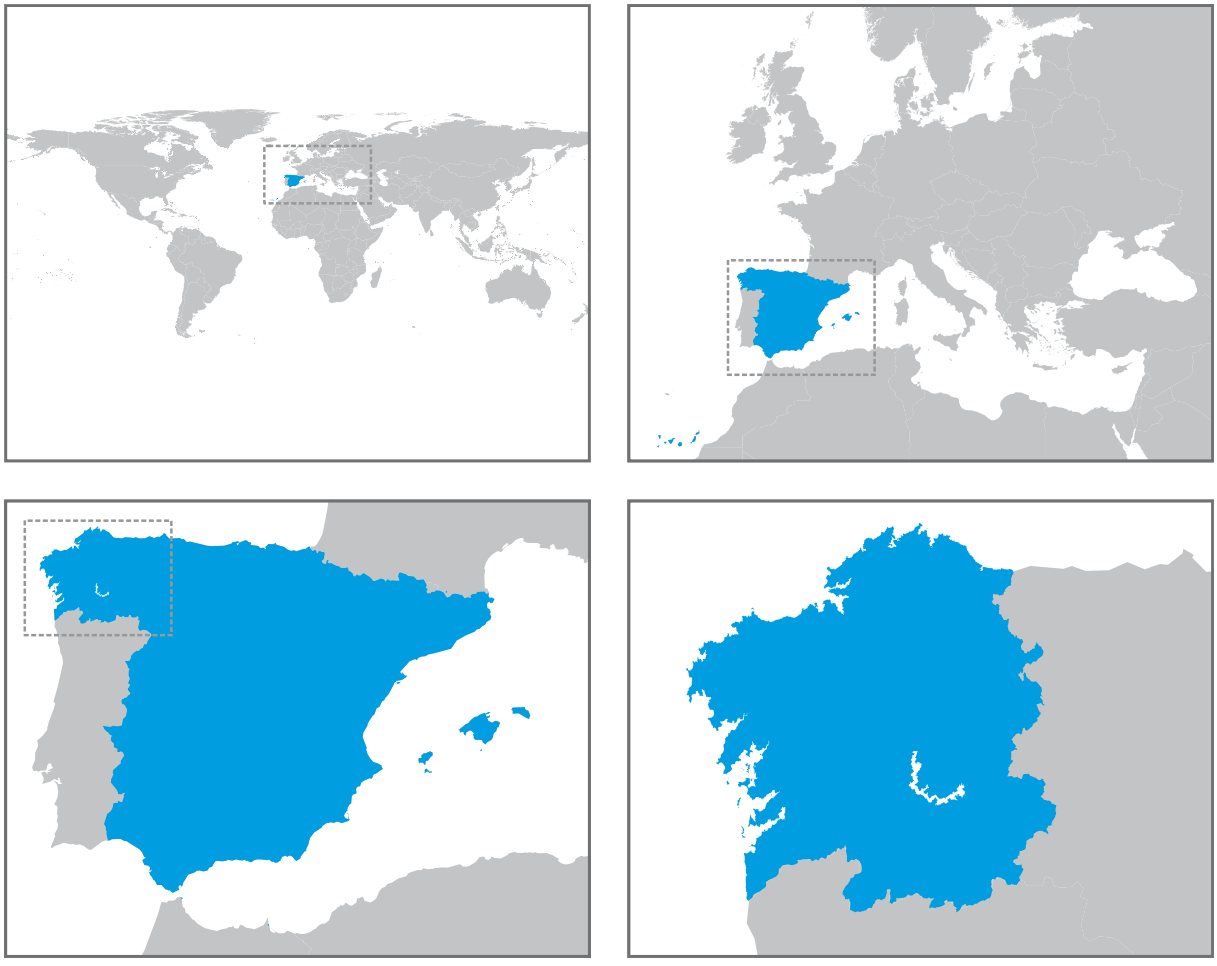
State Party
Spain

State, Province or Region
Provinces of Lugo and Ourense,
Autonomous Community of Galicia, Spain.

Name of nominated property
Ribeira Sacra Waterscape

Geographical coordinates indicating minutes and seconds
(WGS 84) N 42° 27' 14" / W 7° 43' 50"
(ETRS 89) UTM zone 29N: 604352 / 4700981

This is the point where the Sil and Miño rivers meet at the heart of the nominated property.



Textual description of the boundary of the nominated property

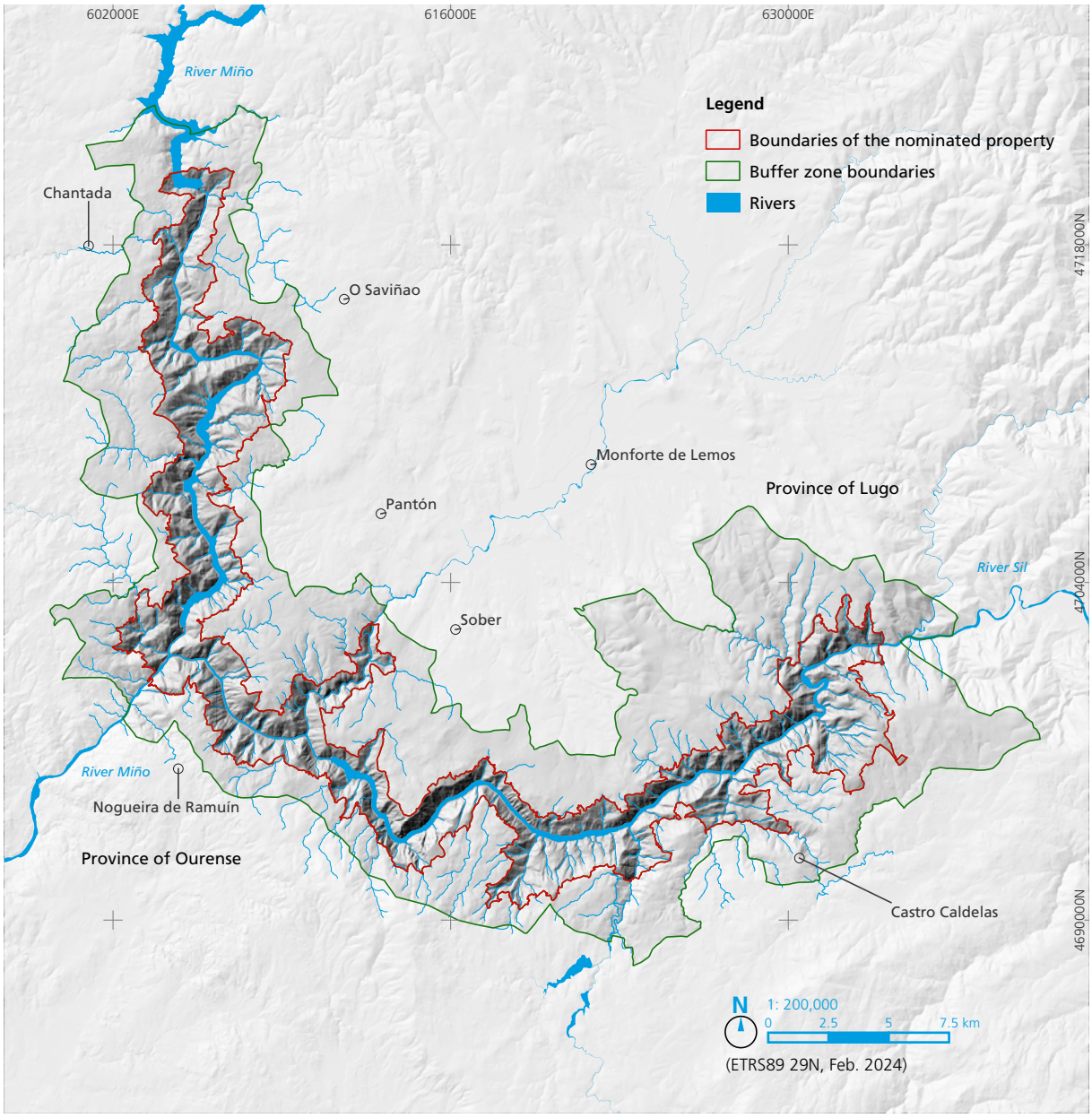
The boundary of the property runs along the upper contours of the entrenched valleys that lie at the confluence of the Sil and Miño rivers. The limits are delineated on the ground by what are known locally as *bocarribeiras*, which is where the slope changes abruptly from gradients steeper than 30% (*ribeiras*) to below 10% (*chairas*). The demarcation therefore includes these two river canyons between Santa María de Pesqueiras to the west and San Clodio de Ribas de Sil to the east, covering an area of 16,471 ha, with a perimeter of 273 km.

The buffer zone around the nominated property covers a surface of 31,979 hectares and is delimited by the 72 parishes that were established in the Middle Ages and that still survive today as identifiable territorial units.

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Map of the nominated property



Criteria under which property is nominated

Criterion (v)

Be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.

Cultural Landscape

Yes

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Draft Statement of Outstanding Universal Value

a) Brief synthesis

The nominated property showcases an outstanding cultural waterscape, traditionally and popularly known as Ribeira Sacra, which is bounded by spectacular river canyons at the confluence of the Sil and Miño rivers (Galicia, Spain), located in the cool, damp climes of Northwest of the Iberian Peninsula.

It is an epic landscape, shaped by the culture and heritage of water and fed by the countless streams, brooks and rivers that define its identity, beauty, composition and unique settlement patterns. It traces the origins and evolution of a territory sculpted by water and is paradigmatic of a culture of water: one can clearly discern the marks of its construction over more than 1,500 years of continuous occupation, dating back to the ancient eremitic and monastic traditions that are deeply rooted in the region.

The culture of water in these places is revealed through an exceptional water heritage that includes archaeological sites, waterworks from all periods of history, including a significant water industry heritage, the unique drainage systems of the *socalcos* (terraces), and many other vernacular features in the form of consecrated fountains and mines, canals, weirs, crossings and bridges, river routes and other exceptional works associated with water.

The power of water is a central theme in the narrative of the cultural landscape. In the area of the nominated property there is a remarkable catalogue of water-use heritage features that bear constant witness to the energy self-sufficiency of each period. These range from traditional watermills from different centuries, which can still be seen throughout the property in exceptional numbers and density, to the mini-power stations or *factories of light* that emerged at the end of the 19th century, to the hydroelectric dams of the mid-20th century.

In short, Ribeira Sacra is a cultural landscape in which we can piece together the history of the wondrous relationship between water, humans and ingenuity, not only in ensuring their survival and well-being, but also in harnessing to the full all possible uses of water.

Trigoas. © R. Vilanova



b) Justification for Criteria

Criterion (v)

Be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.

The nominated property bears exceptional testimony to a living cultural waterscape that has evolved organically over more than 1,500 years, and boasts an extraordinary repertoire of water works, knowledge and uses that have enabled communities to live there.

It is a complex landscape in which traditional forms of settlement persist alongside unique micro-plots that provide meaningful evidence of the ability of humans to organise and adapt to difficult environmental conditions. The property also features outstanding expressions of an agriculture practised on rugged terrain that has profoundly shaped the riverside landscape over the centuries in the form of *socalcos* (terraces) that carpet the slopes of the river canyons.

Ribeira Sacra contains a unique and remarkably complete example of hydraulic techniques that were developed for energy self-sufficiency over hundreds of years: countless traditional watermills from different periods and with different functions, evidence of the emergence of "white coal" (hydroelectricity) with power stations from the end of the 19th century, and more contemporary hydroelectric dams from the mid-20th century. It thus comprises a rich heritage catalogue of works that bear witness to the human adventure of harnessing the power of water, recognised as a clean and sustainable source of energy.

The nominated property attests to the profound interdependence between the cultural and natural heritage associated with the cultural waterscape, which can be clearly identified in intangible elements such as traditions, myths and legends, toponymy and the consecration of the many works associated with the management and use of water.

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c) Statement of Integrity

The boundaries of the component parts of the property have been strategically drawn in terms of integrity. As such, they cover an area of sufficient scale to allow for a full representation of the features and processes that lend significance to the nominated property, from the spectacular steep river valleys to the sharply sloping terraced hillsides rising from the riverbanks. Moreover, the history of this cultural waterscape and its compositional elements is clearly visible in the landscape, reflected in particular in an exceptional catalogue of waterworks and water-related heritage features, in the rows of crop terraces (*socalcos*), in the eremitic and monastic landmarks that reflect how the land was settled and that shaped the culture of water, and in the enduring presence of the ancestral micro-plots of land.

The cultural landscape contains more than enough elements to fully represent the values and attributes that convey the significance of the nominated property, both in terms of diversity and density: the many watercourses, the great profusion of water-related works, the rich historical heritage, and the diverse riverside crops and uses.

The boundaries of the buffer zone have been established not only to actively contribute to the direct protection of the nominated property, but also to ensure the preservation of the viewsheds and the continuity and compositional integrity of the river landscape of Ribeira Sacra.

The nominated property is free from major threats and is of sufficient size to demonstrate how multiple systems – agricultural, hydraulic, ecological, territorial, social and spiritual – have interacted and adapted to different situations over time.

d) Statement of authenticity

All the components and their constituent elements are credible and genuine demonstrations of the different manifestations and configurations of the waterscapes they represent, and of the architecture, ensembles, waterworks, ethnological elements and, in general, the tangible and intangible heritage associated with them. Their authenticity is evident in the degree to which the qualities pertaining to the attributes conveying Outstanding Universal Value may be clearly identified and understood, particularly through their form, design, functionality, typology, materials, period and location. This is reflected in the specific features of its components, such as in the recognisable typologies of the waterworks and water-management systems of different periods, in the water-related layout of settlements and plots, or in the functionality and structure of the unique farming systems.

The authenticity of the different cultural waterscapes and heritage elements within the nominated property is confirmed by the cited documentary sources and historical maps. The authenticity of the heritage elements is also attested by the large number of studies, inventories, catalogues and research undertaken on various aspects of the nominated property.

Furthermore, the nominated property is the embodiment of a vibrant, age-old cultural tradition in which genuine knowledge, practices and customs still persist. They are powerful reminders of the character and spirit of an area criss-crossed by endless ribbons of water, where local communities uphold their traditions, illustrating the unbroken sense of culture and identity associated with this place.

Ribeira Sacra has retained a high degree of authenticity as a whole, notably in its water-related heritage, in the farming systems, and in the perdurance of uses and materials, strengthened by the many conservation efforts that today maintain the active social role of this cultural landscape in perpetuating a sustainable economy.

e) Requirements for protection and management

The protection of the nominated property and its various components is fully safeguarded by the different regional, national and European laws and provisions that address the different realities and features that make up the cultural landscape.

The Ribeira Sacra Waterscape has a robust system of general protection that is primarily sustained by the designation of the entire area as Heritage of Cultural Interest (BIC) in the category of “cultural landscape”. This is the highest legal status that current regional and national legislation establishes for the recognition and protection of cultural manifestations and is the highest legal category for the protection and stewardship of cultural heritage assets at regional and national level in Spain.

The nominated property benefits from a Management System that includes a Management Plan and a governance system that are effective and adapted to the characteristics and needs of the cultural landscape. Both provide for the unified management of all the elements of the property, with a view to the future and sufficient capacity to preserve its Outstanding Universal Value over time and to address potential threats and vulnerabilities. The Management Plan is divided into seven programmes that include different actions of vital importance for the planning, development and protection of the property, the landscape and its cultural heritage, with a cross-cutting approach to achieving the proposed strategic objectives. For its part, the governance system ensures that all those involved in one way or another with the nominated property consider themselves to be participants and stakeholders in its management. To this end, a management structure has been set up for the nominated property under the aegis of the Di-

rectorate General of Cultural Heritage of the Xunta de Galicia and coordinated by the Interdepartmental Commission of Ribeira Sacra. The Interdepartmental Commission is a participatory management body composed of representatives of public authorities and public bodies with competence in the area, in addition to a broad representation of the social and private entities involved in Ribeira Sacra.

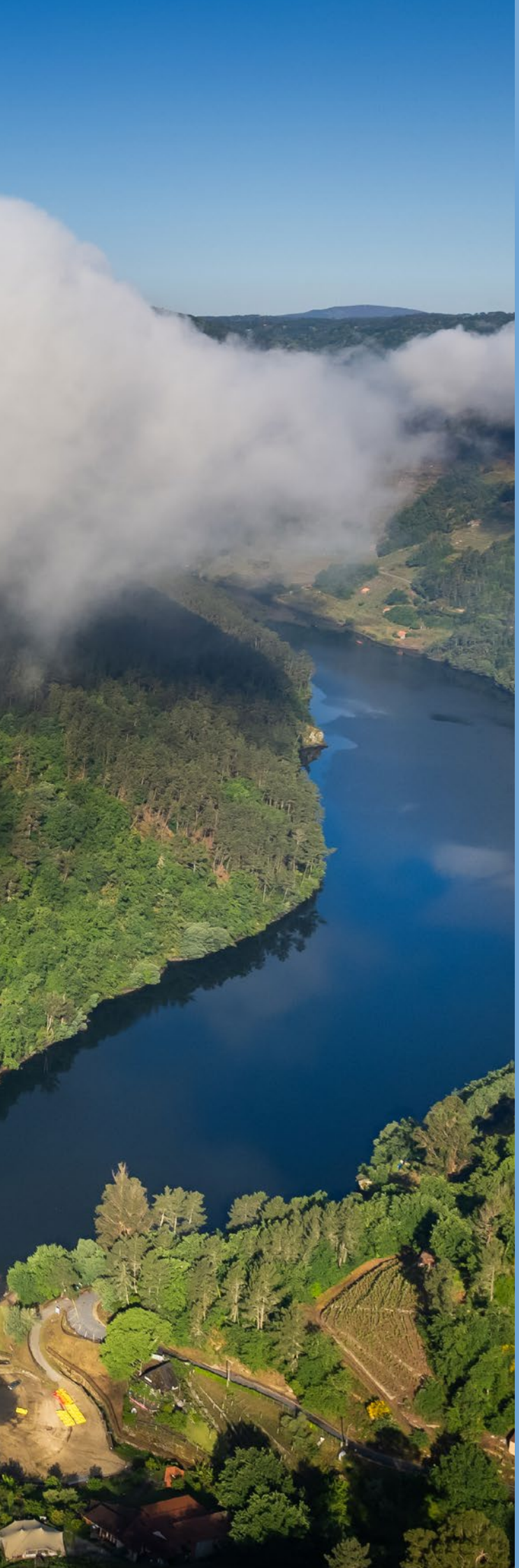
Name and contact information of official local institution

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Website:
https://ribeirasacrawaterscape.com

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Ribeira Sacra Waterscape

1. Identification of the nominated property

1.a. Country

1.b. State, Province or Region

1.c. Name of nominated property

1.d. Geographical coordinates to the nearest second

1.e. Maps and plans, showing the boundaries of the nominated property and buffer zone

1.f. Area of nominated property (ha) and proposed buffer zone (ha)

1a. Country
Spain

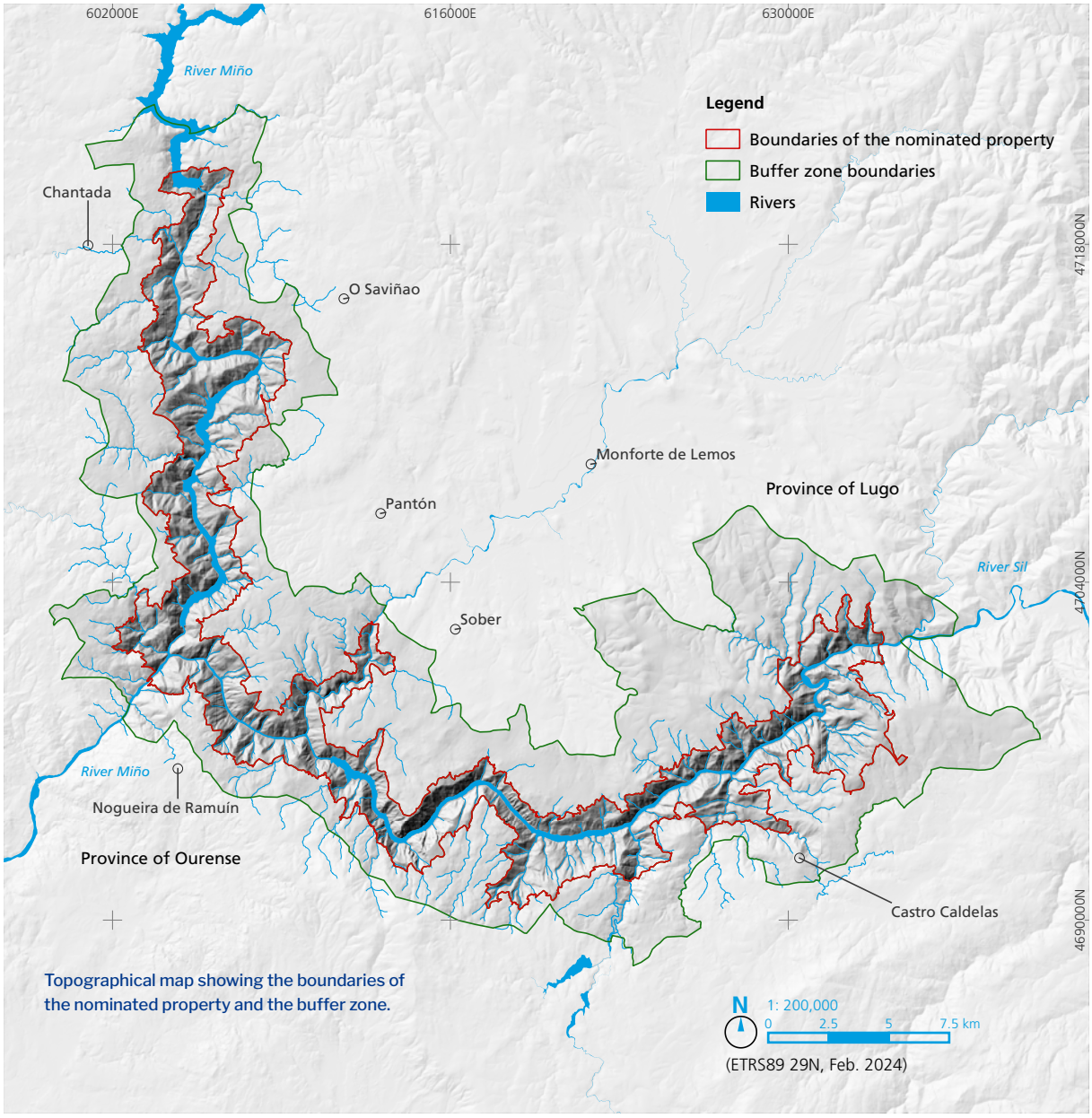
1b. State, Province or Region
Provinces of Lugo and Ourense, Autonomous Community of Galicia, Spain.

1c. Name of nominated property
Ribeira Sacra Waterscape

1.d. Geographical coordinates to the nearest second
(WGS 84) 42° 27' 14" N / 7° 43' 50" W
(ETRS 89 UTM Zone 29N) 604352 / 4700981
This is the point where the Sil and Miño rivers meet at the heart of the nominated property.

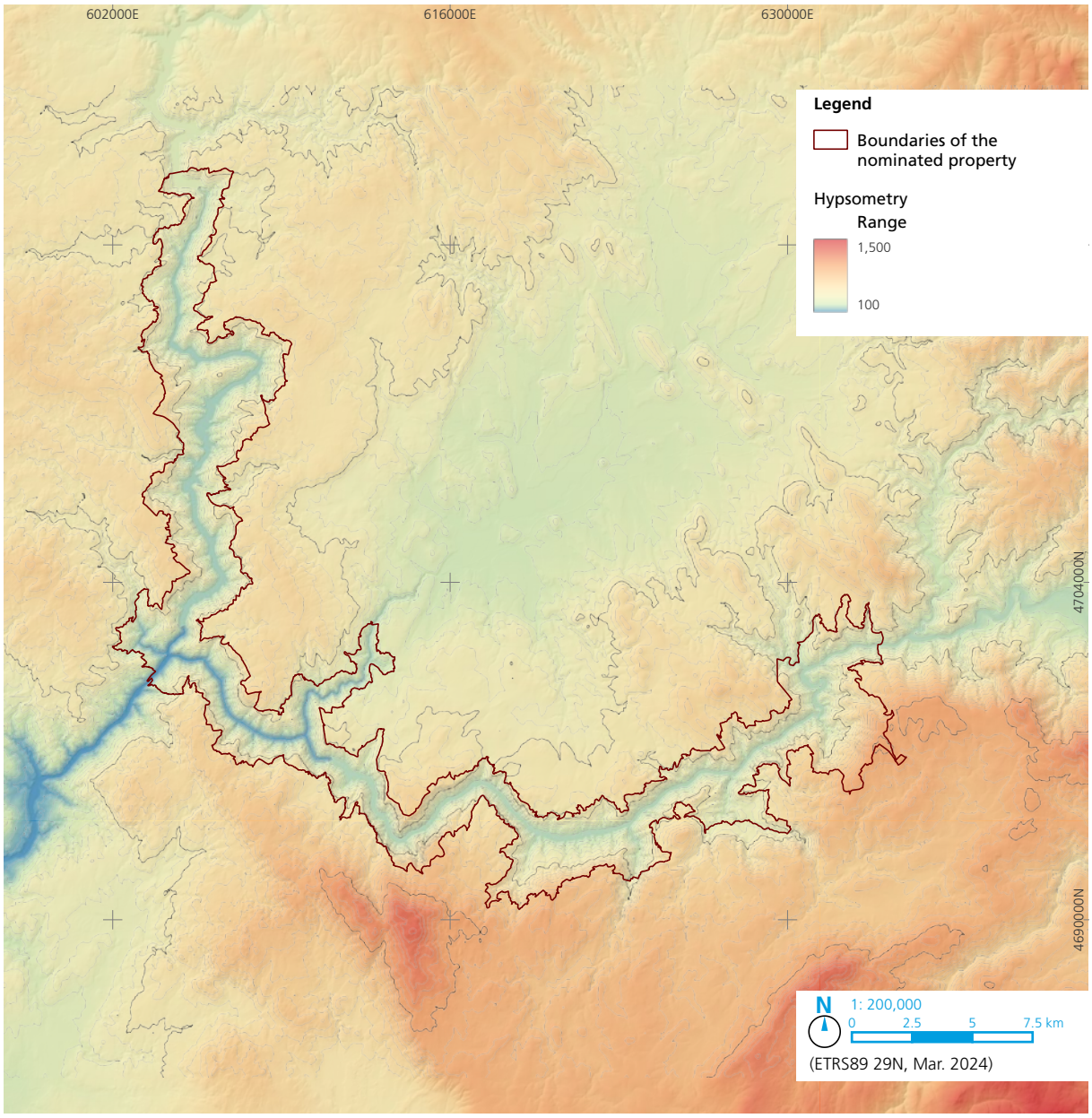
1.e Maps and plans, showing the boundaries of the nominated property and buffer zone
In addition to the reference maps attached below, "Annex 1 - Maps" to this nomination dossier provides a complete topographical map of the nominated property and the buffer zone at a scale of 1:50,000. The digital annex also incorporates these maps in pdf format and includes the GIS files in shp format for the boundaries of the property and the buffer zone separately.

1.f. Area of nominated property (ha) and proposed buffer zone (ha)
Area of nominated property: **16,471 ha**
Buffer zone: **31,979 ha**

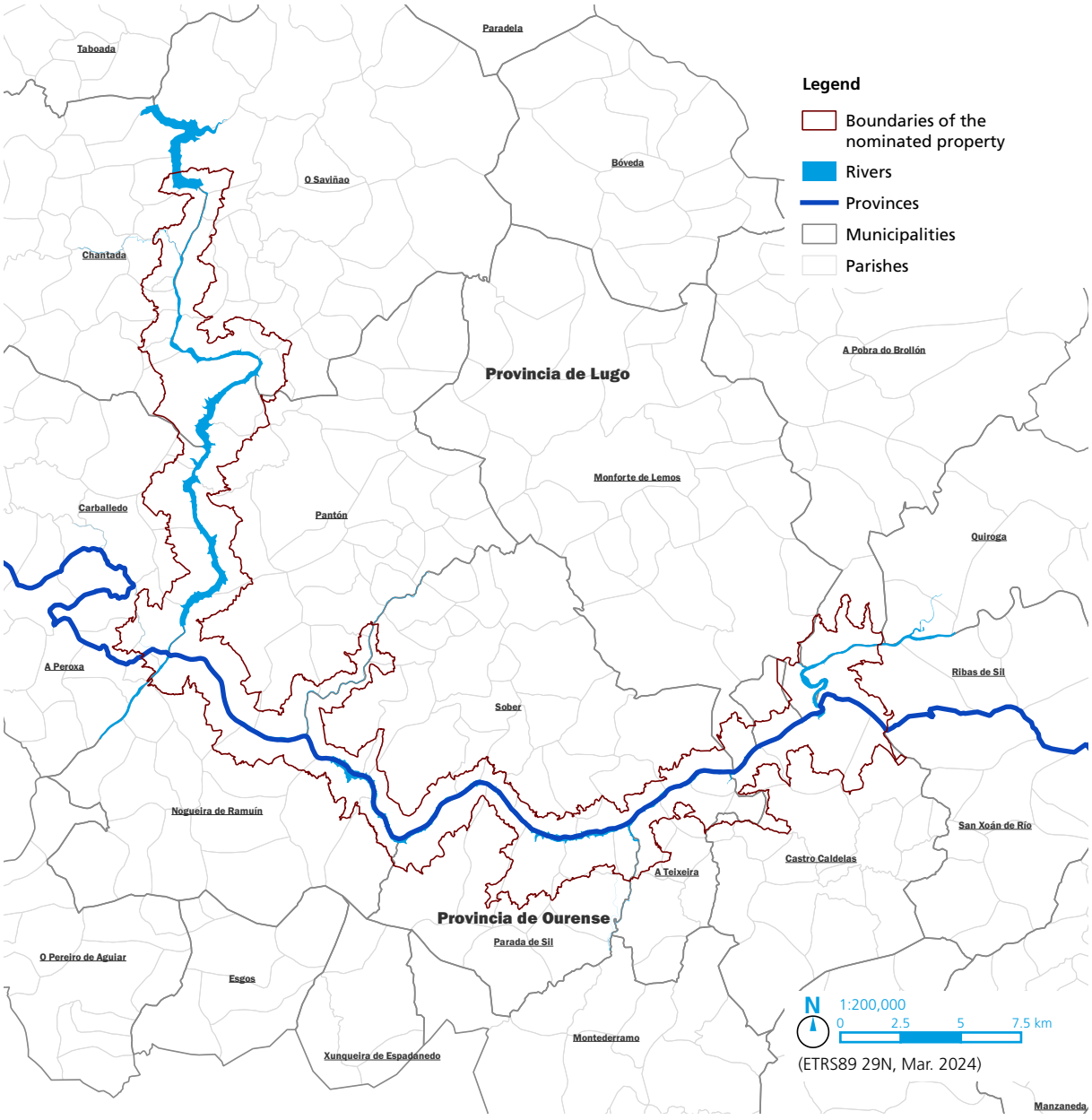


Topographical map showing the boundaries of the nominated property and the buffer zone.

Hypsometric map indicating the boundaries of the nominated property.



Administrative division of the nominated property into provinces, municipalities and parishes.







Ribeira Sacra
Waterscape

2. Description

2.a. Description of nominated property

2.b. History and Development

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2.a. Description of nominated property

The nominated property showcases an outstanding cultural waterscape, traditionally and popularly known as Ribeira Sacra, which is bounded by spectacular river canyons at the confluence of the Sil and Miño rivers (Galicia, Spain), straddling the provinces of Lugo and Ourense in in the cool, damp climes of Northwest of the Iberian Peninsula. Ribeira Sacra is a landscape that is clearly delineated by cultural and natural values, the hallmarks of which are the combined product of water and human communities, working together to shape this remarkable place over the centuries. Despite its seemingly untouched nature and isolation, it is an intensely and extensively exploited riverscape, where every available metre of land has been modified to meet the demands of survival.

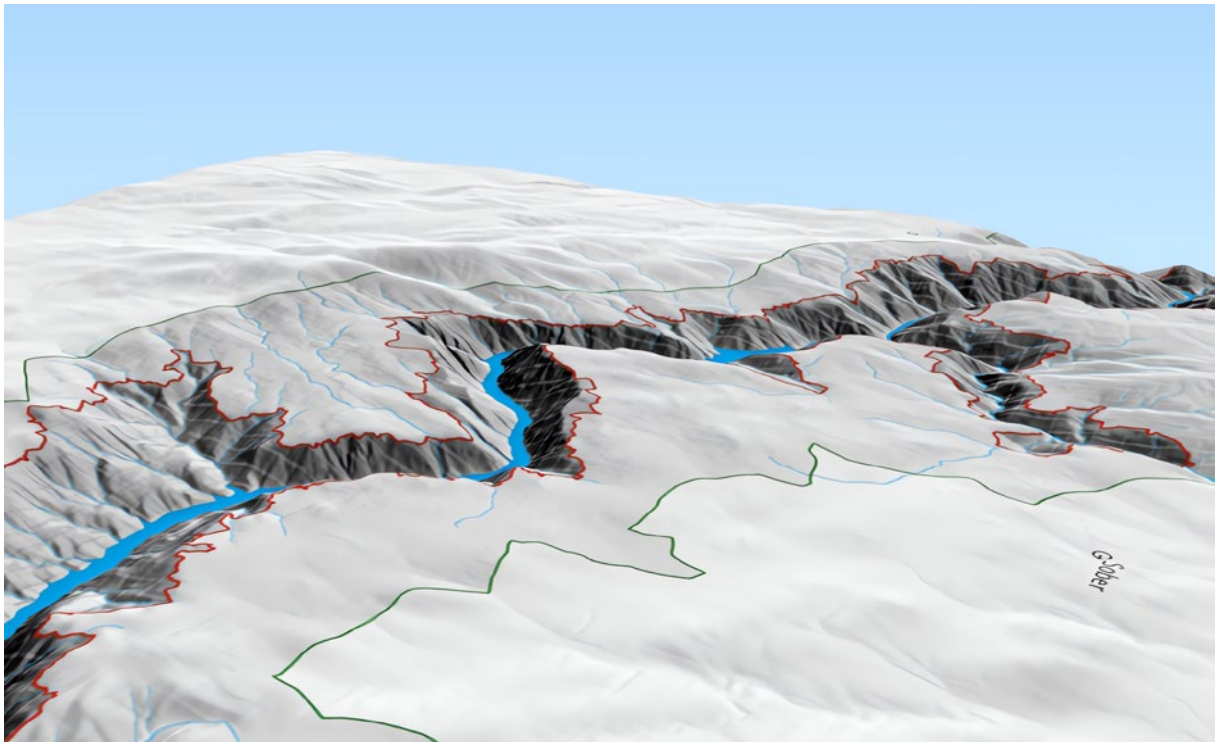
It traces the origins and evolution of a landscape sculpted by water and is paradigmatic of a culture of water: one can clearly discern each and every mark of its construction over more than 1,500 years of continuous occupation. It is an exceptional testimony to a living landscape that has been shaped by water over many generations to become an open book on the heritage and culture of water, its pages written on its soaring slopes and its countless rivers and streams. It is, in short, one of the most exquisite examples of a cultural landscape in the Western world, where nature and humankind – with its beliefs, aspirations and sense of survival – have come together to create the most beautiful symphony from the medium of water.

The boundary of the property runs along the upper contours of the entrenched valleys that lie at the confluence of the Sil and Miño rivers. The limits are delineated on the ground by what are known locally as *bocarribeiras*, where its slopes meet the surrounding plains. The demarcation therefore includes the river canyons and entrenched valleys between Santa María de Pesqueiras to the west and San Clodio de Ribas de Sil to the east, covering an area of 16,471 ha, with a perimeter of 273 km.

The buffer zone around the nominated property covers an area of 31,979 hectares, with a perimeter of 204 km, and is delimited by the boundaries of 72 parishes that were established in the Middle Ages and that still survive today as identifiable territorial units.

The description of the nominated property is divided into two main sections, with various subsections. The first section focuses on the physical characteristics of a place created by water, and includes an account of the distinctive agricultural practices, chief amongst which are the impressive crop terraces (*socalcos*), and the settlement patterns that make this living landscape unique. The second section explores the rich heritage associated with the culture of water that underpins the outstanding significance of the cultural waterscape, including water heritage from different periods, the eremitic and monastic heritage linked to its origins and the most noteworthy elements of intangible heritage.

A digital terrain model of a section of the nominated property, showing the layout of the property boundary running along the edge of the river canyons and the scope of the buffer zone which is located in the surrounding plains.



Canyons and entrenched valleys carved out by water

The deep river incision in the bedrock of the Galician Massif

The deep channels of the Miño and Sil rivers in their middle stretch – the geomorphological basis of the outstanding waterscape of Ribeira Sacra – are the result of a prolonged incision by the two rivers in the vast mass of granite, gneiss and other metamorphic rock layers that form the great geotectonic unit of the Galician Massif.

The mechanical action of water, which has carved deep, steep-sided valleys, canyons with near-vertical walls in some sections, is not only the result of the erosive capacity of these two mighty rivers throughout their geological history. The ancient massif carved out by the Sil and Miño rivers was folded and uplifted and then flattened in the Palaeozoic, with large intrusions of granitic plutons. During the Mesozoic, due to high tectonic pressures during Alpine orogenesis, it broke up into large blocks arranged at different heights, separated by faults, with many internal fractures.

Within the area of Ribeira Sacra, the river system that drains into the Miño and Sil rivers had already taken shape during the Cenozoic, following lines of tectonic weakness: along faults and, above all, along fractures. The rivers began to excavate deep incisions in the fractured and altered rock, while the blocks over which they flowed rose up as a result of the pressures of late Alpine orogeny.

The canyons and steeply entrenched valleys of the Miño and Sil rivers, with drops of more than 500 m in some places, are the joint result of a mutually reinforcing process of water erosion and tectonic uplift (Pérez Alberti, 2019; Vicente *et al.*, 2011). They are thus an excellent example of the phenomenon known in fluvial geomorphology as “antecedence”. This particular feature, together with other lithological and geomorphological factors, explains why this entrenched section of the two rivers, particularly the Sil, is included in the Spanish Inventory of Places of Geological Interest of the Spanish Geological and Mining Institute due to its exceptional geodiversity, beauty and state of conservation.

Within the overall context of the deep, narrow valleys that distinguish the outstanding river landscape of Ribeira Sacra, there are certain internal differences as regards the steepness of the slopes, which vary depending on the type of rock into which the Miño and Sil rivers have cut. Because of this, there is significant diversity in the natural physiognomy of the landscape, in plant life and land use, and in the distribution and layout of the old monastic settlements and the dozens of villages that comprise the traditional settlements.

The steepest profiles of the two valleys occur where the river cuts through homogeneous and consistent masses of adamellitic granite, as occurs in certain stretches of the Sil. The spectacular,

High plains of the ancient Galician Massif between the provinces of Lugo and Ourense, where the entrenched rivers Miño and Sil have created the canyons and deep valleys of Ribeira Sacra. Panoramic view to the north from the foot of Monte Meda. © R. Mata







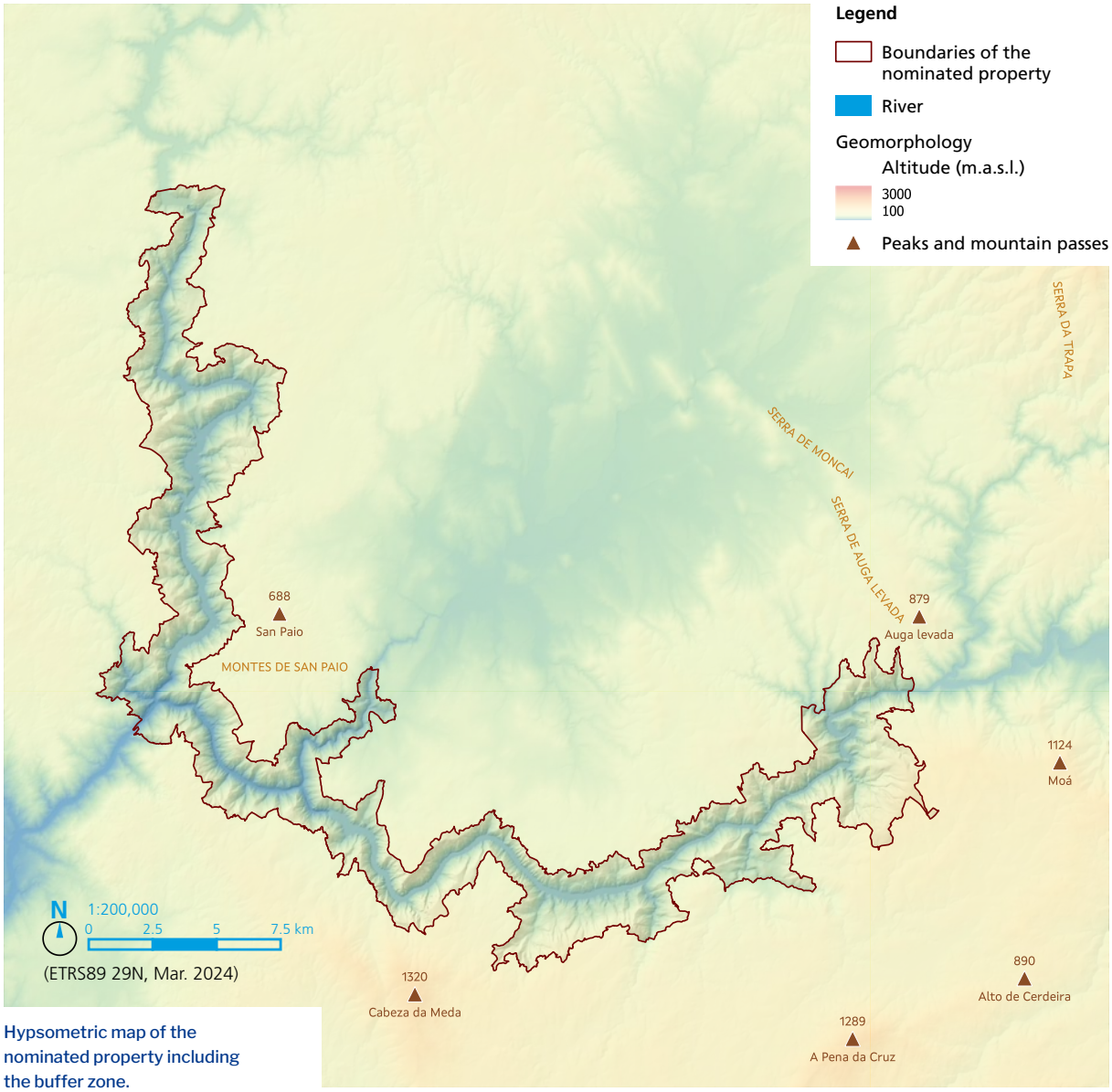
Sil canyon from the viewpoints of Cabezoás and Vilouxe (top left and right) and Cividade (bottom). © R. Mata



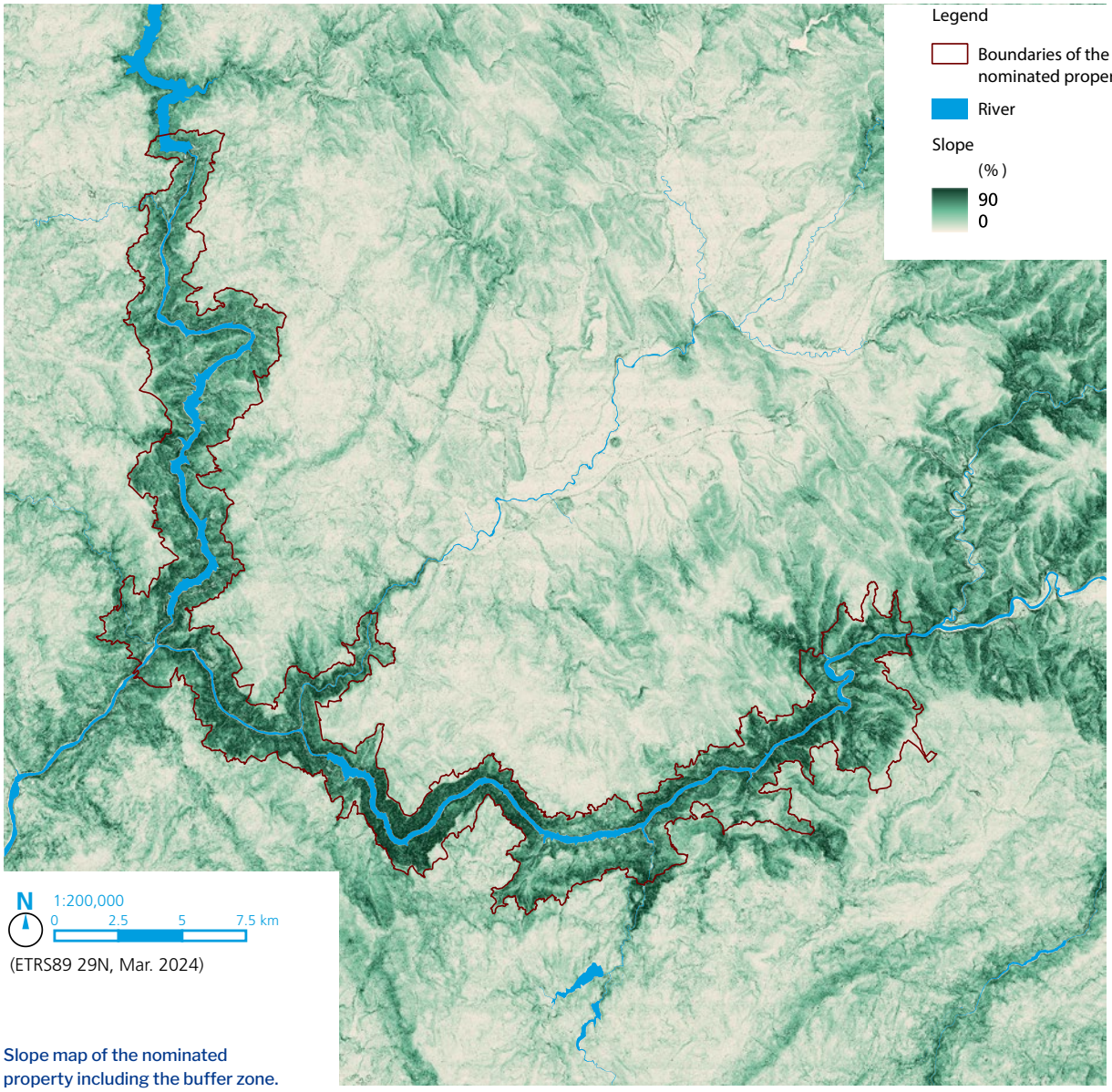
near-vertical walls form wild and spectacular rocky canyons with patchy vegetation of trees and bushes suited to the steep slopes and lack of soil, free of settlements and traditional agricultural activity, although they are used and transited by the rural communities.

In the rest of the area, the deep incisions of the Miño and Sil rivers occur on rocky masses of gneiss, quartzite, schist and slate. Here, the two rivers and their main tributaries, the Asma, the Mao, the Cabe and the Edo, have carved out entrenched valleys, with steep slopes that have a regular gradient at certain points and at others are staggered or divided into steep ridges or interfluves separated by the channels of the many streams and brooks. It is on these steep rocky slopes that crops have been grown on narrow stone terraces since the Early Middle Ages and where numerous villages are also located, linking up their landholdings and private and communal woodlands, which tend to occupy the steepest and rockiest patches of land, with small watercourses close by.

A distinctive feature in this relief of deep valleys and river canyons are the fluvial terraces perched above the river Sil, in the south-east of the nominated property. They are a series of ledges at different levels over gneissic rock, with steep slopes on their edges that are covered by crop terraces (*socalcos*). These fluvial terraces were formed during the different stages of entrenchment of the Sil river.



Hypsometric map of the nominated property including the buffer zone.



Slope map of the nominated property including the buffer zone.

Contrasts in the orientation of the slopes and the spectacular entrenched meanders

In this land of deep valleys sculpted by water, attention should be drawn to specific relief features of great scenic significance when considering the distinctiveness of this diverse landscape. First, the course of the major rivers and the orientation of their steep slopes, which bears a close relationship to the distribution of plant cover and to land use, particularly as regards the location of the vineyards. Second, the deep entrenched meanders that endow the landscape with spectacular scenery and exceptional viewing and interpretative conditions.

The Miño and the Sil, in the sections that flow through the nominated property until they meet at Os Peares, follow clearly different courses along distinct tectonic lines: the Miño flows in a predominantly north-south direction and the Sil in an east-west direction, which means, in general terms, that their slopes also have different orientations.

The slopes of the Miño face east on the right bank and west on the left bank; there is therefore, broadly speaking, no significant difference in the hours of potential sunshine and in the microclimatic conditions for cultivating the crops that grow on both banks of the river. The slopes of the Sil, on the other hand, have quite contrasting orientations, given the predominantly east-west course of the river. The steep slopes on the right bank face south and are therefore sunnier than those on the left bank, which face north and are more shaded, cooler and more humid. The sunny slopes are mainly lined with impressive cultivation terraces. In contrast, the shady areas are covered with a dense forest of oak and chestnut trees, although small patches of vineyards can be seen.

In addition to the special bioclimatic and agrological significance of the orientations of the steep slopes of the rivers Sil and Miño in the layout of the cultural landscape of Ribeira Sacra, another notable and distinctive feature of this highly diverse waterscape is the deep entrenched meanders. The wide rocky bends provide spectacular vistas and offer, from various viewpoints, a comprehensive reading of many of the natural and cultural features and values of the Ribeira Sacra landscape.

Two entrenched meanders are particularly noteworthy for their size, breathtaking beauty and viewing possibilities. Strategic viewpoints located at the highest points of each bank offer a panoramic view of the river's "entrance" and "exit" between steep rocky promontories. One of these canyon meanders is on the Sil river south of Sober. The other great meander, on the Miño, has a highly evocative name: *O Cabo do Mundo* (World's End). The Cabo do Mundo viewpoint commands a spectacular view of the high, dark-toned rocky spur, like a narrow peninsula jutting into the river, surrounded by water to the north and south.



Marked contrast between the sunny and shady sides of the steep slopes of the Sil river in Vilachá and Doade, with predominantly crop terraces – *socalcos* – on the southern slopes and woodland on the northern slopes. © R. Mata







Entrenched meander of the Sil to the south of Sober from the Vilouxe viewpoint, set in a beautiful canyon rising to more than 500 metres (top) and view of the meander of the Miño known as O Cabo do Mundo (World's End), from A Pena da Cova (bottom). © R. Mata

The topography of the steep slopes and its relationship to historical settlement

In this land of canyons and deep valleys, there are significant internal differences in the topography of the steep slopes, with clear implications for the patterns of settlement and land use, and for the organisation of the cultural landscape as a whole.

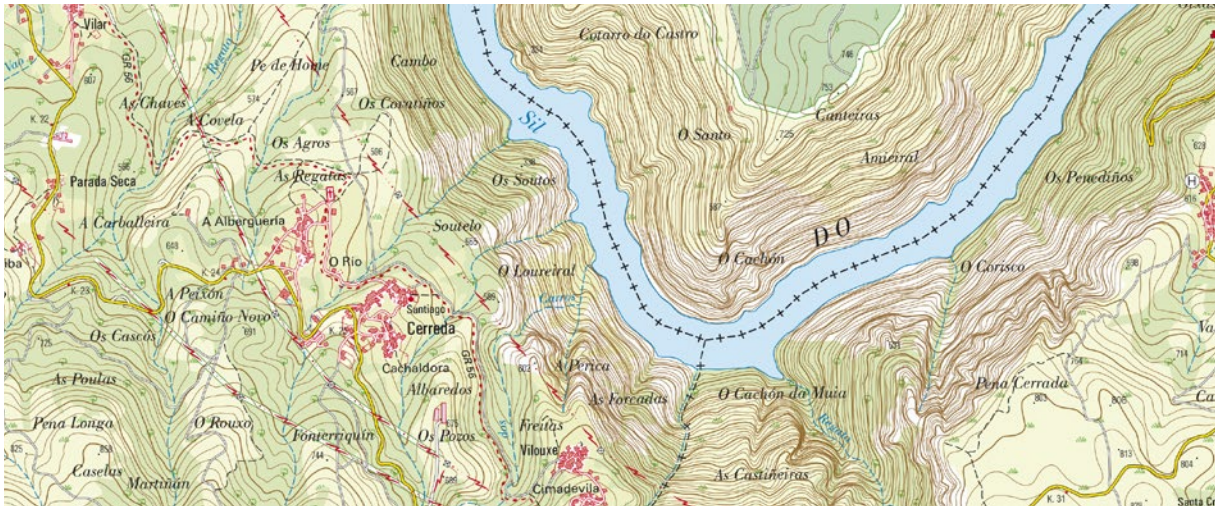
A common and characteristic feature of the landscape of the nominated property is the significant drop in elevation between the high surrounding plains and the valley bottoms of the entrenched rivers Miño and Sil. The strip of land that leads from the high plateau to the steep slopes is known as *bocarribeira*, a lyrical term coined by the geographer Ramón Otero Pedrayo, and the title of a collection of poems by the same author. The *bocarribeiras* of the rivers Miño and Sil in Ribeira Sacra are home to many villages, overlooking the valley floor, with their plots of land, meadows, chestnut groves and woodlands, typically arranged in the form of transects or strips between the level ground of the uplands and the riverbanks.

The steepest – almost vertical – profiles stretching down from the *bocarribeiras*, with slopes of over 65° and up to 88°, occur in the sections where the rivers, especially the Sil, have cut through the granite massifs. In these canyons, the rocky terrain of the steep walls and the lack of soil account for the scant settlement and agricultural use to this day. The villages and their farmland are located along the inner edge of the *bocarribeira*.

Beyond the granite canyons, the slopes that have been hewn from gneiss, granodiorite, quartzite or schist, whilst still having steep gradients, almost always above 40°, have historically been occupied by a few villages, with some sections skilfully terraced for the cultivation of grapevines.

A closer inspection of the steep slopes reveals a range of different shapes and forms, which shed light on the layout of the settlements and the division of land into farmland and woodland. The landscape thus acquires a rich intrinsic diversity – natural and cultural – which is the result of an ancestral process of intelligent adaptation of the settlement to the possibilities of the environment. The cluster of villages has indeed adapted to the contours of the slopes, seeking out water sources and small areas of level ground on which to build their farmsteads. Such adaptation is a prominent feature and an outstanding value of the Ribeira Sacra cultural landscape. A detailed analysis of the close-knit group of villages, which punctuate the landscape with a constellation of small settlements set in a mosaic of *ager* (farmland) and *saltus* (pastureland), enables us to establish, albeit not exhaustively, at least three patterns or models for the location of villages in relation to the lay of the land.

One of these patterns, matching that of the villages located in the *bocarribeiras*, can be identified in the valley of the Sil between A Teixeira and Parada de Sil, particularly on the left bank, on slopes divided into ridges by small watercourses. A second settlement pattern is found on slopes with moderate and relatively regular gradients, not divided by small watercourses into ridges or interfluves as in the previous pattern. Lastly, a third and distinctive pattern for the distribution of villages and farmland on slopes is found on stepped slopes – fluvial terraces – such as on the right bank of the river Sil and at the point of confluence with the river Edo in the municipalities of A Teixeira and Castro Caldelas.





Bocarribeira on the southern side of the Sil canyon in the parish of Cerreda (Nogueira de Ramuín) with the villages of Vilouxe, Cerreda and A Alberguería perched on the high plain, close to the canyon walls. Bottom: view of the canyon from the Cividade viewpoint, with the villages of Vilar de Cerreda and A Alberguería atop the *bocarribeira*. © IGN and R. Mata

A humid Atlantic climate with abundant rainfall and marked local contrasts

Striking local nuances are also evident in the climate of the nominated property, which is located within the humid Atlantic climate zone that encompasses much of Galicia. These nuances are due to the inland location of Ribeira Sacra, relatively far from the ocean, with a certain Mediterranean influence, to the elevated altitude of the *bocarribeiras* and, above all, to the stark contrasts in the topography and orientation of the valleys. These geographical factors explain the significant local differences in temperature and rainfall, despite the relatively small size of the area.

That said, a common feature of the *bocarribeiras* and uplands that surround the Miño and Sil canyons is the abundance of rainfall, with totals in excess of 1,000 and even 1,500 mm per year, as is the case at the Santo Estevo Observatory (1,515 mm). This means significant volumes of surface water, especially from September to May, which is channelled through a dense and hierarchical drainage system, but also runs free and untrammelled down the steepest slopes. Precipitation tends to decrease towards the bottom of the narrow valleys, to less than 1,000 mm, or even 800 mm in the case of the Sil valley, the eastern section of which marks the transition to a subhumid continental Mediterranean climate.

Another characteristic and identifying feature of these deep, damp and rainy valleys is the frequency and diversity of hydrometeors, which yield beautiful landscape shots. A particularly attractive sight are the dense fogs that cling to the Miño and Sil valley floors, both radiation fog on still, cold days in the winter months, when the sun's rays bathe the high ground, and advection fog, also common in Ribeira Sacra when a mass of warm, humid air from the Atlantic flows into the cool canyons. The rainstorms from the west and southwest also frequently trap layers of low cloud on the slopes which, together with the light mist that rises off the dammed up course of the rivers, enhance the special texture and mood of this landscape of water flanked by canyons.

The average temperatures also vary significantly depending on altitude and orientation. On the lower slopes and at the bottom of both valleys, the average annual temperature is between 14 and 15°C, rising to over 15°C in the area around Os Peares. In contrast, in the *bocarribeiras* and in the high plains surrounding the nominated property, the average temperature drops appreciably by between 2 and 3°C, ranging from 11 to 13°C. Another temperature-related difference – difficult to measure precisely due to the low number of local weather stations, but still significant – is the difference between the sunnier and warmer south and south-west facing slopes, where vineyards thrive under the right soil and slope conditions, and the cooler and more humid shady slopes, where there are more wooded areas. The sheltered, low-lying valley floors have relatively mild winters and are well suited to the cultivation of cherry and citrus trees in some orchards. Together, these attributes distinguish the area of the nominated property from its surroundings.





Hydrometeors of the waterscape. Top: clouds trapped in the Miño valley, between the parishes of Nogueira de Miño and Ribeiras de Miño, after a westerly rainstorm. Bottom: rainbow over the *socalcos* (terraces) of Doade and the Sil, seen from Souto Chao after a spring shower. © R. Mata

The omnipresence of water

An exceptional hierarchical drainage system criss-crossed by a myriad of watercourses

The extraordinarily intricate river system and its particular organisational features are attributable to the high volume of rainfall and surface run-off, the deeply entrenched main valleys, and the rocky terrain, deeply riven by fault lines and fractures. Water is omnipresent in the nominated property: in the large and small rivers; in the hundreds of streams and brooks; in the headwater streams and waterfalls, both permanent – such as Auga Caída or do Cachón – and the many that are formed in the rainiest months of winter and spring, fed by the runoff that flows off the *socalcos* or over the rocky ground after regular and heavy rainfall. In this magnificent setting, water also creates a soundscape of tumbling water and waterfalls and fills the air with the special fragrance of water.

The drainage system centres around the two main rivers, the Miño and the Sil, that converge at the beautiful confluence of Os Peares. These two rivers are joined by large tributaries with sizeable sub-basins in the uplands that border the valleys. The tributaries are also entrenched at their confluence with the two major rivers when they emerge from the *bocarribeiras*. The Miño is joined by the Asma, which is fed by water from the lands of Chantada and runs through a deep valley dotted with mills from Monte da Rada to the point where it joins the main river; further downstream, it is joined by the river Búbal, which flows through a wide catchment basin in the lands of Carballedo. The Sil, for its part, is fed by three main tributaries that hold great significance in the cultural landscape: the river Edo, which flows through Terra de Caldelas and forms a beautiful entrenched valley in its final stretch; downstream, the fast-flowing river Mao, which originates in the uplands of the Serra de San Mamede and has carved out a beautiful rocky, forested canyon dotted with rapids and small waterfalls; and the river Cabe, which flows through Tierra de Lemos and joins the Sil at a beautiful spot overlooked by the Ermita da Barca chapel.



Meeting of the rivers Miño (right) and Sil (left) at Os Peares with the iron bridge. © R. Mata

The courses of the rivers Miño and Sil and the confluence with their main tributaries are influenced by dams: Belesar and Os Peares on the Miño, and Santo Estevo and San Pedro on the Sil. The deep entrenchment of both rivers, the Sil in particular, and the narrow valley bottoms mean that the dams, at a moderate height above the natural base level of both rivers, do not detract from the setting and image of rivers entrenched in canyons and deep valleys. The courses of the Miño and the Sil, which broaden where they are held in by the dams, are narrower upstream, hemmed in by the *bocarribeiras* that rise several hundred metres above the river level. This dissipates the impression of dammed watercourses and reinforces the image of deep canyons, an image that is accentuated by the reflection of the water at the valley bottom.

Just as important as the main rivers of Ribeira Sacra are the hundreds of small rivers, streams and brooks with short, straight courses that emerge, tumbling, from the *bocarribeiras*, bisecting the steep slopes, with a profusion of waterfalls, cascades and *cachones* (small waterfalls), with gushing, noisy waters, which indelibly mark the character of Ribeira Sacra, both tangible and perceived. They are the fine threads that weave together the tapestry of this waterscape.

The pervasive presence of water is made clear if we look at the findings of the analysis of available maps by the Xunta de Galicia, where the not inconsiderable figure of 486 watercourses are recorded in the area of the nominated cultural landscape. Yet even so, on the steeper, more uniform slopes, part of the surface runoff on days of heavy rain is not channelled into small streams but washes down the slopes and must be controlled and slowed by the narrow *socalcos*, which perform the vital dual task of creating soil and managing runoff flows.

In addition to surface water, there is a multitude of springs, wells and fountains, especially abundant in the *bocarribeiras* and on the flat areas of land found on some of the slopes. These water points, which tap into deep and subsurface aquifers and are sometimes held sacred, have been instrumental in the historical forms of settlement in Ribeira Sacra, from the hermit settlements and monastic foundations to the villages and hamlets in the canyons and along their edges.



Confluence of the rivers Miño and Asma in the municipality of Chantada. © R. Mata

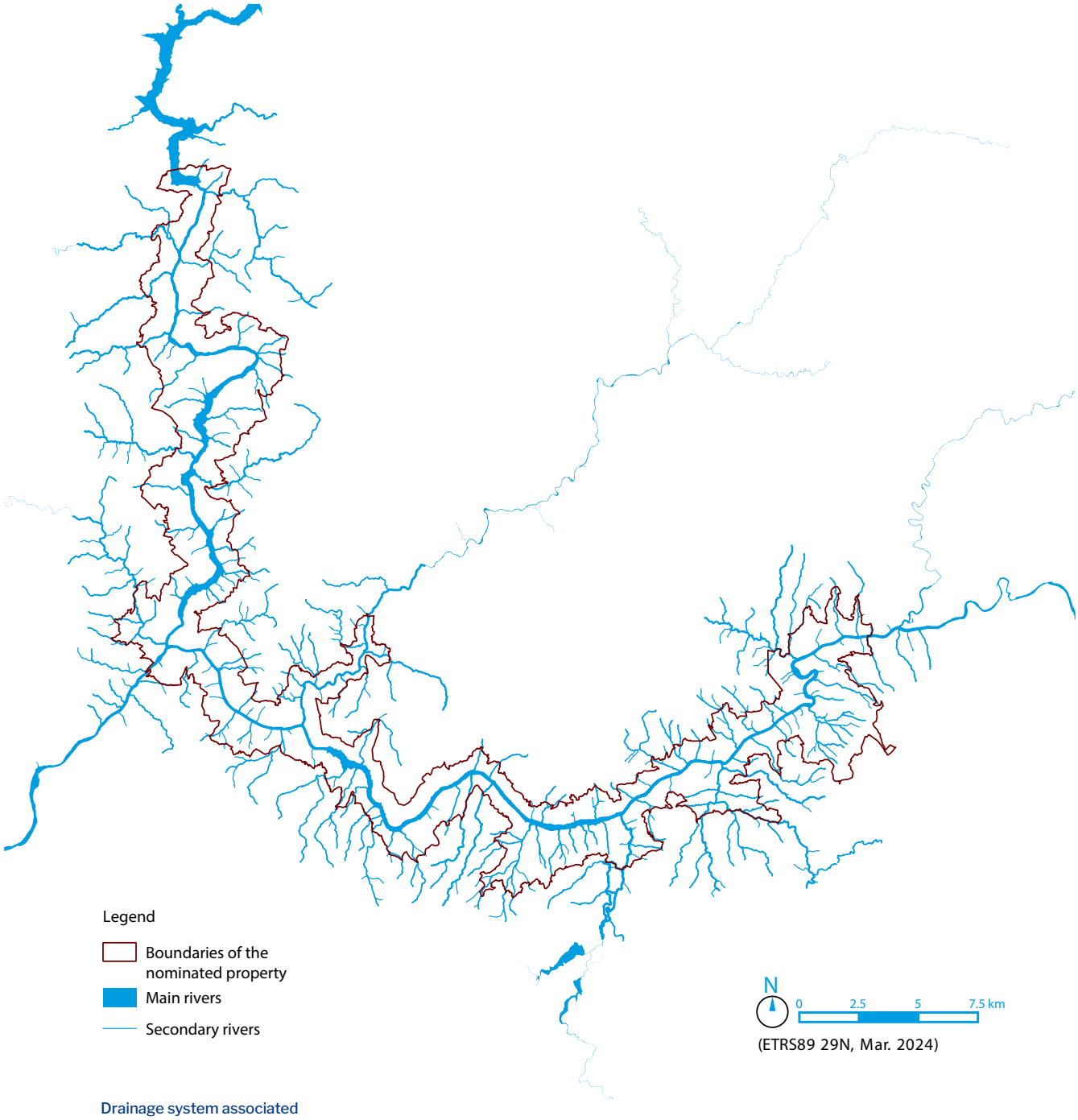


Confluence of the rivers Cabe and Sil, next to the village of A Barca and its solitary hermitage. © R. Mata

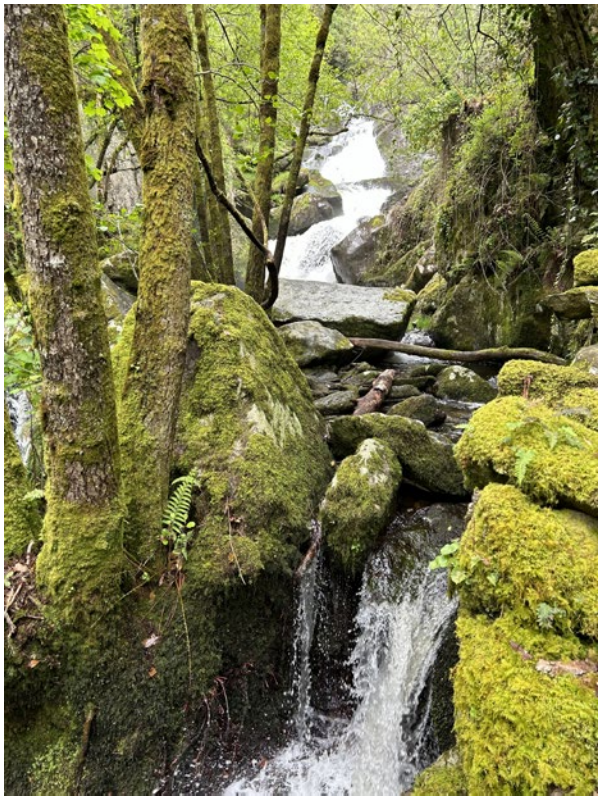


The images show the narrow stretch of water of the dammed courses of the Sil at Vilachá (right) and of the Miño at A Cova (left). © R. Mata





Drainage system associated with the nominated property, showing the most significant of the numerous watercourses that criss-cross the cultural landscape.



Fervenza do Cachón (left) on the dos Vados river, near A Teixeira, and the small waterfall of the Lamateiro stream over the river Sil in the Santo Estevo reservoir, parish of Vilar de Cerceda. © R. Mata



Vilachá stream bordered by majestic alders and many medieval wineries lining the watercourse, evidence of the decisive role played by Benedictine monasteries in demarcating the vineyards. © R. Mata



A biodiverse, cultural vegetation mosaic, adapted to varying terrain, soil and microclimates, and to the presence of water

One of the most characteristic and valued features of the Ribeira Sacra landscape is its extensive and biodiverse vegetation mosaic. This diversity of vegetation and the rich ecological and cultural diversity are in fact the result of centuries of human intervention in the woodland environment. For the communities of Ribeira Sacra, *monte*, a term that refers to uncultivated land covered with productive trees, shrubs, bushes or grass, has always been a vital resource that complements agricultural and livestock farming activities. It has also been part of a traditionally communal land-use system, of common land at the parish level that, within the parishes, is divided into village smallholdings (*voces*, *suertes* and *senaras*). We therefore have before us a distinctive element and a notable value of the Ribeira Sacra landscape, both natural and culturally constructed.

For this reason, the layout and structure of the woodland habitat is also closely related to peasant smallholdings, since much of the woodland, like the agricultural land with which it was associated, was definitively divided up among the peasants with the end of the *foral* system in the first quarter of the 20th century. This highly fragmented private land stands in contrast to the always larger common landholdings – *montes vecinales en mano común* – the legacy of a long peasant history and the private – not public – property of the parish and village residents as a whole. In addition to the vegetation mosaic of the woodlands, large tracts are interspersed with agricultural mosaics of orchards, vineyards and some cereal and forage crops. The appearance of this patchwork of vegetation is that of a jigsaw puzzle of small pieces with no apparent order, although in reality such order does exist.

Within the context of a woodland rich in species and intensely managed for many years, the stands of chestnut (*Castanea sativa*), known as *soutos de castiñeiros*, are of special interest, both for their spatial significance and for their ecological, productive, cultural and aesthetic value. This cultivated woodland, which tends to occupy humid areas associated with oak groves, has been one of the mainstays of traditional peasant farming. Chestnut trees, sometimes mixed with oak trees, dot the landscape of the nominated property with tracts of varying size, both privately owned and communal. The stands are stocked with old trees that have been pollarded to produce a broad crown that is well exposed to the light, thus maximising nut yields. The larger riverside chestnut groves (*soutos*) are usually equipped with *sequeiros*, a traditional vernacular stone building for drying chestnuts. The role that chestnut trees have played in the local diet and the majestic stature of the oldest specimens give these trees a special value and a symbolic value with which the village communities of Ribeira Sacra identify.

Alongside the chestnut groves, mixed or monospecific broadleaf forests typical of the humid Atlantic bioclimate or of the transition to the subhumid Mediterranean climate, such as oak (*Quercus robur*, *Q. Petraea*, *Q. Pyrenaica*) *and* birch, blanket the cooler and wetter areas of the *bocarribeiras*, the high ground and some moderately steep slopes.

The floristic and tree diversity of Ribeira Sacra is further enriched by the presence of two species of oak from the Mediterranean bioclimate, holm oak (*Quercus rotundifolia*) and cork oak (*Quercus suber*), which have also played a significant role in family farming. Holm oaks and cork oaks – the latter planted by the farming communities to obtain cork – are planted in copses or mixed with other deciduous tree species, with strawberry trees (*Arbutus unedo*) and scrubland. They are a good indicator of the climate transition in Ribeira Sacra, especially in the easternmost area of the Sil valley, towards a continental Mediterranean climate, and tend to thrive in the middle sections of the sunniest slopes, although they can be found in any part of the territory.

As Ribeira Sacra is a waterscape, special mention should be made of the fascinating plant life linked to the watercourses: the copses along the banks of the rivers, streams and brooks, and the water meadows that line the narrow floodplains of some of the tributaries of the rivers Miño and Sil. These linear features are of great floristic and ecological interest in identifying the green infrastructure of Ribeira Sacra. At the same time, they add a notable flourish of naturalness and beauty to the margins of the undammed stretches of river, often separating patches of terraced crops on the slopes.

The riparian woodland, both in the main courses and in the streams, is dominated by *ameneirais* or groves of alder (*Alnus glutinosa*) and *salgueirais* or groves of an endemic species of willow (*Salix salviifolia*) from the west of the Iberian Peninsula (Guitián *et al.*, 2017), with the additional presence of maples and oaks, and a rich understorey of shrubs and herbaceous plants adapted to the shady, damp conditions.

Of particular note is the respect that the farmers of *socalcos* on steep slopes have shown for the small patches of riverside vegetation that grow alongside the streams and brooks that flow down the slopes. Their actions have helped to preserve habitats of very high ecological value, while at the same time maintaining the natural drainage system and regulating runoff on the slopes, which also benefits their terraced crops. All these features combine to form an agroforestry hillside landscape of high formal, ecological and aesthetic value.

A substantial area is occupied by scrubland comprising various species, either undisturbed or interspersed with small patches of woodland or grassland.

It is important to remember that scrubland, as part of the woodland ecosystem, has historically played a decisive role in agriculture. To guarantee harvests year after year on poor soils – both physically and chemically – has entailed the large-scale use of manure (García Fernández, 1975), made possible by producing large quantities of gorse (*toxo*, *Ulex europaeus*). This has been particularly necessary for agriculture in Ribeira Sacra, where gorse used as animal bedding has been a primary source for the creation and fertilisation of the soil used in *socalcos*.

The high floristic, ecological, cultural and landscape interest of Ribeira Sacra as a whole and of the land surrounding the Sil in particular has led to the inclusion of the Sil Canyon as a Special Area of Conservation in the Galician Natura 2000 Network, with its corresponding environmental regulation. In addition to various species of birds, invertebrates, amphibians, reptiles and mammals of conservation interest, the implementing decree noted a total of 10 habitats of Community interest in accordance with Directive 92/43/EEC, several of which are directly linked to the aquatic environment.





Large chestnut grove overlooking the Sil canyon, including the Monastery of Santa Cristina de Ribas de Sil (top). Bottom: an ancient chestnut tree, included in the Catalogue of Singular Trees of Galicia, next to a *sequeiro* in the Entambosríos village chestnut grove. © R. Mata







Examples of the conservation of riverside copses alongside streams and brooks on terraced slopes with vineyards. Top: dense woodland next to the Portabade stream (Parish of Ribeiras de Miño). Bottom: woodland next to the Souto Chao stream (Parish of Doade). © R. Mata

The human construction of a landscape sculpted by water

The historical terracing of steep slopes for cultivation: the socalcos.

Ribeira Sacra is an outstanding cultural landscape that illustrates the combined action of local communities, the monastic tradition and a unique natural environment, and which has retained many of the original features from its earliest days, providing unique testimony to how the structure of this land has been adapted to these river canyons.

One of the most distinctive and notable features of the historical construction of the Ribeira Sacra landscape is the crop terraces that cling to the steep slopes of the Miño and Sil valleys, and of the lower course of some of their tributaries, also deeply entrenched, such as the Asma, the Cabe and the Edo. This practice dates back, at least in documented form, to the 9th century.

Within the framework of a well-documented agricultural practice of medieval origin (López Sabatel, 2009; 2022), the distinctiveness and exceptional interest of the terraces of Ribeira Sacra, within peasant farming traditions, can be attributed to two clear agro-environmental factors. Firstly, the fact that the terraces were built in a wet climate, with abundant rainfall for a good part of the year, where surface runoff is intense and untrammelled. Terracing the

A good example of the species-rich Ribeira Sacra scrubland in Penas de Matacás (*Monte Vecinal en Mano Común* or common land, Ribón and Gándara, Parish of Paradela), featuring gorse and heather, together with holm oak and cork oak saplings. © R. Mata



steep slopes therefore meant radically modifying the natural topography in order to create and stabilise the soil, but also – it is important to stress this – to regulate the flow of water and to manage drainage across the farmland. Secondly, the fact that work had to be carried out on very steep slopes, with gradients often exceeding 32°, even 64°, and furthermore, on rugged rocky foundations.

This was astutely and beautifully noted by the Galician geographer Otero Pedrayo, when in 1926 he wrote in the "Guía de Galicia" (Guide to Galicia): "one of the interesting cultivation methods is that of the "sucalcos" or terraces which sculpt and adorn the abrupt slopes over the Sil, the Miño in certain stretches, the Bibei, the Navea, the Cabe, counteracting the destructive action of rushing waters and offering an admirable example of the age-old perseverance of generations of farmers, treating the landscape in an unconsciously artistic style".

The terraces of Ribeira Sacra are called by different names depending on the municipality, parish and even village. *Socalco* or *sucalco* is probably the most widespread name for these terraces of stone. But reference is also made to *muras* in Saviñao or Chantada, *paredes* in A Teixeira, *muros* in Sober and Parada do Sil, *paredós* in Ribas de Sil or *calzadas* in Pantón and Nogueira de Ramuín (Pérez Alberti, 2019). These diverse naming conventions are proof of the deep-rooted significance of terraces for local communities and their landscapes. Equally diverse are the ways in which the *socalcos* adapt to the nuances of the topography and the bedrock on the slopes. The size and layout of the plots, their distribution on the steep slopes, their relationship with the surrounding woodland, with the watercourses and with traditional footpaths are all factors that have given rise to a morphological and cultural diversity on a micro-scale, typical of a landscape built over centuries with knowledge and techniques finely adapted to the rich agro-ecological potential of these canyons and entrenched valleys.

Given the distinctive features of the relief and climate of Ribeira Sacra, the uncultivated land best suited to ploughing was on the steep slopes of the banks of the rivers Miño and Sil. The monasteries thus built their estates and monumental structures thanks to the efforts of the peasantry working under the *foro* (land tenancy) arrangement, who ploughed the wastelands and steep slopes and built, by dint of toil and self-sacrifice, the magnificent riverbank terraces, a cultural landscape wrought by labour of epic proportions. The monastic records that we have studied also point to the small size of the basic production units, which must not have exceeded 3,500 m^2, with the smallest size being that of a *cavadura*, that is, a little less than 500 m^2 (López Sabatel, 2022).

The layout of the terraces varies significantly depending on the slope, the rocky substrate and the relationship with other geographical features, in particular with the small watercourses that plunge down the slopes, bisecting them and often forming elongated ridges or interfluves, which they adapt to. They are all aligned at right angles to the slope, to reduce erosion and control surface runoff.

On the steeper, rockier slopes, the terraces merge seamlessly with the rocky terrain, which then gives way once again to terraces, forming striking ensembles of great beauty and agro-biodiversity. On these steeper slopes, the terraces are barely wide enough to sustain a single row of vines. These are the most heroic exponents of this remarkable agricultural system. In contrast, on more gentle slopes, the terraces are wider, with lower walls, and have the capacity for two or more rows of vines. This type of *socalco* is common on the slopes of ridges or elongated interfluves between watercourses that descend towards the bottom of the river valley.

The construction technique used to make these terraces has always consisted of building a wall, then stripping the layer of weathered material from the bedrock and filling the resulting hollow by mixing the material with shrubs, usually gorse. The soil created in this way follows a constant pattern that has been repeated without exception over the centuries, clear evidence of its practicality and resilience.

At any rate, it is important to stress that the terrace system and the construction technique used in Ribeira Sacra has certain unique features. In addition to providing new areas of flat ground, often in extreme topographical conditions, the sections and construction features of the terraces are able to curb heavy surface runoff and manage drainage. The walls are designed in such a way as to keep the soil aerated and to act as drainage channels, favouring lateral runoff – through gaps between the stones – and deep infiltration. They are, therefore, highly water-efficient systems that are perfectly adapted to the conditions of the different seasons. Although forms of terrace cultivation are well represented in many places around the world, especially on the World Heritage List, the specific features of these historical *socalcos* set them apart in terms of their water-management features and their verticality.



Finca Cortezada in 1925. Photograph by Ruth Matilda Anderson for the Hispanic Society





Harvesting grapes from the *socalcos* on the steep slopes of the Ribeira Sacra requires imaginative transport solutions. © A. Rodicio





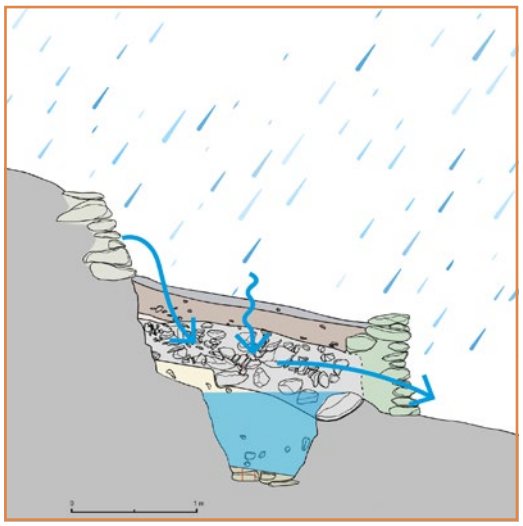
Top, detail of *solcalcos* on the steep slopes of San Amaro, Parish of Doade, built on gneiss, with heather growing on the rocky substrate. Left, granite boulder and adjoining *socalcos* in the Parish of Camporramiro, next to the Miño. © R. Mata





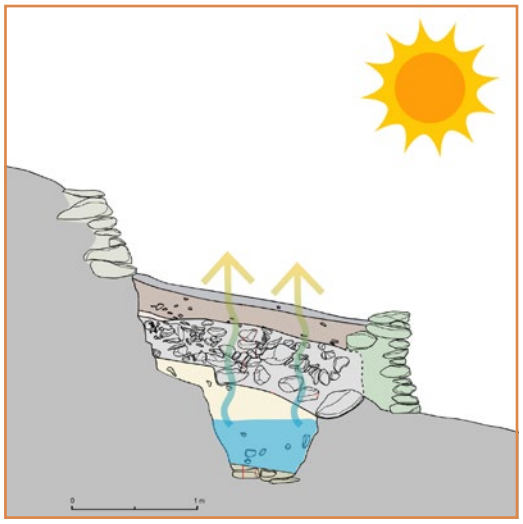


The images show different perspectives of the narrow terraces of schist and quartzite in the Seoane and Capitana (Doede) estates, each *socalco* containing a single row of vines. © R. Mata

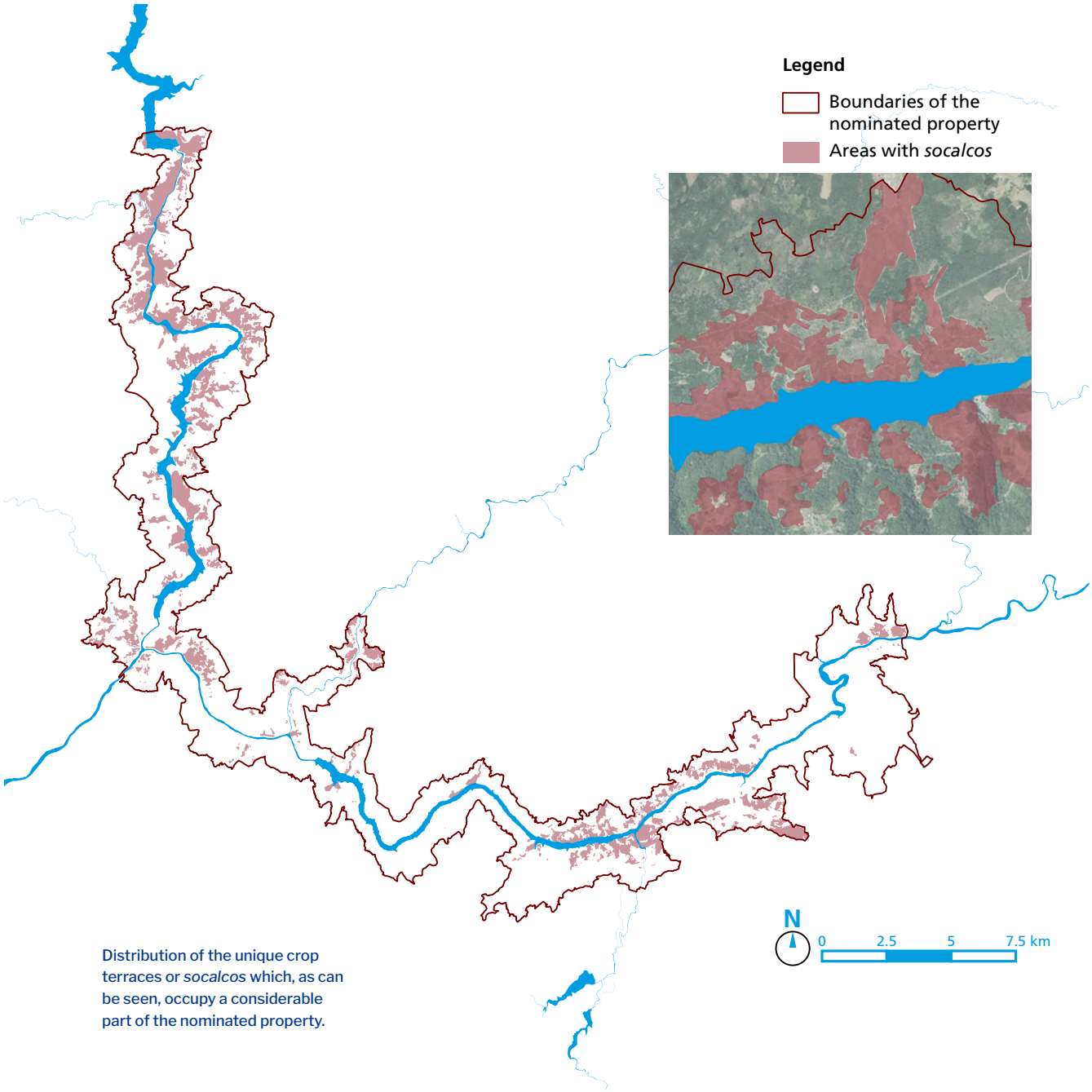


The Moure winery has created a label for one of its wines that illustrates the great human endeavour of building *socalcos* and creating clay-loam soil on top of the slate bedrock. The name of the wine also symbolises this process of construction: *Pedras líquidas (liquid stones).* © R. Mata





The *socalcos* should be regarded as water-management systems that control heavy surface runoff and manage drainage, while also adapting to the local climate. The diagrams provide a simplified overview of their sections, construction elements and behaviour.
Redrawn by Crecente Asociados from a graph by Incipit CSIC



Distribution of the unique crop terraces or *socalcos* which, as can be seen, occupy a considerable part of the nominated property.

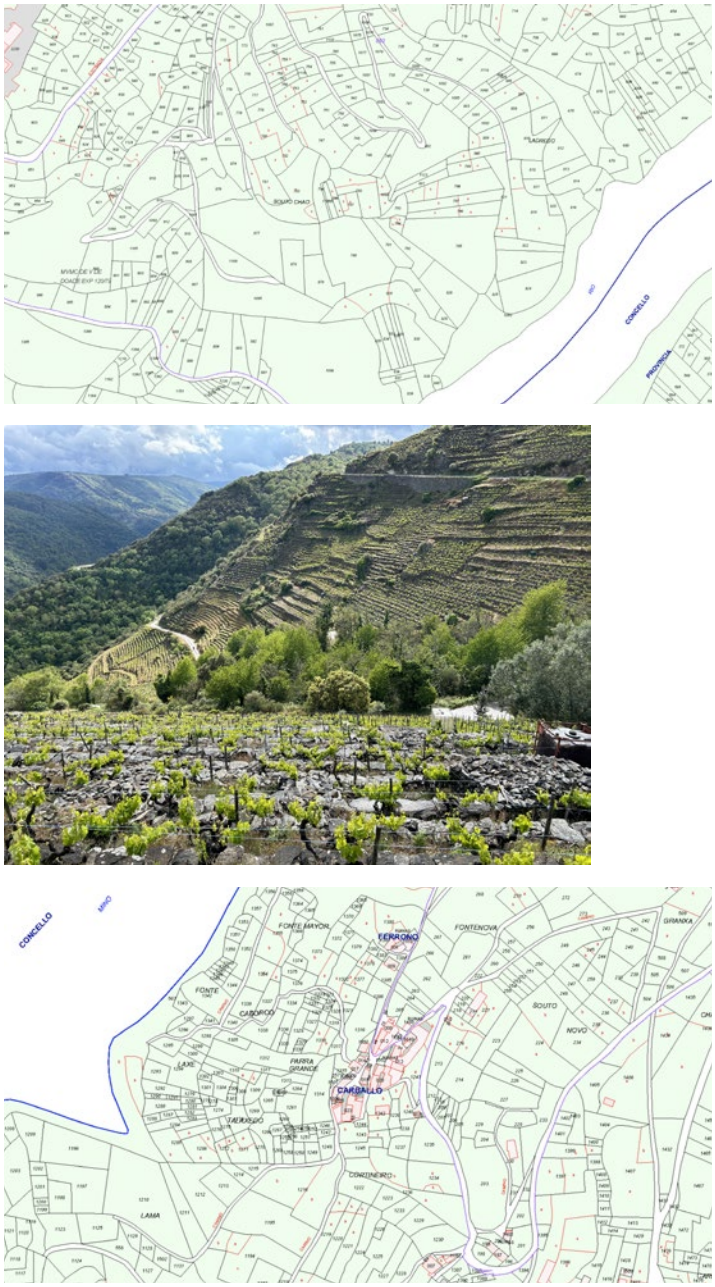
The unique smallholder and family micro-plots

The commendable vernacular engineering work of the *socalcos* is accomplished within the framework of a smallholding structure, which lends yet more meaning to the arduous task of building and maintaining the terraces and managing a thriving agricultural exploitation.

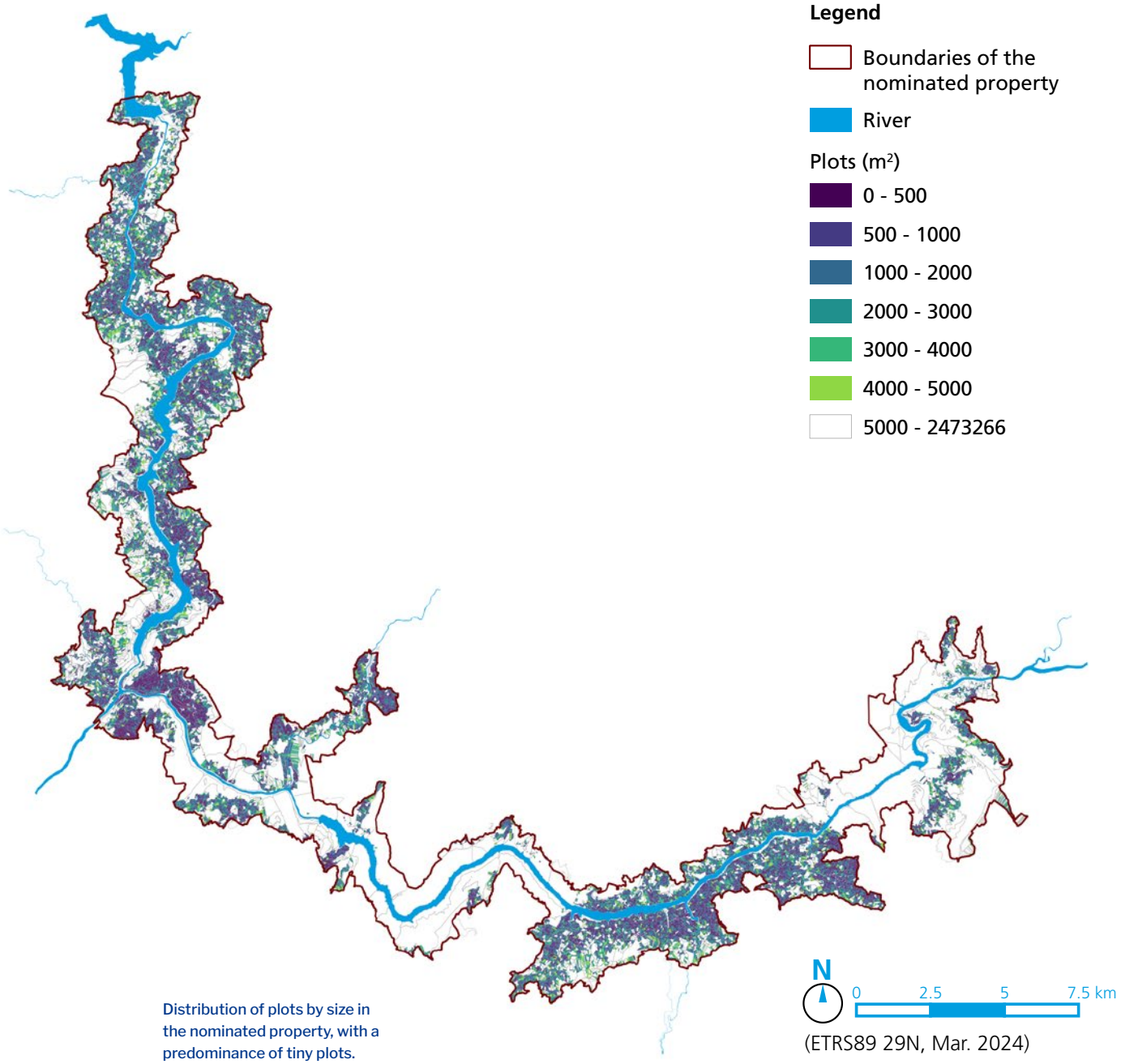
One of the most significant features of Ribeira Sacra is the remarkable intricacy of the smallholdings, with more than 90,000 plots and an average surface area of barely 400 m², a distinctive trait that has clearly left its mark on the landscape. The plots are defined by traditional methods of land and property management, such as the *cavadura*, considered to be the area of land that one person was able to cultivate in a day for their livelihood.

The sheer abundance of micro-plots, the legacy of a protracted historical process whereby the land was farmed by a large number of tenant farmers (*aforados*) of monastic lands, who eventually became outright landowners after the 1926 law on the redemption of *foros* (monastic property rights), and of subsequent land division through inheritance, has further complicated the management of these agricultural holdings. Their continued existence is quite exceptional and can only be explained by the economic importance, both in the distant past and in the present, of agricultural production in the context of multifunctional farms.

The micro-plot, like the *socalco*, with which it logically bears a close resemblance, takes on different shapes depending on the surrounding environment, more particularly the surrounding terrain, and on the historical context of the family property units in each parish and village.



Cadastral plot and corresponding image of the steep slope of Souto Chao, showing tiny plots of cultivated land, which contrasts with the somewhat larger size of the plots of uncultivated land (top) and the slopes of the Miño in the village of O Carballo with very small plots of land around the village (bottom). In both cases, the plots, like the terraces, are aligned at right angles to the slope. The plots, which in many cases are no larger than 500 m², contrast with the somewhat larger plots of land occupied by trees and scrubland, which are also privately owned. © R.Mata



(ETRS89 29N, Mar. 2024)

Distribution of plots by size in the nominated property, with a predominance of tiny plots.

Parishes and villages, connections with water and relief

The cultural landscape of Ribeira Sacra, marked by water, scored through by canyons and deep valleys, is an excellent example of the way in which two historical structures of a different but closely related nature have organised the territory and shaped the morphological and functional composition of the landscape, its identity and social cohesion, from the Middle Ages to the present day.

These structures are, on the one hand, the parish, which, transcending its original religious function and having acquired its full form in the 11th century (López Alsina, 2009; López Sabatel, 2018), maintains to this day the capacity to integrate a variable number of dispersed population centres and to provide them with bonds of cohesion and community identity. On the other hand, there is village as the basic nucleus of rural settlement, scattered throughout the territory, integrated into the parish structure and with a considerable complexity and diversity of sizes and formal configurations.

Below the level of municipality, the area of the nominated property and its buffer zone is today divided into 76 parishes, of which the majority – 68 – extend over the two areas, four lie entirely within the property and another four are located entirely in the buffer zone. In a landscape with the distinctive natural assets of Ribeira Sacra, with canyons and entrenched valleys carved by the great rivers and precipitous slopes cleft by streams, the layout of the parish boundaries and the distribution and location of the dozens of villages have features directly related to the watercourses and specific landforms, endowing the landscape with significant value.

The birth and growth of the parish as a religious and territorial entity, its consolidation in the Middle Ages (López Alsina, 2009; Sánchez Pardo, 2010) and its survival over time has been extensively researched for the whole of Galicia and, in greater detail, for the specific case of Ribeira Sacra during the Middle Ages. Taking the Ribeira Sacra municipality of Pantón as a reference, a close relationship has been identified between the process of monastic seigniorialisation from the 11th to the 13th centuries with the establishment of the *cotos* (monastic grounds) and the parish boundaries that were laid out at that time and have survived to the present day. Thus, of the twenty-six parishes that make up the current municipality of Pantón, twenty-four were already included in the medieval records of the monasteries of Ferreira, Pombeiro and San Vicente de Pino, with boundaries and lands under the authority of the monasteries (López Sabatel, 2018).

In Ribeira Sacra, given the density and hierarchy of the drainage system, the rivers were and continue to be the parish boundaries. Not only the Miño and the Sil, but also some of their tributaries, such as the Asma, the Cabe and the Edo, and numerous streams delimit the boundaries between parishes.

A good part of the course of the river Sil within the nominated property marks the boundary and dividing line between two of the four provinces definitively constituted in Galicia by the provincial division of Javier de Burgos in 1833: Lugo and Ourense. Together with the Miño, the two great rivers of Ribeira have, for centuries, served as boundaries for 13 municipalities and a total of 52 parishes within the nominated property. But what is interesting is that, alongside the role played by the major rivers, the small rivers, the short streams (*regos*) that flow directly from the *bocarribeiras* into the rivers, have also played an important role in parish delimitation. Several of them have been used to establish the perimeters of the parishes perpendicular to the major watercourses, as shown in the table below. Altogether, this illustrates the centuries-old relationship of the local communities and their social and cultural organisation with water or, more precisely, with the watercourses. (Table 2.a.1)

Together with the parishes as centuries-old entities that govern social and religious life in the rural environment, the village, in general terms, has been the centre of habitation and of the organisation of agricultural exploitation, including woodland as a constituent part.

This settlement type, for the most part represented by a multitude of small villages scattered throughout Ribeira Sacra, has two main features of great interest from the point of view of the cultural landscape. On the one hand, the continuity over time of the village settlement structure, which can be linked, according to available research, to the territorial organisation of the monastic economies and to the consolidation and perpetuation of the Late Medieval *foros* (monastic property rights), which linked farmland and settlement. On the other hand – and of great significance – the forms or patterns in which the maze of villages and places have been set in the extraordinary landscape of the canyons and entrenched river valleys of Ribeira Sacra. As well as the documented centuries-long continuity of the parishes since the Middle Ages, there are also interesting accounts of the historical permanence of the polynuclear settlement system, at least from the 13th century onwards.

This very dense constellation of small nuclei and villages, attached to farmland and woodland and bounded by the parishes, has a distinguishing feature and a unique value in Ribeira Sacra: the different patterns by which the settlements have adapted to the sharp contrasts in the relief of the Ribeira.

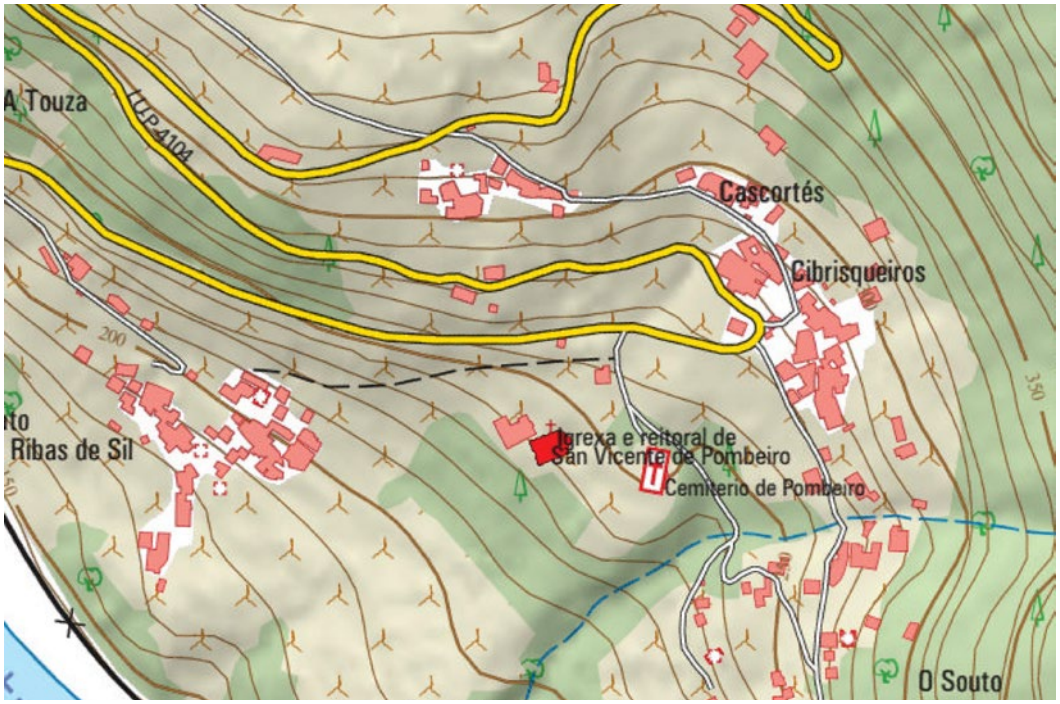
In the case of Ribeira Sacra, these adaptation patterns relate, on the one hand, to the importance of the *bocarribeiras*, that is, the area of contact with the high plains that enclose the valleys of the rivers

Table 2.a.1

Secondary watercourse	Inter-parish boundary
River Asma	San Fiz de Asma/Lincora (Chantada)
Rego de Millarada	Diomondi/Mourelos (O Saviñao)
Rego de Camporramiro	Lincora/Belesar (Chantada)
Rego de Souto Varela	Santiago de Arriba/ A Sariña (Chantada)
Rego de Fondón	Nogueira de Miño (Chantada)/Erbedeiro (Carballedo)
Rego de Lama	Mourelos/A Cova (O Saviñao)
Rego de Corzoás	Ribeiras de Miño/Vilar de Ortelle (Pantón)
Rego de Aguianza	Vilar de Ortelle/Atán (Pantón)
River Cabe	Frontón (Pantón)/Anllo (Sober)
River Cabe	Acedre (Pantón)/ Anllo (Sober)
River Cabe	Cangas (Pantón)/Rosende (Sober)
Rego de Xábrega	Anllo/San Martiño (Sober)
Rego Leiredo	Barantes/Santiorxo (Sober)
Regueiro da Olmeira	Vilachá (A Pobra do Brollón)/Vilamarín (Monforte)
River Edo	Paradela/Troncela (Castro Caldelas)
River Mao	Cristosende (A Teixeira)/San Lourenzo (Parada de Sil)
Regato de Biduelo	Santo Estevo de Ribas de Sil/Moura (Nogueira de Ramuín)

Source: Prepared by Crecente Asociados from MTN 1:25:000. IGN

Miño and Sil; on the other hand, to the topographical diversity of the slopes and their different capacity to accommodate small villages and farmland. As already mentioned, four patterns or "place-types" of village location have been identified in relation to the topography (Pérez Alberti, 2015 and 2019): (i) on *bocarribeiras*, (ii) on slopes, (iii) on terraces and (iv) on interfluves. The first pattern is clear and meaningful, while the following three, especially slope and interfluve settlement, sometimes display mixed forms. There is no doubt that the peasant communities showed territorial intelligence when deciding on the location of hundreds of small dwelling spaces, a fact that has left its mark on the landscape and that renders it intelligible and of particular value. The images below contain representative sketches of the four patterns of village location in relation to the relief and the watercourses.







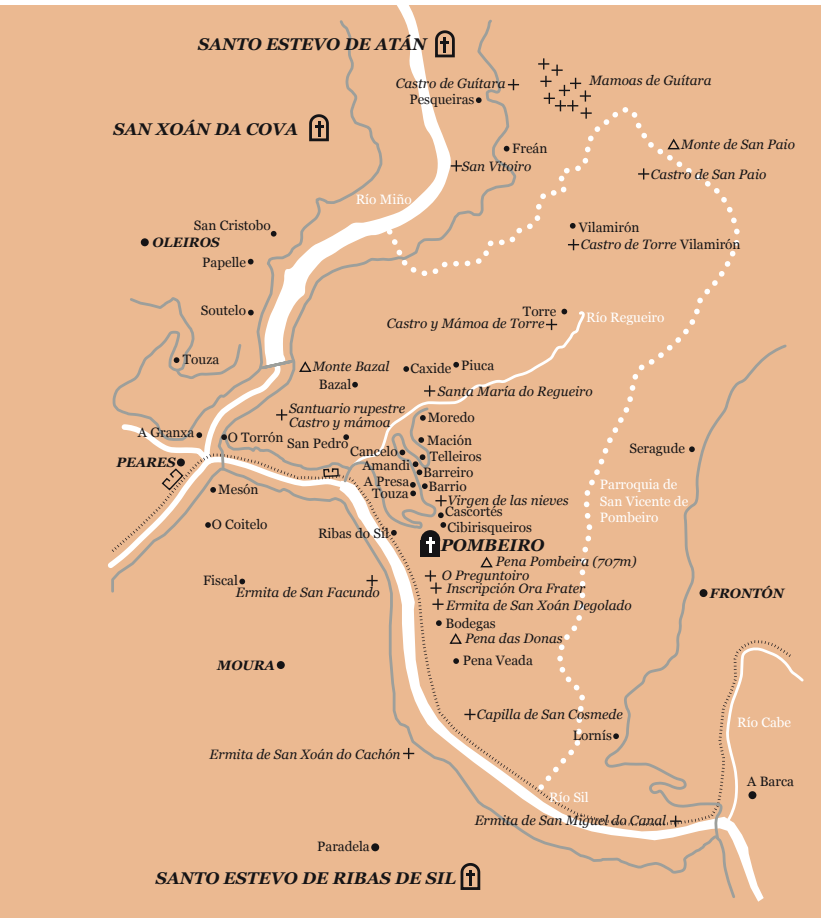
Example of the permanence of very long-term settlements. (Top) Current map of the area of the parish of Pombeiro with details of the existing villages and small settlements arranged on the slope between the *bocarribeira* (O Regueiro) and the course of the river Sil (San Pedro and Ribas de Sil). Most of them are mentioned in monastic documents from the 13th and 14th centuries. (Bottom) PNOA aerial photograph (2020) of part of the area (villages of Cibrisqueiros, Cascortés, O Souto, A Touza, O Barrio and the church of the Monastery of San Vicente de Pombeiro) and aerial photograph from 1956, showing the long-term stability of the settlement structure. © Xunta de Galicia and PNOA





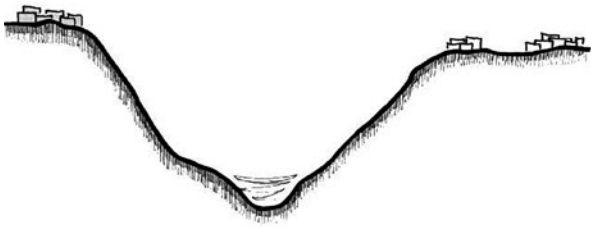


Left, view of the parish of Pombeiro from A Touza towards the river Sil and detail of the villages of Cibrisqueira, Cascortés and O Souto. Right, the 12th-century church of the old Monastery of San Vicente de Pombeiro. Bottom, sacred elements in the Pombeiro area. © R. Mata / Crecente Asociados

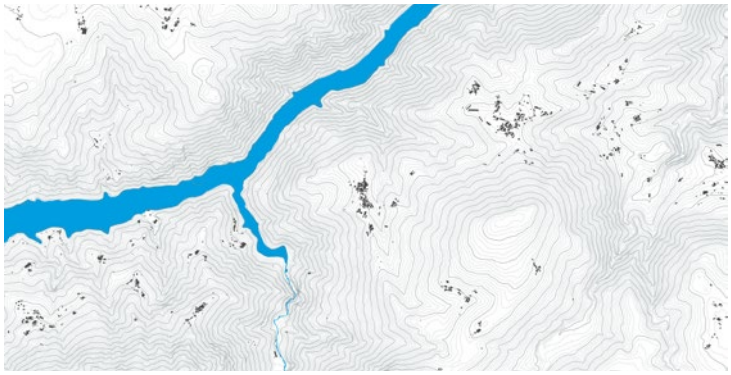


Examples of the four patterns or "place-types" of village location in relation to topography in Ribeira Sacra.

© Prepared by the authors after Ramón López (cross-sectional sketches) (2018), and MTN (National Topographic Map) at 1:25,000, IGN. Photographs: R. Mata

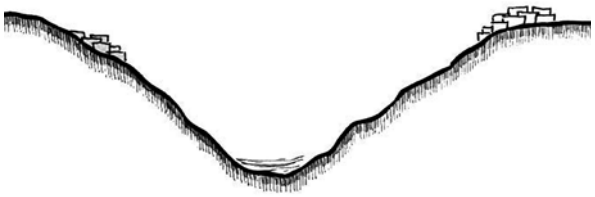




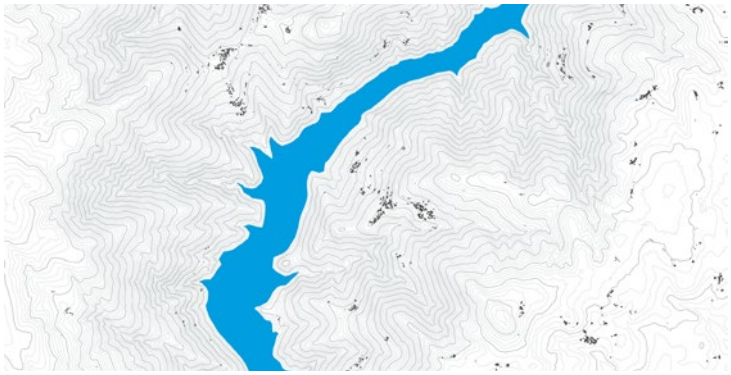




Cristosende: settlement on *bocarribeira*.





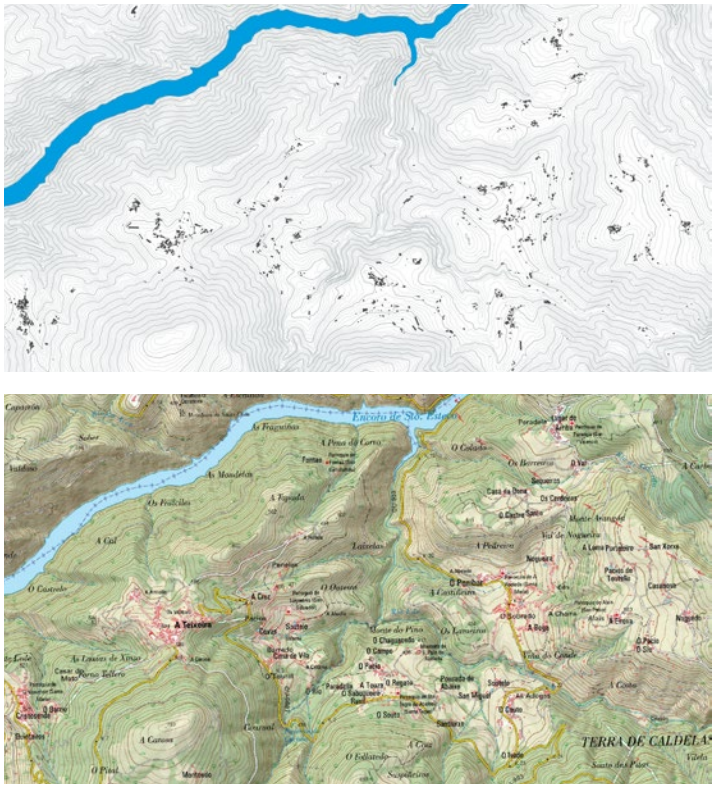




O Barrial, O Carballedo, Portabade, O Carballo, O Bacelo (parish of Ribeiras de Miño): settlements on slopes.

Examples of the four patterns or “place-types” of village location in relation to topography in Ribeira Sacra.

© Prepared by the authors after Ramón López (cross-sectional sketches) (2018), and MTN (National Topographic Map) at 1:25,000, IGN. Photographs: R. Mata





Settlements on fluvial terraces, parishes of Lumeares and Sta. Tegra de Abeleda.





Villages on ridges or interfluves in the parish of San Lorenzo de Baxacova.

The cultural heritage of water

Water heritage has laid the foundations of a technical and cultural heritage that has shaped the territory and the cultural waterscape of Ribeira Sacra. With this in mind, this section describes the exceptional wealth of tangible heritage associated with water management through the ages, materialised in the many different waterworks and hydraulic structures made possible by the dense drainage system of rivers and streams and steep gradients, not forgetting the above-mentioned crop terraces, considered in themselves to be effective water-management structures. This landscape is distinguished by the great density and typological diversity of water heritage features, regarded as prominent attributes of the nominated property.

The water heritage of the nominated property encompasses an extraordinary legacy of works in which we can trace the uninterrupted evolution of a landscape with deep ties to water and its vicissitudes. It is a long history, the first pages of which were written by the hermits who dug the first channels in the rock surrounding their cells to drain off rainwater or to provide water for themselves. The story continues with the introduction, by the monastic orders, of a great number of water-powered systems, opening the door to a water-powered realm where countless mills were erected over the course of generations, and culminated with the advent of hydroelectric power at the very moment that this technological breakthrough became a reality.

The culture of water in the nominated property has at the same time given rise to a plethora of small-scale heritage elements that dot the territory and that bear witness to the genesis of a permanent and original relationship with water. Furthermore, this is a living cultural landscape, which has maintained a rich intangible heritage that encompasses multiple elements that attest to the close relationship of the local population with the attributes and values that adorn this space. The main manifestations of this heritage are discussed in this section.

Traditional watermills

The watermill is one of the identifying features of Ribeira Sacra. Due to its importance, certain medieval authors referred to it evocatively as the “mother of machines”. It was also an important territorial marker and a place where peasant communities gathered to socialise.

In the geography of Ribeira Sacra, intersected by hundreds of rivers, streams and brooks, there are many traces of mills and water-powered structures from different periods that illustrate the more than seven centuries of milling history in this area. They are a rich and varied collection of structures that rise up among the chestnut and oak woods and copses on the banks of the watercourses, and which bear witness to the continuous endeavours to harness the power of water for milling grain or other activities such as fulling. Such has been the profusion of these watermills in the area of the nominated property that some authors have described them as *socalcos* of the waterways, drawing a parallel with the vast number of cultivation terraces along the river canyons.

The first records of watermills date back to the beginning of the 11th century, as is the case of the mills of Santo Estevo de Ribas de Sil, although it is thought that mills were in use before that time. However, the most significant boom in the number of watermills came at the time of the first great expansion of these mills in Europe, between the 12th and 13th centuries. Against this backdrop, it is highly significant to note that the introduction of these technologies in Ribeira Sacra came at the hands of the monastic orders, which lends further credence to the role of the monasteries in the creation of a water culture in the nominated property.

The section on History and Evolution describes in greater detail the dealings between the monasteries and the *aforados* (tenants of monastic lands) over the use of the watermills as part of the prevailing water-management culture and its historical processes. The *foro* was a long-term lease (three lifetimes) whereby the peasant undertook to work the land or, in this case, a mill, in exchange for an annual fee or rent. Although this was the most widespread practice, not all mills were owned by the monasteries, as there is evidence of many cases of mills run by the parishes, which were managed and maintained by the community.

That said, most of the surviving mills that are still in a good state of preservation date from the 17th and 18th centuries, a period that saw another great wave of milling activity and the adaptation of many of the existing mills to the new technologies of the time, when wooden wheels were replaced by more efficient metal structures.

From a technological point of view, it should be noted that the majority of the inventoried mills are horizontal-wheeled watermills and their different variants, known in Spanish as *rodezno* mills, with a smaller number of vertical-wheeled mills, or *aceñas*. The horizontal-wheeled watermills in turn exhibit great typological diversity in their design, depending on their different components. The catchment systems differ depending on whether they are equipped with a small dam or with a weir to divert water from the watercourse, or with several channels and millponds. Depending on the flow rate, the mill race is sometimes complemented with a “bucket” to raise the water to a sufficient height and volume to produce a flow of water with sufficient power to drive the waterwheel, a Middle Eastern invention introduced to the Iberian Peninsula by the Arabs. With regard to the water outflow, there is another type of staggered mill design where the difference in elevation means that



Privilege of Ordoño II for the reconstruction of Santo Estevo de Ribas de Sil. 921. © AHN



the same water – the tail race – that flows out of one mill is used in the next mill.

The mills are typically sturdy buildings of granite or a type of rock known as *albar*, the upper part of which was given over to the milling or working space and, on occasion, the living quarters. Most had a single water wheel to transmit power, although there are cases of mills with more than one wheel. They were mostly flour mills, although there are some documented exceptions of mills serving different functions, such as tanneries, fulling mills, sawmills and smithies.

Another, no less important, classification can be made according to the system of ownership. The mills could be classified as either private or communal. Until the 19th century, most private mills were in the hands of religious orders or seigniorial houses. Some were exclusively for their own use, but more commonly they were leased in exchange for a rent. The peasants were allowed to run the mill in exchange for the *maquía*, which was the measure of grain they paid in exchange for the use of the mill. The other, undoubtedly most widespread, type was the communal mill. When a villager lacked the means to build his own mill, he would join forces with others and pool the limited available resources to build a communal mill, which became known as a mill of *herdeiros* (heirs), *parceiros* (the part of a whole), or *roldeiros* (rolda means "turn, time"). Contributions were made in the form of money, labour, materials or time spent on construction, and the co-owners were then granted milling rights based on the share of their contribution. It goes without saying that they also had certain duties, which usually consisted of conservation and repair work on the mill and the associated hydraulic infrastructure that kept it in working order.

But if there is one thing that makes this place unique, it is the sheer number and density of the traditional watermills. Their remains are landmarks that stand as testament to the memory and calling of this waterscape and embody qualities that may be seen as attributes of the nominated property. The first historical document that provides quantitative data on the subject is the Economic Description of the Kingdom of Galicia of 1797, which refers to the large number of mills in the *comarca* (administrative division). Other references at municipal level are equally informative. This is the case of the Cadastre of Ensenada (18th century), which lists 86 mills operating in the municipality of Chantada alone, part of the nominated property. Chantada, at various times in its past, has had as many as 200 watermills, dating back to the first inventories of these mills carried out in the municipality at the beginning of the 14th century. Data aggregated at the municipal level indicate that, in the past, there was one mill for every 16 households, which means that, if we extrapolate the data to the rest of the municipalities of Ribeira Sacra, we can have an approximate idea of the lasting, far-reaching presence of these waterworks across this land.

This vast heritage is clearly visible in some of the most outstanding sites of the nominated property. These places concentrate the density and abundance of these heritage features as if seen through a magnifying glass. Such is the case of Los Molinos de Xábrega, where 28 mills and two fulling mills have been identified along a stretch of just over three kilometres of the Xábrega stream; their structures are well preserved and have undergone restoration work. There are different types of mills: in addition to the more typical horizontal-wheeled mills, there are also vertical-wheeled mills such as the Nemesio da Boca mill. Other examples are the mills on the Tarrío and on the river Asma, or the ensemble formed by the 26 mills on the river Edo, a tributary of the river Sil, which are distributed over a stretch of barely two kilometres. There are also mills associated with other traditional buildings of great ethnographic interest, such as the chestnut drying sheds (*sequeiros*), fine examples of which are located in the vicinity of the monastery of Santo Estevo de Ribas de Sil. In truth, the property is impregnated with countless mills set in the steep watercourses of the cultural landscape. There are both relics of the past and well-preserved works, many of which remain to be mapped and inventoried, given the magnitude of the task in such a complex environment. However, the surveys conducted to date suggest that there are at least 600 of these structures in various states of conservation.

It is worth noting that watermills, especially when grouped together along a watercourse, give shape to very unique landscapes with their own personality. The mills are not only isolated, stand-alone structures, but form part of a complex water system, composed of a whole set of elements such as sluices, flumes, mill races and millponds, dams and weirs, and spillways and tail races to return the water to the main watercourse, as well as access roads and crossings. All these elements, in harmony with the environment and set off by lush, shade-filled vegetation, give rise to beautiful built landscapes such as those that can be admired in Ribeira Sacra.

Another heritage element associated with the ancestral milling culture are the traditional granite quarries where the stone was extracted to make the grindstones for the water mills. These quarries are scattered throughout the cultural landscape in the best quality granite outcrops, sometimes in steep and inaccessible places. The millstones were carved entirely in the quarry to keep them as light as possible when they were transported to the mills. In any case, transport was very laborious, and when carts could not be used, they were dragged on wooden contraptions made of oak attached to a yoke pulled by a pair of oxen. A good example of these quarries is Cotarro das Rodas, in the parish of Bolmente, in the munici-

















Watermills on the Xabrega. © DXPC

pality of Sober, which had the reputation of being the best in the region for providing millstones. Numerous millstones can still be seen in the old quarry, abandoned at different stages of production.

Then, at the turn of the 20th century, a paradigm shift occurred in Ribeira Sacra's culture of water-based technology. The first electric generator was developed at the end of the 19th century and these new devices began to be connected to existing hydraulic systems. This marked the emergence of hydroelectricity as a global phenomenon which, today, supplies around 16% of the global demand for electricity. It was also at this early stage in the emergence of hydroelectric energy that this innovation was introduced to Ribeira Sacra. Some of its traditional mills were converted into mills capable of producing electricity, used both to drive the milling mechanisms and to supply electricity for its own use or for other users. This led to a continuous process during which some of the old mills were converted into mini-hydroelectric power stations, ushering in a new era of hydroelectric development in this area. However, as had happened earlier in the rest of Europe with the Industrial Revolution and the appearance of the steam engine, many of the traditional mills gradually fell into disuse. The difference in Ribeira Sacra is that this process took place almost a century later and with the advent of electricity.

Unlike developments elsewhere in continental Europe, it is worth noting that the traditional mills were in use until well into the 20th century. This meant that many of the mills that were not converted coexisted with the first mini-hydroelectric power stations and even with the larger power stations that were built in the middle of the 20th century. There are paradigmatic cases of mills that continued to survive, such as the Pesqueiras water mill, which was in operation until the 1970s and which today, following restoration, is once again in use. Ribeira Sacra is thus a unique case of continuity and coexistence, in a single territory, of systems for harnessing the energy of water which represent very different periods.

Remains of an old medieval mill in the vicinity of the Monastery of Santo Estevo de Ribas de Sil. © Rubén Vilanova



Ancient watermill located over the river Asma. © Rubén Vilanova

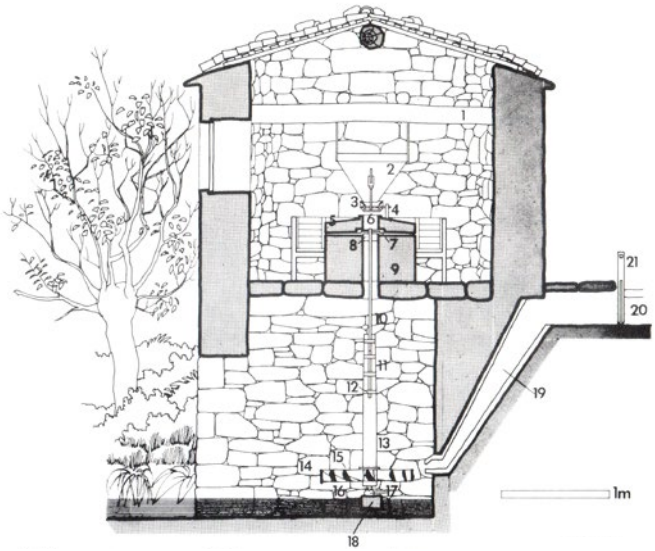




Abandoned nearly completed millstone in the old granite quarry of Cotarro das Rodas, in the parish of Bolmente. © Carlos Rueda



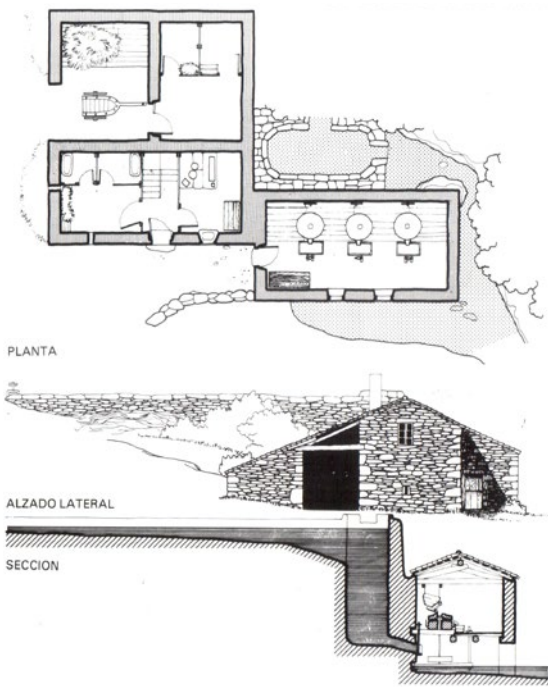
Traditional watermill with two *rodeznos* (horizontal water wheels) in Pesqueiras, currently restored and in operation. © Rubén Vilanova



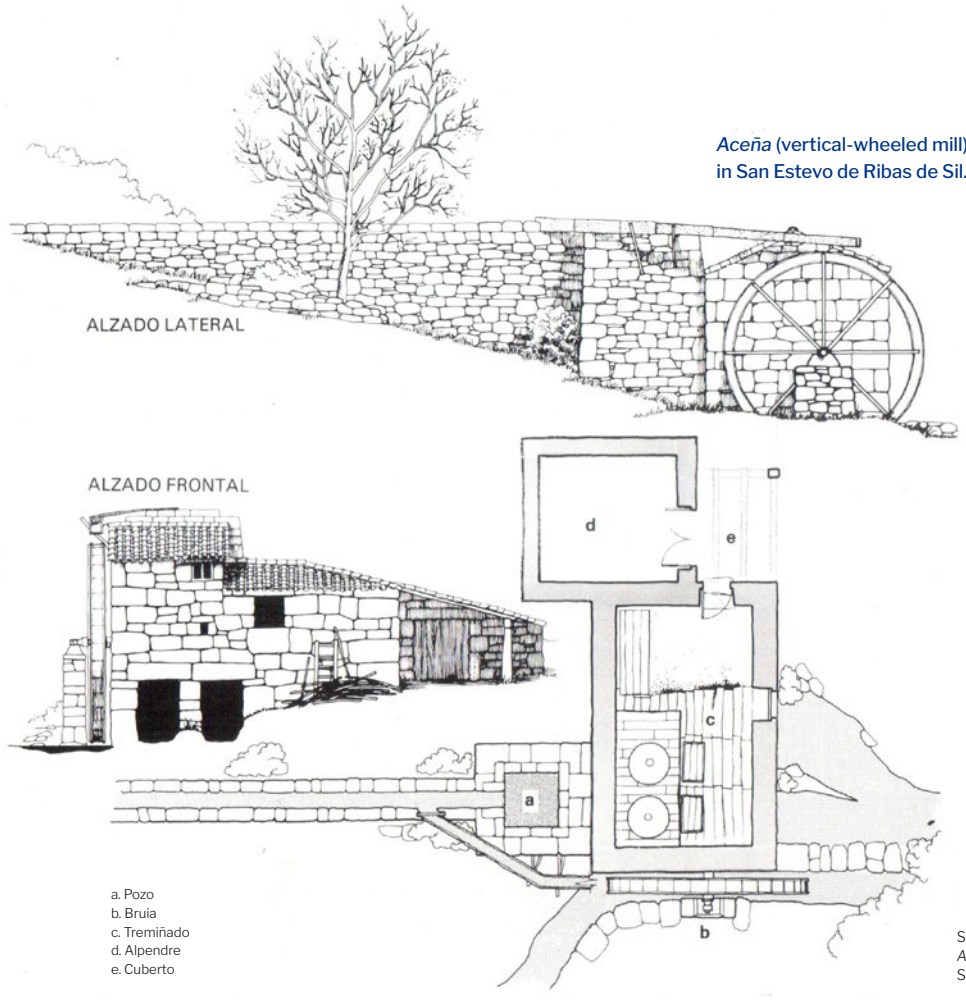
1. Trabe
2. Moega
3. Quenlla
4. Tenxedoiro
5. Capa
6. Ollo
7. Segorella
8. Buxa
9. Pé
10. Beo
11. Vara
12. Argolas
13. Masa de vara
14. Rodicio
15. Penas
16. Grilo
17. Rá
18. Mesa
19. Canle
20. Gavia
21. Firidoiro

Traditional horizontal-wheeled mill.

Traditional watermill with “bucket”.

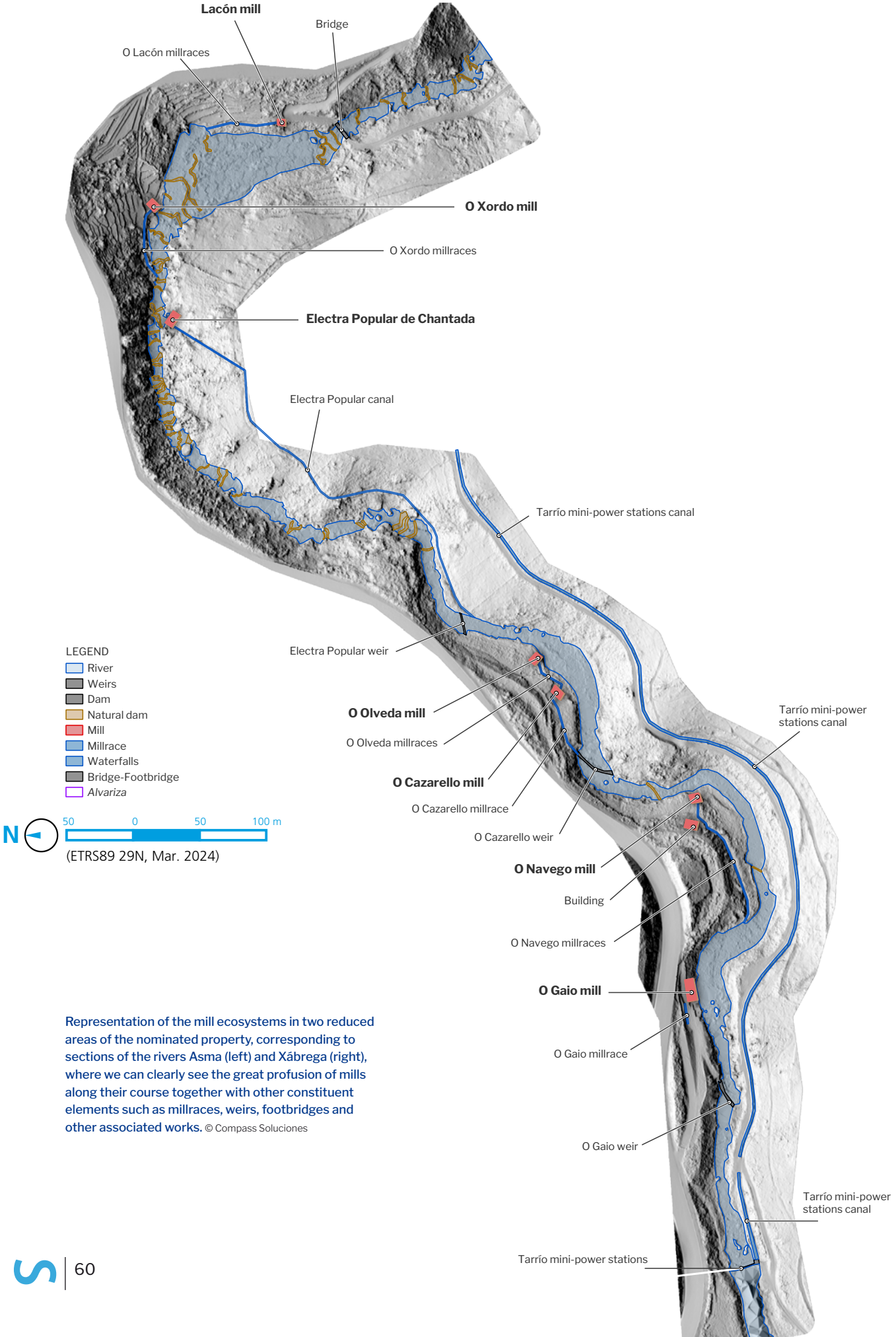


Aceña (vertical-wheeled mill) in San Estevo de Ribas de Sil.

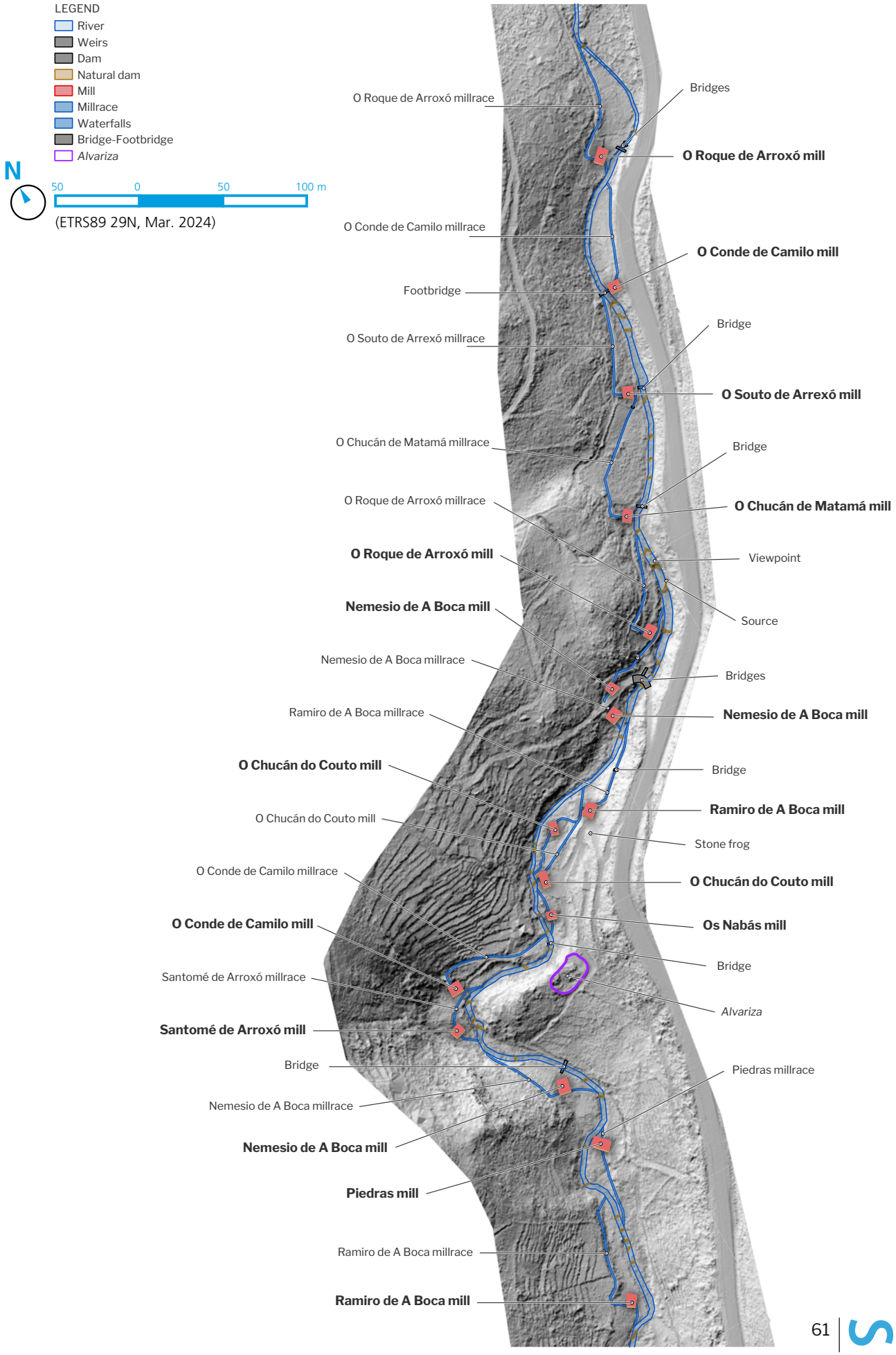


a. Pozo
b. Bruia
c. Tremiñado
d. Alpendre
e. Cuberto

Source: Llano, Pedro, *Arquitectura popular en Galicia.* Santiago de Compostela: COAG, 1983



Representation of the mill ecosystems in two reduced areas of the nominated property, corresponding to sections of the rivers Asma (left) and Xábrega (right), where we can clearly see the great profusion of mills along their course together with other constituent elements such as millraces, weirs, footbridges and other associated works. © Compass Soluciones


LEGEND
River
Weirs
Dam
Natural dam
Mill
Millrace
Waterfalls
Bridge-Footbridge
Alvariza
N
50 0 50 100 m
(ETRS89 29N, Mar. 2024)
O Roque de Arroxó millrace
Bridges
O Roque de Arroxó mill
O Conde de Camilo millrace
O Conde de Camilo mill
Footbridge
Bridge
O Souto de Arrexó millrace
O Souto de Arrexó mill
O Chucán de Matamá millrace
Bridge
O Roque de Arroxó millrace
O Chucán de Matamá mill
O Roque de Arroxó mill
Viewpoint
Source
Nemesio de A Boca mill
Nemesio de A Boca millrace
Bridges
Ramiro de A Boca millrace
Nemesio de A Boca mill
O Chucán do Couto mill
Bridge
O Chucán do Couto mill
Ramiro de A Boca mill
Stone frog
O Conde de Camilo millrace
O Chucán do Couto mill
O Conde de Camilo mill
Os Nabás mill
Bridge
Santomé de Arroxó millrace
Alvariza
Santomé de Arroxó mill
Bridge
Piedras millrace
Nemesio de A Boca millrace
Nemesio de A Boca mill
Piedras mill
Ramiro de A Boca millrace
Ramiro de A Boca mill

Hydroelectric industrial heritage

The cultural landscape has water resources and an exceptional natural topography, factors that make it particularly well-suited to hydroelectricity, just as they also contributed to the unparalleled number of traditional water-powered mills. As a result, the area gained prominence as a centre of hydroelectric power generation at the beginning of the 20th century, specialising in harnessing the power of water, known as "white coal", as a renewable and sustainable energy source.

The beginnings of this new specialisation can be traced back to the conversion of certain traditional mills into small hydroelectric power stations; this was the case of Eléctrica de Belesar, Electra do Mato and the Ribeiraos factory of light, all prime examples of this process of change. It is also significant to note that these new technologies coexisted with traditional mills until very recent times, and even continue to do so today.

But the origins of this new industry, namely the production of hydroelectric energy, can be clearly identified in the Electra Popular de Chantada, located on the river Asma, which was originally built following an application for a hydraulic concession made in 1899, in the pioneering early days of hydroelectric power. Initially intended to power the town's public lighting, a function that became a reality in 1906, it was for more than fifty years the only source of electricity in this municipality of Ribeira.

At a later date, and with the suggestive name of *A Fábrica da Luz* (the factory of light), another of the first hydroelectric power stations in Galicia was built on the river Mao, between 1914 and 1916. At the time it was a technological milestone for the history of the region, as it provided light to Ourense and Monforte de Lemos. The masonry and other relevant hydraulic elements associated with the inflow and outflow of water are still preserved today.

It is also significant to note that within the boundaries of Ribeira Sacra there are still six operational mini-power stations that were built in this initial stage – up to the first half of the 20th century – in the history of hydroelectricity. These are the mini-power stations of Bubal I, Tarrío, Pesqueira, Regueiro, Castro Caldelas and Villar, with a nominal power of between 4 and 13 MW, which use weirs to collect water from streams that flow into the rivers Miño or Sil. If we add all of these hydraulic works to the traditional mills, we can see that we find ourselves in a landscape that bears outstanding testimony to the different solutions that have been devised continuously over the centuries to harness the power of water.

The sequence and full range of this industrial hydroelectric items is completed with the larger-scale developments on the rivers Miño and Sil, in the mid-20th century. They are of the conventional dammed type, which uses the difference in height between the reservoir impounded by the dam and the power station located at the base of the dam to generate electricity. In the nominated property, there is an excellent sample of different categories of hydroelectric plants, ranging from water simply diverted into reservoirs or channelled through penstocks, underground reservoirs, with or without reversible pump-turbines, and even cases of pure pumped hydroelectric energy storage. The creation of these plants was an exceptional chapter in the history of engineering at the time, in addition to what was a monumental construction effort for its time, and altogether they form representative examples of hydraulic engineering and its process of evolution up to the first half of the 20th century.

The hydroelectric dams that fall within the scope of the nominated property are: the Os Peares dam on the Miño and the Santo Estevo dam on the Sil, both arch-gravity dams and both completed in 1955, the Santo Estevo dam having the greatest installed capacity in Europe at the time; the Belesar dam, the great work of the famous engineer Luciano Yordi, also considered in its day to be the largest in Europe, is a double-curvature arch dam which was completed in 1963; and, finally, the San Pedro sluice dam, near the mouth of the Sil in the Miño. These infrastructures, built to the most advanced design standards and on the grandest scale of the time, are monumental works from a technical point of view and examples of industrial heritage. They are also enriched by structural and architectural elements related to the modernist movement, and a notable feature is the fact that the workers' villages that made this human feat possible have also been preserved.

Considering that Ribeira Sacra is a landscape that has been heavily constructed since its very origins, it should also be stressed that the scale of the transformations brought about by the dams and reservoirs of the mid-20th century, encased in the rivers, is clearly limited when compared to the major historical transformations that include the construction of cultivation terraces. One only has to note that the surface area occupied by the hydroelectric dams and their reservoirs is no more than 5.9% of the total surface area of the cultural landscape.

That being the case, this area may be regarded as a special instance of a cultural landscape that contributes to the mitigation of climate change and the reduction of greenhouse gases through the production of hydroelectricity. Another point to note is that current hydroelectric generation in the nominated property exceeds 2,300 GWh/year, which means that Ribeira Sacra is capable of covering almost half of Galicia's domestic electricity consumption with clean and sustainable energy, or that it prevents the emission of around 350,000 metric tonnes of carbon dioxide equivalent (CO^2-eq) per year, as per the current energy mix.

Regueiro mini-power station (Parada de Sil), one of six in operation, dating from the first period in the emergence of hydroelectric power. © R. Mata



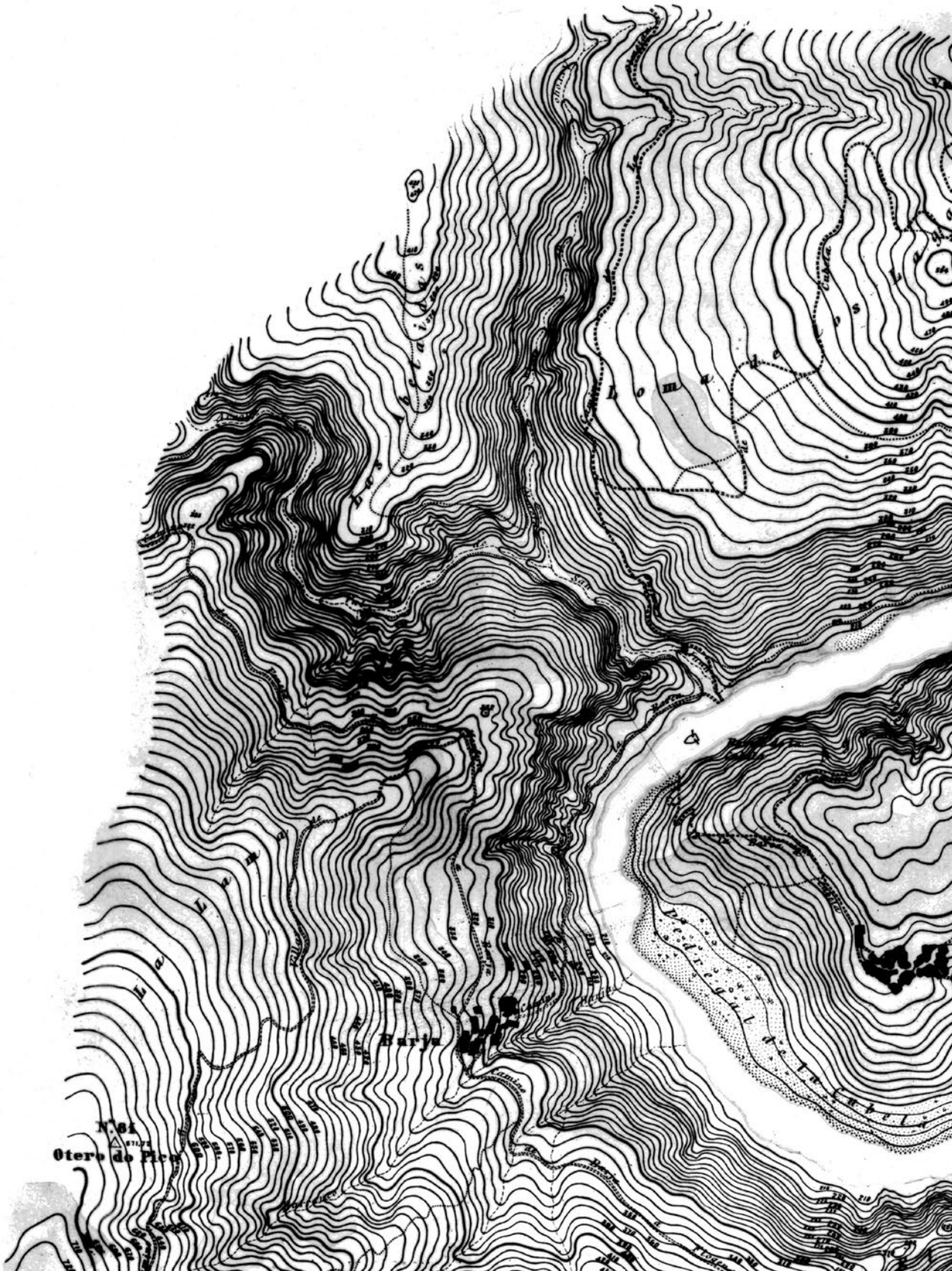


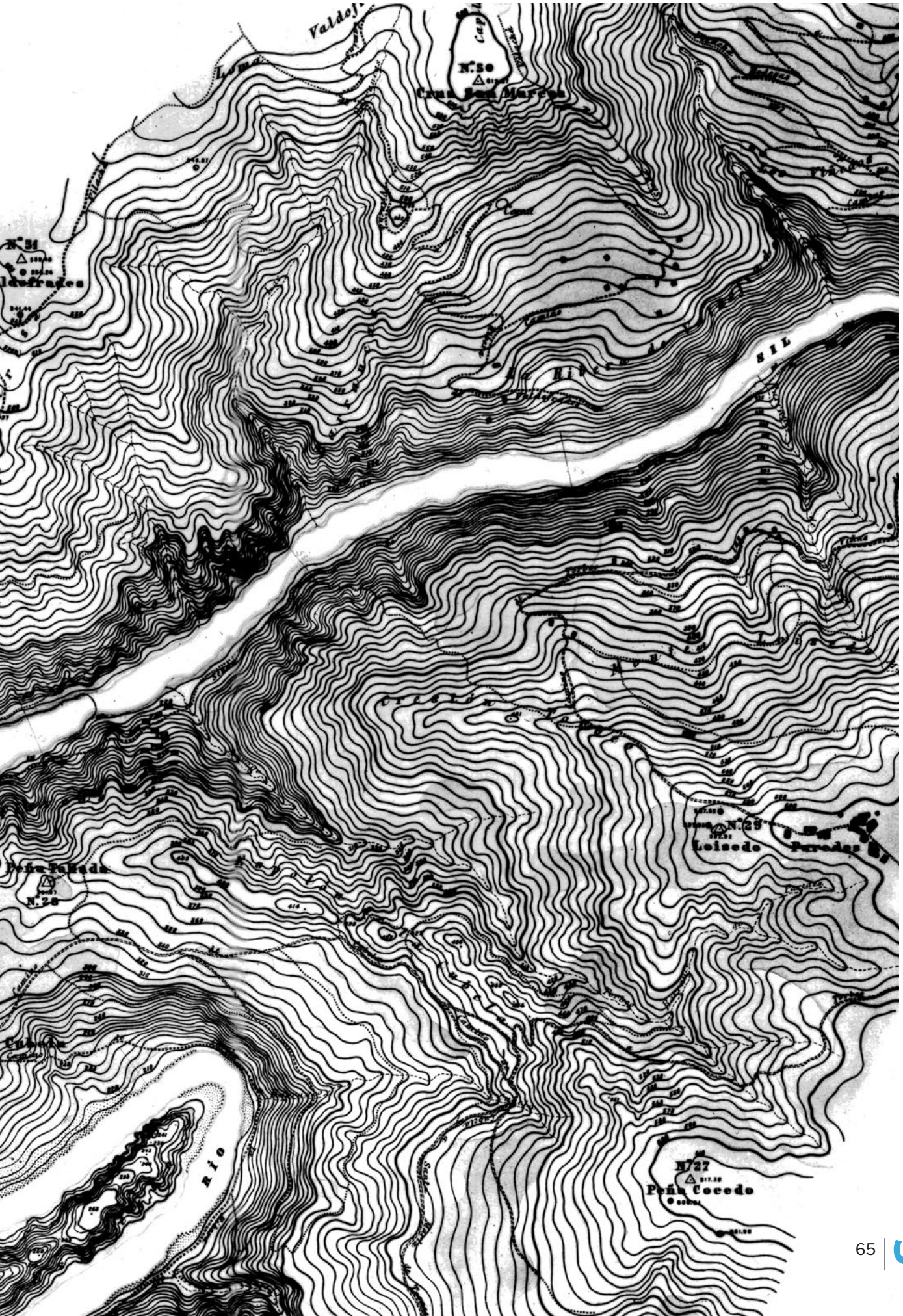
View of the Belasar dam at dawn. © A. Rodicio

Santo Estevo dam set in the rocky, forested landscape of the Sil canyon. © R. Mata



One of the tacheometric surveys from the series of surveys on the river Sil, produced in 1945 by Ideam for Saltos del Sil SA, prior to the construction of the dams.




Valdoj
N.30
Cima Peña Mayor
N.31
Idoffrades
SIL
Peña Tablada
N.28
N.29
Loisedo
Peredes
N.27
Peña Cocedo
Rio

The other heritage features of a landscape interwoven by water

Beyond the systems associated with the traditional watermills and the hydroelectric industry, a plethora of small works and physical landmarks scattered throughout the nominated property bear witness to the enduring relationship with water of the communities that have inhabited this area.

To begin with, there are the water channels and reservoirs of the first eremitic communities that settled in these areas around the 4th century, and which are still preserved in several of the settlements identified in the nominated property and their immediate surroundings. The channels dug into the rock that surrounded the cells and drained the rainwater are outstanding in their uniqueness.

A ubiquitous feature is the abundance of small crossings and the historical *pontellas* across the countless streams and brooks that flow through the nominated property. They are a recurrent feature of the intricate network of traditional paths and trails in the nominated property, many of which are still in use and endow the landscape with a remarkable scenic beauty. They are found in great typological diversity ranging from stepping stones to *pontellas* (clapper bridges), small bridges made of slabs resting on piers. The wear and tear on the stones gives us an indication of the antiquity of these traditional design solutions, which are still preserved today.

The architecture of water is reflected in an infinite number of imaginative construction solutions, from domestic buildings to farmsteads. An interesting case in point is the cellars lined with channels through which fresh water flowed during the summer months to cool the room and keep the premises at a constant temperature. Another distinctive structure are the ancestral *alvarizas*, walled enclosures where beehives are kept, always with a pool of water. There are also numerous fountains, mines and washing places dotted around the area. Of special note is the fact that many of these features have been consecrated, as described in the following section on intangible heritage.

The *sequeiros* and *hórreos* form an ensemble of buildings that we can associate with water, or rather with a way of managing the omnipresent damp in these lands. The *sequeiros* – chestnut drying sheds – are traditional structures with a distinguishing feature: they were only used for two months of the year, during the months when chestnuts were harvested with the first winds of autumn. Chestnuts were a staple of the peasant diet in these areas until the arrival of potatoes and maize from America, hence the lingering presence of these unique buildings in the Ribeira Sacra landscape. They are circular or rectangular buildings of granite or schist masonry, found only in the provinces of Lugo and Ourense, where the nominated property is located. They generally had two floors: chestnuts were stored on the upper floor, while the lower floor housed the hearth where the fire was built to slowly dry the chestnuts. Like the watermills, many of the *sequeiros* were historically owned by the monasteries. Several of these buildings are still standing in the property, some of them, such as Mazo de Santigoso, in very good condition.

The *hórreo* is a traditional building raised from the ground on pillars used to store foodstuffs and keep them dry and out of the reach of animals, so that they remain in an optimal state for consumption. These buildings are relatively common in Galicia and the north of the Iberian Peninsula and Portugal, but in this area the conservation and upkeep are outstanding.

These architectures of water, while not exceptional in isolation, together enhance the unique values of the cultural landscape and its close relationship with water, comprising a rich historical and ethnographic water-related heritage.

Another important aspect to consider is the abundant religious imagery related to water. Special mention should be made of the significant heritage of stone baptismal and holy water fonts throughout Ribeira Sacra, the majority of which were crafted during the Romanesque period, at the height of the population and farming boom in the area.

A final highlight is the more than a hundred viewpoints, dating from different periods, that overlook the rivers Sil and Miño in the nominated property. Although, strictly speaking, they are not water-heritage features, such an impressive number reveals how much the local inhabitants have always depended on and admired these rivers.



Traditional house and water features in O Noguedo. © C. Rueda



Horreo in Maiorga. © R. Vilanova

Crossing a *pontella*. © C. Rueda

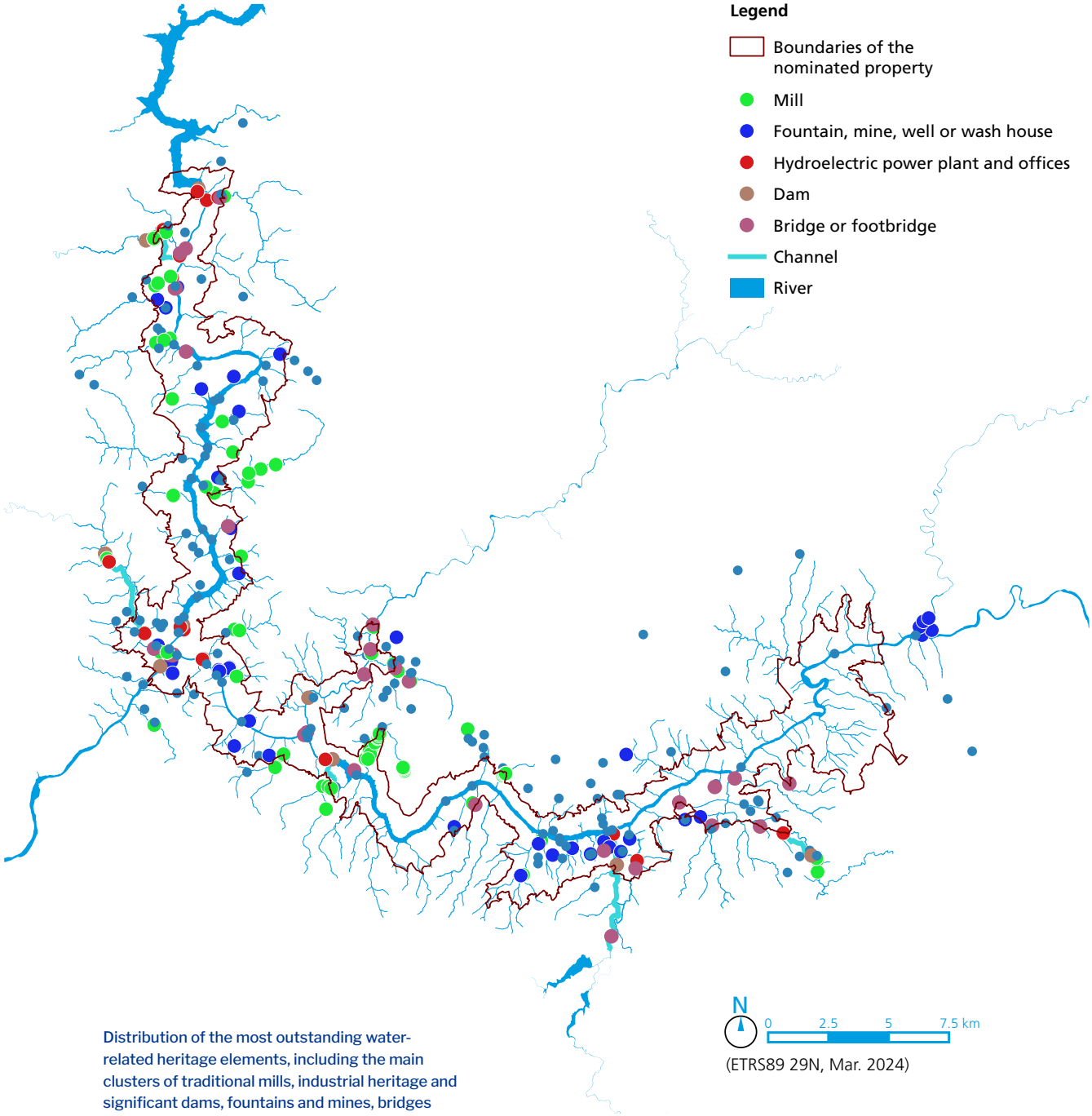




Old *pontella* on the Xábrega, one of the many examples of this type of structure found throughout the cultural landscape. © C. Rueda

Hórreo in the lands of Pombeiro. © R. Vilanova





Distribution of the most outstanding water-related heritage elements, including the main clusters of traditional mills, industrial heritage and significant dams, fountains and mines, bridges and crossings. For reasons of scale, not all the features described in this section are shown.

The imprint of eremitic and monastic traditions on the cultural landscape

The making of this cultural water landscape cannot be fully understood without an appreciation of its spiritual and religious character over more than a millennium. The mark left by the spirituality of the first hermit communities and the role of the monasteries were determining factors that were instrumental in giving this evolving cultural landscape its current form. Throughout this description we have seen how the monastic community played a decisive role in many of its constituent features, which have survived the passage of time. The *socalcos*, the watermills and many other works that have left their mark on the Ribeira Sacra waterscape are the product of their influence. It follows that the heritage associated with these manifestations should be viewed as a value to be taken into account in the nominated property.

With this in mind, it is important to clarify at the outset that the traditional and long-standing name for the site – Ribeira Sacra – comes from the sui generis interpretation of the term *Revoyra Sacrata* by Friar Antonio Yepes in the 16th century, which he understood to refer to the great concentration of monasteries, parishes, churches and chapels on the banks of the rivers Miño and Sil. In reality, however, the term was first used in 1124 to describe a sacred oak grove that Theresa, Countess of Portugal, daughter of King Alfonso VI of León, donated to the monastery of Santa María de Montederramo upon its foundation. Be that as it may, the name gained traction and was kept alive by popular tradition.

The nominated property contains many vestiges of the first hermit settlements and a plethora of churches, monasteries and other religious buildings that bear witness to the pervasive presence of the monastic orders. They were the spiritual bedrock that formed the foundations of some of the most significant elements that have shaped the cultural landscape, impregnating many of the works and the actions that brought them into being.

This life of spiritual retreat became consolidated from the 6th century onwards, when small hermitages with very small communities that led a life of prayer and seclusion began to spread throughout the area. Many traces of these hermitages are still preserved in the area of the nominated property and in its buffer zone. The remote and inhospitable river canyons of the Sil and Miño were the ideal setting for these lives of seclusion, just like the hermit's original calling to the desolate deserts of North Africa. Several well-preserved archaeological sites have been identified in the nominated property that represent the ascetic landscape of the period. Notable among them is the necropolis of San Víctor de Barxacova. These traces have survived as part of the collective memory up to the present day and were beautifully described by the brilliant writer and philosopher Unamuno when he described these places as "ascetic in a deep bed of granite".

The former hermit settlements underwent reforms, giving rise to thriving monasteries, first Benedictine, and later Cistercian. This is borne out by the vast array of religious monuments that testify to the influence of the monasteries. From the beginning, these settlements were located, as was to be expected, near water points that guaranteed their water supply, as can be seen from the many fountains, some of which are consecrated, and water conduits in the surrounding area. It is worth noting that the San Pedro de Rocas complex, which is located in the buffer zone, marks this transitional period which also represented the birth of Western Monasticism: there is evidence that it was the first community of monks to abandon the hermit life. It should also be noted that the Benedictine abbeys were located mainly on the *ribeiras*, that is to say, in the area of the nominated property, unlike the Cistercian abbeys, which were located in the *bocarribeiras* or at a distance from the river canyons. There is thus a curious monastic specialisation with respect to the main rivers and watercourses.

The monastic legacy is especially palpable in the monasteries located in Ribeira Sacra. In the river valleys of the Sil we find the monasteries of Santo Estevo de Ribas de Sil, Santa Cristina de Ribas de Sil and San Paio de Abeleda, while in the Miño river valleys we find those of San Paio de Diomondi, Santo Estevo de Ribas de Miño, San Xoán da Cova, Santa María de Pesqueiras, Santo Estevo de Chouzán, Santo Estevo de Atán and Santa María de Nogueira de Miño. All this heritage is in an excellent state of conservation.

Most important for our purposes, however, is the fact that the monasteries had a decisive influence on two essential aspects of the present-day cultural landscape. On the one hand, they instigated and accelerated the cultivation of the steep riverbanks by building terraces on impossible slopes, improving the ancestral techniques for building terraces and introducing new varieties of grapevine. On the other hand, they introduced and promoted watermills, which have had a decisive influence on the cultural landscape. In any event, the value attached to water in the design of the religious monuments – in their iconographic or even topographic elements – is explained by the transformative power of Ribeira Sacra.

The relationship with water in these monuments is even more significant if we consider two specific aspects. The first is that the monasteries, hermitages and churches all feature a characteristic balcony-like setting over the respective rivers. The second is that their orientations are determined by the rivers, breaking with the canonical tradition of Christian religious buildings.

It is true that all or a large part of the accumulated heritage in the nominated property was made possi-



View of the Benedictine monastery of Santa Cristina de Ribas de Sil, which dates back to the 10th century. It was one of the largest monasteries in Ribeira Sacra during the Middle Ages and preserves its Romanesque church from the end of the 12th century. The river Sil can be seen below. © R. Vilanova



The monastery of Santo Estevo de Ribas de Sil is one of the most outstanding and spectacular sites of the rich monumental heritage of Ribeira Sacra. Founded in the 6th century by San Martín Dumiense, the current building was erected between the 12th and 18th centuries. © R. Vilanova



San Xoán da Cova. © DXPC



Monastery of Santo Estevo de Ribas de Miño. © DXPC

ble thanks to the efforts of the local communities, who worked the land as *aforados* (tenant farmers), both of the monasteries and of the nobility, until the last decades of the 19th century. The redemption of the *foros* (monastic property rights) in favour of the peasantry did not in fact occur until the enactment in June 1926 (Regulation of 25 August) of the Royal Decree-Law that proclaimed redeemable all the *foros* governing immovable property in the provinces of Galicia.

Intangible heritage and water culture

As the nominated property is a living cultural landscape, intangible heritage associated with water occupies a prominent place in the values that adorn it. As the draft Charter on Intangible Cultural Heritage (ICOMOS-ICICH, 2021) recognises, the inseparability of heritage must be taken into account, recognising that tangible and intangible aspects must be respected in equal measure and that the contemporary vision of heritage therefore requires an integrated approach. This dimension is particularly important in Ribeira Sacra when referring to the biocultural capital inherent to the area, which includes both traditional knowledge and symbolic, sacred and spiritual references to water.

The first outstanding feature is the persistence of the traditional knowledge of land and water management, particularly the continuing art of *socalco* construction with dry stone walls. It is a tradition that is kept alive as can be seen by the fact that the acreage of agricultural land cultivated in *socalcos* is not only maintained, but in some areas is even increasing. Associated with this practice we also find the regular celebration of the river harvest, when the grapes are transported down the river, or the surviving traditional grape varieties that today are the hallmark of the area's wine production.

The mythical beings of the Ribeira Sacra aquatic environment are still alive and well in the collective imagination. This is the case of the *xacias* that captivate humans with their beauty, like mermaids in the sea, and then inflict misery on those who follow them. Another figure of local folklore are the *ibios*, a tradition that is preserved at the foot of the river Sil in the municipality of Sober: a local representation of the *mouros* or *mouras*, mythological creatures that inhabited these lands before the arrival of the human race and that have their origins in Celtic legends.

Further manifestations of water-related popular culture are the great profusion of holy fountains and enchanted springs, some of which are of great interest, such as the underground ones that are reached by steps. Highlights among the long list of this type of water feature include the fountains of San Xermán, Os Mouros and Fonte da Moura in the municipality of Sober; Fonte da Virxe in Chantada; Cerreda in Nogueira de Ramuín; Aguas Brancas, Fonte Bendita and Fonte da Cabaza in Parada de Sil; and Outeiro da Pena and Xanxomil in Teixeira. There are also striking references to *mouros* and witches, as in the case of the Fonte das Bruxas (Fountain of the Witches), where it was said that the witches gathered to dole out evil. These features are significant examples of sacred, mythical or healing sources of water, or are also associated with traditional events such as processions. Rituals also carry great meaning, such as the pilgrimage of the faithful to Santo Estevo de Ribas de Sil to perform a water ritual for the sick, or the ritual celebrated at the Fonte dos Meniños in Argozón to cure children with rickets.

The festivals and celebrations linked to the river and the riverbanks are another important aspect of this intangible heritage. A good example is the traditional *aturuxos* contest. Every year, between the end of May and the beginning of June, hundreds of people gather at the foot of the Miño river, between the municipalities of Chantada and O Saviñao, to sample the famous cherries. The *aturuxos* contest takes place during the fair, when locals from both sides of the Miño compete by shouting "Ei, papeiros! Ei, rabudos!", an ancestral form of communication between the banks of the river that is of great ethnographic and anthropological interest. These same performances are also seen during the harvest festivities on the banks of the river Sil, both in Nogueira de Ramuín and Parada de Sil.

Special mention should be made of the remarkable toponymic heritage of the nominated property, which boasts an unusually large number of place names, many of which are unique, often containing pre-Roman roots, and include a remarkable variety of hydronyms. There is a remarkable number of place names that are unique to this area (recorded only once in the *Nomenclátor de Galicia*, which lists the names of all settlements). There are more than a thousand of them, 1,020 to be precise, which represents 20.6% of the total number of place names (Boullón and Méndez, 2020). Ribeira Sacra also contains a considerable number of relict place names from pre-Roman languages that are not recognisable today, but which, by delving into their morphology and comparing them with other Indo-European languages, are revealed to share a common etymological denominator: water. These toponyms reveal aspects of language that are not transposed into other forms of speech, because there is no evidence of the language spoken before the Romanisation of Iberia, and because there are no written sources available that give a clear account of the process by which Latin was introduced to this region. The hydronyms of Latin origin are equally plentiful and usually contain common or easily recognisable words, always related to water. Other forms of Arabic origin can also be found in this heritage repertoire. In any case, this outstanding heritage is proof of the abundance, variety and antiquity of hydrotoponymy in the

nominated property, a fundamental component of its linguistic identity and testimony to the culture of water that has underpinned the formation of this landscape since prehistoric times.

Finally, this section would not be complete without mentioning the *muiñeira*, Galicia's most iconic folk dance, which harks back to the days spent working in the mills – *muíños* in Galician – and the moments of playful leisure while waiting for the grain to be milled. The most striking aspect of the *muiñeira* is that the beat reproduces the rhythms and sounds of the mill. This *comarca* (administrative division) has its own particular versions, such as the well-known Muiñeira de Chantada, considered to be the most popular and authentic in Galicia.

Material culture and river transport

One of the most outstanding aspects in this respect is the preserved movable heritage of the boats, which bear witness to the intense use of the river and the great number of boat crossings that operated in Ribeira Sacra until the middle of the 20th century. Equally noteworthy is the still extant movable heritage related to the *pesqueiras* and *caneiros*, ancestral fishing systems, and various different types of fishing gear.

In Ribeira Sacra, at least seven types of river boats were still in use until the second half of the 20th century, out of the ten known types in Galicia, with local adaptations. These waters have been plied by the most basic types of vessels, such as rafts of logs lashed together, *barcos de dornas* – already used in the Mesolithic, according to archaeological evidence, but which disappeared from Europe in the Middle Ages – and vessels specifically designed to cross from one riverbank to the other, as well as more elaborate craft and riverboats.

The Ethnographic Museum of Arxeriz, located in a 17th century *pazo* (manor house) on the edge of the nominated property, is home to the best exponents of these local artefacts, containing the largest exhibition of riverboats in the Iberian Peninsula.

One of the rooms in the Ethnographic Museum of Arxeriz, displaying all the typological variety of boats that were once found in the rivers of Ribeira Sacra. © E. de la Iglesia



2.b. History and Development

Records indicate that this site has been occupied since prehistoric times, as evidenced by the presence of Neolithic dolmens or tumuli, known locally as *mámoas*, petroglyphs and *castros* (hillforts). The Miño and Sil river basins and their tributaries have been a strategic transit area since the Lower Palaeolithic, but it was in the Neolithic that these peoples began to alter the landscape, modifying its forms and leaving behind permanent traces. We know of major archaeological sites from this period in the area surrounding the nominated property, such as the group of seven megalithic burial mounds at As Cabanas.

Between the end of megalithic culture and the beginning of the Metal Ages, between 3,000 and 2,000 BC, the communities that populated the Miño and Sil valleys introduced another element that changed the landscape by transforming the rocks that crowned the hills and river cliffs into sanctuaries and places of pilgrimage endowed with a magical character; these places included shrines and places of worship. As with the *mámoas*, the petroglyphs that marked these sites were located in strategic places within the territory.

Evidence dating from the Bronze Age also survives in the form of valuable finds of swords, spearheads and pendants, such as those discovered in Forcas and Ribas de Sil along the riverbed or in caves in rugged locations. This also speaks to the relationship between the inhabitants and the river environment, symbolised by instruments of power.



Object of personal adornment, dated to the Late Bronze / Early Iron Age, from the water storage facility at Santo Estevo de Ribas do Sil (Nogueira de Ramuín, Ourense).
© A. Trigo Arnal (National Museum of Archaeology)

During the Iron Age, the settlers abandoned the lowland areas near the riverbeds and moved to the uplands, where they built their fortified settlements, known as *castros*. These were generally fortified enclosures, with several lines of defence, made of earth, stone and probably stockades, located on hilltops along the riverbanks, in strategic positions to keep watch over the territory and thoroughfares, but always overlooking the river. Given that rivers played an essential role in communication routes, it is evident that, against a backdrop of tensions related to the possession and trade of resources, fortified settlements were built on the hilltops overlooking the watercourses to gain a strategic advantage.

Once the Cantabrian Wars between Rome and the different Cantabrian and Asturian peoples that inhabited the northwest of the Iberian Peninsula had ended, the process of Romanisation began and was accompanied by the exploitation of resources on a whole new level. Mineral resources were intensively mined, leaving deep marks on the landscape, and enormous transformations ensued, some based on the most refined and technologically advanced methods available at the time. Mining was at its most intense on the river Sil, where the *ruina montium* technique was used to extract gold, especially in two locations to the east, just beyond the boundaries of the nominated property. Although there is no evidence of the transformation of the steep slopes of the river canyons into cultivated terraces in Roman times, it is possible to reconstruct the "biography" of the most abundant species in those times in the area of the nominated property – chestnuts and grapevines – which are still predominant in the present-day landscape.

Despite the importance and significance of all that has been said about the early history of Ribeira Sacra, the personality of this site takes on greater dimensions from the Roman imperial period onwards. An essential element in the configuration of this landscape was the arrival of the first Christians, who probably came to the region with the Roman army and settled in this area. These early Christian hermits sought peace in rocky shelters, in the solitude of the forest, surrounded by babbling brooks, against the mountain backdrop. Influenced by the complex topography and the multiple river courses, the hermits lived in scattered communities, with led to denser settlement and the development of the original network of footpaths. The surviving traces of this early period can be found in the parish church of Santa María de Temes, located at the confluence of the rivers Sil and Miño, very close to an ancient Roman road. Little by little, the *castros* gradually gave way to the first population centres and, alongside

them, a network of paths, vegetable gardens, tree crops, and riverboat crossings.

From the beginning, evangelism in these lands was closely linked to Priscillianism, regarded as one of the first heresies of Christianity. Its ideas penetrated deeply into these river valleys, strongly influencing their subsequent development. It was a movement with a marked tendency towards strict asceticism, advocating a less hierarchical church in which the laity and women would play an important role. It also championed pilgrimage and the hermit life, where perfection lay in the spiritual rather than the material. Priscillianism envisioned dual communities of anchorites, where men and women led a life of renunciation and penance, free and independent of the rules and conventions of the orthodoxy of the early bishops. The idea of a life in harmony with nature was what drove the growth in these remote river canyons of communities that were already well established by the 6th century. In fact, the extent of eremitic communities in this region is well documented during the Suevi Kingdom of Galicia (409-585), when anchorites lived in remote areas and held their ceremonies in caves. It was, in short, a period distinguished by the presence of hermits inspired by the Desert Fathers, the product of a cultural transfer between East and West, the Mediterranean and the Atlantic.

After the defeat of the Visigothic Kingdom by the armies of the Umayyad Caliphate of Damascus, the permanent settlements proved ineffective and incompatible with their strategy. Raids and pillaging were very frequent throughout the second half of the 8th and early 9th centuries, which meant that, especially in Ribeira Sacra, the population returned to occupy these places as settlements that provided better protection. Ribeira Sacra thus also became a land of refuge. In fact, the migrations of the 8th and 9th centuries that crossed North Africa and Hispania on their way to Central Europe turned this area into a land of sanctuary.

During the Early Middle Ages, there was a large and prominent anchorite community in this region, as evidenced by the necropolis of Barxacova in Parada de Sil. Their presence continued to be a constant feature at least until the 10th century, as recorded in a document from 977, in which King Vermudo II granted land to the monastery of Pombeiro *ad fratrem Recaredus anacoreta*. These were also signs of the systematic repopulation efforts instigated by the Christian kings in an era of conflict and warfare, with continuous advances and setbacks, which coincided with the spiritual retreat of anchorite ascetics who had sought in the deep ravines of the great rivers of the Ribeira Sacra not only a place of seclusion, but also a refuge from the dangers of the world.

The Heredad de Rocas, located in the surroundings of the nominated property, heralded the new order that was to be established after the heretical tradition of the hermits: it is home to the only surviving monastery from the Suevi period in the world and the oldest recorded evidence (573) of the founding of an abbey in Western Europe. This site illustrates the gradual transition from eremitical practice rooted in Eastern traditions to monasticism, in other words, the transformation that ensued when the hermits practising penance in these places abandoned this way of life to seek seclusion in monasteries. This type of settlement explains the importance that monasticism came to have in Ribeira Sacra between the 6th and 10th centuries, in the Early Middle Ages.

Cereal provided the main means of subsistence for the communities of the time, planted in the most accessible areas of the *bocarribeira*, in the outer area of the nominated property, rye or wheat in particular. Cereal was a staple in their diets and for the payment of rents, which is why it occupied the best and most productive plots of land. Wine, on the other hand, occupied the terraces along the river canyons. The banks of the rivers Miño and Sil gradually became the breadbasket and wine cellar for a way of life fundamentally influenced by anchorites, hermits, incipient communities of monks, refugees and repopulations encouraged by Christian kings fighting to recover territorial power bases; all of which imbued the area with a profound spirituality. This led to the foundation of the first double monasteries, promoted by the local nobility as final resting places and as offerings in exchange for spiritual sustenance.

This important anchorite and monastic presence in the Early Middle Ages was followed by the expansion of the Order of Saint Benedict from the 11th century onwards, initially thanks to the support of King Alfonso VI and his son-in-law Raymond of Burgundy, who encouraged the arrival of Benedictine monks. As monastic settlements were established, the great abbeys – the nerve centres of spatial and cultural organisation and tradition – were built, along with the many churches and chapels that dotted the cultural landscape. Small villages also proliferated, and the parish structure that still survives today was established and consolidated, sustained by an upgraded and well-maintained system of paths adapted to the complex morphology of the area.

In the second half of the 12th century, the Cistercian reform spread throughout Ribeira Sacra and some of the foundations were incorporated into this reform, including the monasteries of Montederramo and Ferreira, which became the main male and female houses in the *comarca*. Curiously enough, however, the Benedictine orders remained in the entrenched river valleys of the rivers Miño and Sil, that is, in the area of the nominated property, while the Cistercian order expanded throughout the rest of the territory.

The Benedictine monks brought with them a new way of organising work and managing land. They in-

The founding inscription from the monastery of San Pedro de Rocas is the oldest written evidence of monasticism in Western Europe (AD 573). © Provincial Museum of Ourense





The Benedictine monks brought with them a new way of organising work and managing land, which still survives today, and expanded the cultivation terraces in Ribeira Sacra. In the picture, the hermitage of San Mauro in Peña do Castelo, with views of the *socalcos* clinging to the steep slopes of the river Sil, and the forests of the more shaded riverbanks. © A. Rodicio



The role of rivers as shapers of the landscape is visible in the maps of the bishoprics of Lugo and Ourense made by José Cornide in 1763.


Fumiña
Mondoñedo
Meyra
Piquin
Zela
Aguiax
Luaces
Bolaño
Fonsa
Cubiledo
Pineyra
Buxon
Fuensagrada
Tizimol
Condar
Fuente Neyra
Valdepedro
Freyso
Rio
Corneas
Villaiz
Puebla de Navia
Montaña de Segra
Villacha
Villaboa
Villaboa Dorna
Castro Lundes
Donis
Cervantes
S. Pedro
Valle de Cancelada de Arriba
Fabal
Vilarello
Nogales
Foxes
Pino
Rozaeda
Oubia
Lozaeda
Villasoro
Bobeda
Fornelas
Neigada
Nascos
Castaneelos
Rio Sor
Villamor
Folgoso
Cauxel
Esperante
Meyraos
Laseara
Villarubin
Viezzo
Monforte
Grullade Nocedas
Pineyra
Neyras
Penelas
Lobios
Amande
Rinol
Doade
Baxanes
Rosende
Villaescusa
Canabal
Meyra
Tebreo
Faba
Montañas del Valcarce
Puente Fabrence de Sor
Sacar de Bois

troduced new crops, including new varieties of grapevine that grew alongside the existing ones, and they maintained and expanded the cultivation terraces along the *ribeiras*. The resulting construction of *socalcos* (terraces) was the greatest modification that the landscape of Ribeira Sacra has undergone throughout its history. A remarkable feat of engineering that still survives today, with 12,000 km of dry stone walls. This farming system adapted the steep slopes of these dramatic river canyons to the cultivation of vineyards and other crops such as vegetables and fruit, olive and chestnut trees.

The monastic orders also built the first watermills in Ribeira Sacra, which have been a constant presence in this territory over the centuries, providing it with one of its most significant features. These lands were also graced by the construction of architectural features and structures specially designed to store produce, which are still a distinctive feature of the landscape today.

Both the monasteries and the nobles exploited the land by means of a long-term usufruct agreement, known as a *foro*, which became widespread in Ribeira Sacra from the 13th and 14th centuries onwards and which, in many cases, was binding on a family for three lifetimes, with the possibility of extension. The *foros* were an instrument used not only to manage cereals, vineyards, vegetable gardens and chestnut groves, but also the fishing grounds and watermills along the rivers and streams. The *foros* were a way of making the land productive, since the monasteries were unable to work it directly, as serfdom had been abolished in the Middle Ages. To keep track of the income from these *foros*, one of their number – a *cabezaleiro* – was appointed every year after the harvests to deliver the rents set by the monasteries. The rents were collected in the form of a portion of the harvest, which from the mid-15th century would mainly consist of wine, rye, fodder or chestnuts. The expansion of the vineyards from the 15th century onwards is recorded in the *foro* agreements in which the tenants of monastic lands – *foreros* or *aforados* – were required to plant these steep lands to produce wine, and a large number of cellars were built to store it, a feature that is still visible today in these terraced landscapes.

Against this background, it is useful to remember that the immense, painstaking task undertaken by the peasants of Ribeira Sacra to build cultivation terraces dates back, at least in documented form, to the 9th century. The founding charter of the monastery of San Esteban de Atán, in the Lugo side of Ribeira Sacra, dates back to 816 and is the oldest surviving text documenting the existence of vineyards in Galicia (López Sabatel, 2022). The work was linked to the economic aims of the monasteries to increase the surface area of the of cultivated land. To understand the history of the terraced landscape of Ribeira Sacra, it is important to stress that, with the widespread use of the *foro* as a seigniorial leasehold contract from the 13th and 14th centuries onwards, "planting vines on the slopes" was a typical precondition demanded of the *forero* in exchange for usufruct rights over the property granted to him by the monasteries (López Sabatel, 2009).

One of the priorities of the new abbots was to improve the yield of the privileges granted to them and to exploit the riches of the land through the system of *foros*. The new requirements and improved organisation led to an increase in yields from the estates and crops and, in general, from all available resources, including from the rivers. The growth and strategic importance that the monasteries acquired as managers of this space during the 17th and 18th centuries is evident from the great works, buildings and reforms that were undertaken, including such significant examples as the monastery of Santo Estevo de Ribas de Sil. Much of this work was financed by rental income on the leases and tithes that the monasteries received.

From the end of the 15th century, and mainly in the 16th and 17th centuries, these levies were paid in cereals, chestnuts, pulses or wine, and the foro contracts established the proportion of each product in the rental payment. The abundant records of this type of foro contract provide precise information on the most common crops grown in these parishes bordering the riverbeds, which were mainly chestnut trees and vineyards among others, as is still the case today.

The monasteries played a decisive role in the creation and spread of the parish as a religious and administrative district, after its consolidation in the Middle Ages. It is a division that still survives today and is one of the most distinctive features of the social and spatial fabric of Ribeira Sacra. The monastic *cotos*, spaces closely linked to jurisdictional powers and ecclesiastical settlement, were widely used to define the boundaries of the parishes established from the 11th century onwards by means of geographical features or historical elements. The most characteristic feature is that, given the density and hierarchy of the drainage system, rivers were and continue to be the parish boundaries. Not only the Miño and the Sil, but also some of their tributaries, such as the Asma, the Cabe and the Edo and many brooks, are the geographical features that have been demarcating the boundaries between parishes for a millennium.

The power exercised by the monasteries had, since medieval times, been counterbalanced by the power of the landed gentry in this territory. These noble houses also exercised their power with *foros* and leases, especially in the areas of *bocarribeira*, on the outer edge of the nominated cultural landscape, sharing boundaries with the possessions of the monasteries and from time to time coming into conflict over their management. The *pazos*, the great houses



Both the monasteries and the nobles exploited the land by means of a long-term usufruct agreement, known as *foro*, which was binding on a family for at least three lifetimes, with the possibility of extension. In the image, the Monasteiro de Santo Estevo de Ribas de Sil. © A. Rodicio

of the nobility, were economically almost self-sufficient units, just like the monasteries, since, in addition to farming, they ran the mills, the fisheries, the smithies and the water-powered tanneries... and later on, the *factories of light*, the first hydroelectric power plants.

The far-reaching liberal reform of the State and the dissolution of the Ancien Régime during the first half of the 19th century brought about, among other things, the confiscation of the properties of the ecclesiastical orders from 1836 onwards. In Galicia, it was precisely members of families of the nobility and a nascent urban bourgeoisie who, in general, took ownership of the buildings from which the religious communities were exclaustrated, as well as of many productive lands. However, the *foral* system was maintained in the countryside, so that the new landowners were in fact the beneficiaries of the *foral* rents, while the usufruct remained in the hands of the peasantry, the *aforados*. Thus, an outdated system of land exploitation was essentially perpetuated, with the difference being that the rents, which in general continued to be paid in kind, instead of going to the religious communities, were passed on to the new group of *foro* owners. This regressive situation was criticised throughout the second half of the 19th century in certain political and legal circles, which attributed the backwardness and ruinous situation of much of the Galician countryside to the *foral* system. It was in the first third of the 20th century when open and organised protest spread among the peasantry, who began to demonstrate against their collective feeling of oppression through solidarity and anti-*foral* societies, and their demands were finally heeded by the governing parties (Villares Paz, 1976 and 1982).

As a result of this movement and other social and political circumstances that do not concern us here, this system of *foral* exploitation came to an end with the enactment, during the Dictatorship of Primo de Rivera, of the Royal Decree-Law of 25 June 1926 on the redemption of *foros*, by which peasants were offered an option to buy, which in many cases they exercised. Thus, for the first time, the people who had occupied these river valleys for centuries became the first owners of the plots of land that their fathers and grandfathers had worked as tenants, as *aforados*. However, despite this new state of affairs, the small size of the plots available and the hardships of the time (the mid-20th century) forced many people to emigrate in search of a better future, abandoning what had been until then a long-standing place of refuge. The river, which the new emigrants crossed by boat to leave for other lands, was once again witness and main character in another epic page in the story

of the settlers of Ribeira Sacra. The viewpoint known as Mirador de los Balcones Madrid, located over the Sil river canyon, is a perfect example of this. It is not that the capital of Spain, the destination of many emigrants, can be seen from here, but rather that it was the place chosen by the families to see their loved ones off and bid them a last farewell.

A history marked by the power of water

Watermills have existed in river landscapes since at least the 3rd century BC. Their expansion, associated with the progress of civilisation, took place first in China and the Mediterranean basin, and then in other parts of Europe and the other continents. It is estimated that, at the height of their development in the early 19th century, hundreds of thousands of such waterworks were in operation in Europe.

The construction of watermills in Europe spread gradually from west to east from the 7th to the 12th century, with the various hydraulic typologies adapted to the circumstances of each area (Brown *et al.*, 2018). These watermills were an essential part of the medieval technological revolution, the importance of which is still not sufficiently recognised. Some authors estimate on the basis of the evidence that there were more than half a million of them, from their first appearance until their decline at the end of the 19th century, which reaffirms their extraordinary importance and the heritage significance of these vestiges of the past.

The first records of watermills in Ribeira Sacra date back to the beginning of the 11th century – the mills of Santo Estevo de Ribas de Sil – although it is thought that there were mills before that time. They were established by religious orders, which was relatively common practice in the introduction of these mills in western Europe, where the monasteries played a fundamental role in their expansion. They were a constant presence in this area over the centuries and have given the nominated property one of its most significant features.

For more than eight centuries, from their introduction to their decline, watermills were a recurrent feature of the landscape of Ribeira Sacra. The remains of mills from different periods can be counted by the hundreds and some sources estimate that more than a thousand watermills may have been built in the area of the nominated property. Such was their number that some authors aptly refer to them as the water-based equivalent of the *socalcos*, in analogy to the countless cultivation terraces that stretch across the slopes of these river canyons. This was due to the distinctive physical geography of Ribeira Sacra, which is criss-crossed by hundreds of rivers, streams and brooks, to the steep slopes that magnify the potential of water energy and, especially, to the need for energy self-sufficiency in a geographically isolated place. That said, most of the surviving mills that are still in a good state of preservation date from the 17th and 18th centuries, a period that saw a second great wave of milling activity and the adaptation of many of the existing mills to the new technologies of the time.

Records of the milling history of the nominated property reveal a wide variety of uses, including grain mills, fulling mills and forges, although the vast majority were flour mills for grain and chestnuts. Grain and chestnuts were always ground using horizontal-wheeled watermills and their different variants, also known as *rodezno* mills, while vertical-wheeled mills, also known as *aceñas*, were used for other purposes. Nonetheless, from a developmental point of view, the outstanding feature is that the typology of the buildings and systems of water collection in Ribeira Sacra remained practically unchanged from the Middle Ages onwards. Over the years, minor changes at the most have been introduced, such as the replacement of wooden water wheels with metal ones, but in essence, the watermill landscapes that still survive are practically identical to those of the Middle Ages.

Throughout the centuries, the watermills were nodes in the polycentric medieval space of Ribeira Sacra, together with the churches and monasteries. The mill was always a point of reference, as milling provided the mainstay of the food supply, while trips to and from the mill were an essential part of daily life and the unit of measure used to quantify grain and flour, the *fanega* (Spanish bushel), was also a means of payment, as it was used to pay taxes, *foros* and land. Today *fanegas* have become museum pieces. But these mills, with their ingenious stone and wooden machinery, were constantly modernised to boost their efficiency, especially with the advent of industrial machinery. And Ribeira Sacra changed too, driven by the power of water.

From the end of the 19th century and the first decades of the 20th century, the emergence of hydroelectricity sparked a new paradigm shift in Ribeira Sacra. First came the conversion of a number of traditional mills into mini-power stations, where water wheels became turbines. This was the case of Eléctrica de Belesar, Electra do Mato and the Ribeiraos factory of light, which marked the beginning of a new era of specialisation in harnessing waterpower. The remains of a grain mill that was adapted for this purpose at the turn of the century to supply a private property and the Monastery of San Román de Moreda are still preserved in the Pantón Town Hall. Then came the first hydraulic concessions to generate electricity, pioneered by the Electra Popular de Chantada on the river Asma, which filed the first application in 1899. Six years later, it was already powering public lighting in Chantada and had contracts for more than three hundred lighting points in homes in the region (Carmona, 2015).

And so a host of hydroelectric power stations were built, such as *A Fábrica da Luz* (the factory of light), on the river Mao, and others between 1914 and 1916. The list of mini-power stations that spread throughout the area gradually grew, and six of them are still in operation. They were low-power plants by today's standards, ranging from 15 kW to 60 kW, and it is interesting to note that the electricity supply was also used to power some of the old traditional mills.

Within the framework of the public debate on the role of hydroelectricity in the economic modernisation of Spain, and after timid advances made under the Spanish government's 1902 hydraulic plans, the Gasset Law of 1911 and the Republican National Plan for Hydraulic Works of 1933 (Gómez Mendoza, 1991; Ortega, 1992; Bartolomé Rodríguez, 2011), the first large-scale concessions were granted in 1933, once the knowledge and technology became available to build larger hydroelectric dams. These concessions gained momentum after the Spanish Civil War, during a period of electricity shortages when they became a prized resource. It was against this background that the company Fenosa acquired the concessions on the river Miño from Energías Hidráulicas de Galicia, while Saltos de Sil did the same for the usable section of the river Sil.

Consequently, the great leap forward for hydroelectric power in this territory came in the mid-20th century with the construction of the large reservoirs and hydroelectric dams to exploit the concessions. These construction works should be seen as part of the hydraulic policy of Franco's dictatorship, inspired by the idea of energy autarky and drawing in part on the proposals outlined in the National Plan for Hydraulic Works of 1933 (Mairal Buil, 2007). The decision was thus taken to build great reservoirs, which became examples of modernity and progress for the regime. And so the Belesar and Os Peares dams were built in the Miño basin, and the Santo Estevo and San Pedro dams in the Sil, with the aim of generating abundant and renewable energy. Construction began almost at the same time in both basins at the end of the 1940s and beginning of the 1950s and amounted to one of the most important episodes in the history of Spanish engineering.

In this new era of power generation, the small hydroelectric companies had no future and were ultimately swallowed up by the large operators. This was the case of Electra Popular de Chantada, which was taken over in 1961 when it only had 1980 customers.

For more than eight centuries, the myriad watermills, such as the one in the image, were the driving force behind the life of this cultural landscape, until their decline between the end of the 19th century and the beginning of the 20th century. © E. de la Iglesia



The present

One might think that the focus on hydropower would overshadow or consign the traditional activities of Ribera Sacra to oblivion. But the reality in recent decades has proven to be quite different. The agricultural vocation of these river canyons has remained unchanged to the present day, albeit with certain changes, such as the expansion of vineyards to the detriment of market gardens. This is particularly evident on the sunny slopes that flank the reservoirs, while on the shady slopes the forests of chestnut, oak, Pyrenean oak, cork oak and holm oak have endured, thus perpetuating one of the outstanding features of Ribeira Sacra – the coexistence of cultivated and natural landscapes – which sets it apart from other winegrowing river landscapes.

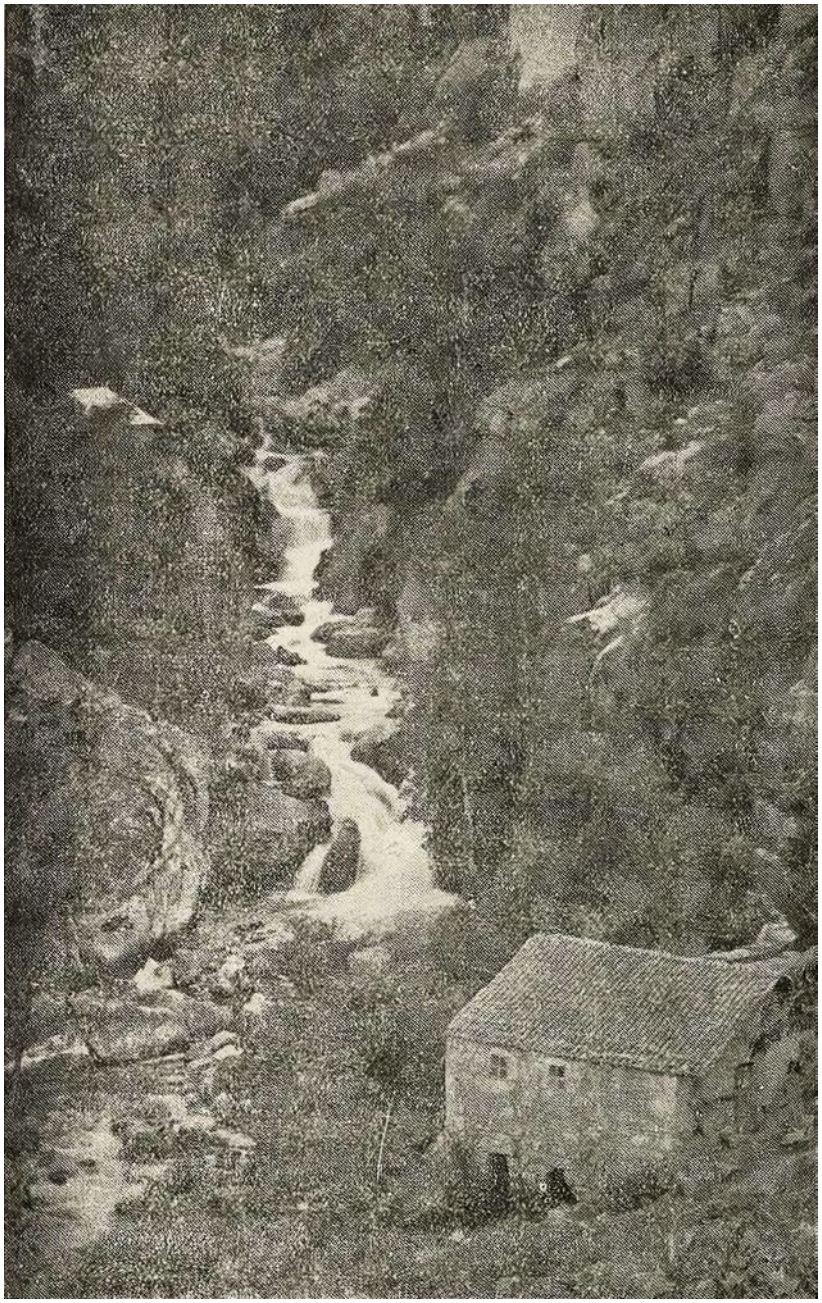
The wine boom has been remarkable in recent times, especially since the creation of the Regulatory Council of Ribeira Sacra in 1993, and the definitive approval of the Designation of Origin in 1996. At present, 90 wineries are listed by the council and, according to the statistics, there are 2,599 winegrowers in the area, exploiting a surface area of 1,241 hectares, which testifies to the agricultural vitality of this river territory. Wine is produced in Ribeira Sacra, as it has always been done, keeping ancestral techniques alive, harvesting by hand, workers climbing the riverside slopes with *culeiros* on their backs. The same applies to traditional products such as chestnuts, cheese and honey.

In recent times, tourism has also emerged as a new ally in the survival of this cultural waterscape. The experience of visiting the landscape has been enriched by river routes and a dense network of viewpoints and trails. Sustainable, non-aggressive tourism, free from the pressures of overtourism, based on sensory experiences and contact with nature, helps to revive and revitalise the local economy. And so visitors continue to discover the same haven of peace, beauty and spirituality that attracted the first hermits.

If anything can be learned from this history, it is that Ribeira Sacra is a land shaped by the silent endeavour of amassing terraces over the centuries, a place of refuge and spirituality, a waterscape where countless traces of eremitic and monastic traditions still persist and, above all, a space that has been shaped for centuries by the power of water in all its forms.

The great leap forward for hydroelectric power in this territory came in the mid-20th century with the construction of the reservoirs and hydroelectric dams. In the image: the Santo Estevo dam. © R. Vilanova





Electra Popular and O Xordo mill,
Asma River, July 1929. © Revista Alicerces





Ribeira Sacra
Waterscape

3. Justification for Inscription

3.1.a. Brief synthesis

3.1.b. Criteria under which inscription is proposed

3.1.c. Statement of Integrity

3.1.d. Statement of Authenticity

3.1.e. Protection and management requirements

3.2. Comparative Analysis

3.3. Draft Statement of Outstanding Universal Value

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3.1.a. Brief synthesis

The nominated property showcases an outstanding cultural waterscape, traditionally and popularly known as Ribeira Sacra, which is bounded by spectacular river canyons at the confluence of the Sil and Miño rivers (Galicia, Spain), located in the cool, damp climes of Northwest of the Iberian Peninsula.

It is an epic landscape shaped by the culture of water, the memory of which is perpetuated through the successive solutions that have breathed life into and moulded the identity of this place through the ages. It traces the origins and evolution of a territory sculpted by water and is paradigmatic of a culture of water: one can clearly discern the marks of its construction over more than 1,500 years of continuous occupation. It is the result of constant interaction between its inhabitants and a river environment that has been deeply transformed by human activity over the course of time. It is, in short, an exceptional testimony to a living landscape that has been shaped by water over many generations to become an open book on the heritage and culture of water, its pages written on its soaring slopes and its countless rivers and streams.

This landscape was initially forged in the unique eremitic tradition that emerged in the 5th century, as hermits sought out secluded, inaccessible spots to commune with nature, their settlements bearing an unmistakable relationship with water. The influence of asceticism continued with the establishment of monastic communities, which laid the foundations for a unique water culture that led to the cultivation of crops on steep terraces and the introduction of the first watermills. The monastic influence can still be seen today in a panoply of churches, including cave sanctuaries, estates, abbeys and monasteries, perched like holy vantage points overlooking the watercourses, in remarkable numbers and diversity. In addition to this, there are the distinctive patterns inherited from traditional settlements. All this well-preserved heritage is testament to the presence and spirit of those communities that transformed rivers and canyons to turn inhospitable and inaccessible places into a means of material and spiritual subsistence. They laid the foundations for a unique landscape that speaks the language of water and, over generations, gave form to a secluded, distinctive territory, shaped by the memory of water and its living presence.

It is a space hemmed in by steep slopes which, despite centuries of isolation, has been the scene of a remarkable feat of human settlement in a rugged and inaccessible territory, where every available metre of land has been adapted to the demands of survival. Living proof of this odyssey is provided by the monumental, centuries-old crop terraces that carpet the slopes of the river canyons with chestnut trees, grapevines and other crops, which have spread from the riverside to the upper reaches of the valley. Further proof is furnished by the enduring presence of highly fragmented landholdings, with over ninety thousand plots in the nominated property, divided according to the unique vernacular land-management system into tiny patches of land – *cavaduras* – adapted to the topography of these steep slopes. These places also bear the stamp of a system of spatial planning that dates back to the early Middle Ages, which still groups local communities into distinct units known as parishes, the boundaries of which are demarcated by watercourses.

The culture of water in these places is revealed through an exceptional water heritage that includes archaeological sites, the unique drainage systems of the *socalcos* (terraces), waterworks from all periods of history, including a significant water industry heritage, and many other vernacular features in the form of consecrated fountains and mines, canals, weirs, crossings and bridges, river routes and other exceptional works associated with water.

In the area of the nominated property there is a remarkable catalogue of water-use heritage features that bear witness to the energy self-sufficiency of each period. These range from traditional watermills from different centuries, which can still be seen throughout the property in exceptional numbers and density, to the mini-power stations or *factories of light* that emerged at the end of the 19th century, to the hydroelectric dams of the mid-20th century. The present-day dams, also associated with the ideal of self-sufficiency since their inception, are exponents of a construction undertaking that was monumental in its day and are outstanding examples of hydraulic engineering from a specific period, featuring a wide range of construction styles and solutions. The associated hydroelectric power plants, of different sizes and scales, continue to provide sustainable energy, underscoring the particular contribution of this site to climate change mitigation.

The distinctive intangible values of this living cultural landscape are discernible in the local water culture, in the traditions of self-sufficient governance, in the time-honoured customs and the beauty of the countless streams and waterfalls, in the dialects, myths and legends, and even in the toponymy, which includes an extraordinary repertoire of hydronyms, many of them found nowhere else. All these elements, together with the distinctive eremitic and monastic practices that set the entire process in motion, underpin the outstanding values and features of this exceptional microcosm of culture and landscape, shaped by water, isolation and self-sufficiency.

In short, it is a cultural waterscape in which we can piece together the history of the wondrous relationship between water, humans and ingenuity, not only in ensuring their survival and wellbeing, but also in harnessing to the full all possible uses of water.



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Attributes and values

The main attributes and values that convey the Outstanding Universal Value of the nominated property are listed below, together with a list of their constituent elements.

Attribute
The spectacular river canyons and valleys sculpted by water that are the exceptional physical features that inform and distinguish the cultural waterscape.

— Outstanding features: The canyons and steeply entrenched valleys of the Miño and Sil rivers that plunge down from the high surrounding plains; the abrupt relief; the deep and spectacular entrenched meanders; the extremely dense and hierarchical drainage system; the innumerable watercourses, springs, streams, brooks, waterfalls and fountains; the extensive and diverse mosaic of humanised vegetation; and the scenic beauty of the landscape.

Attribute
The exceptional, dense and diverse water heritage of the cultural landscape, which includes an extensive catalogue of energy harnessing solutions from the Middle Ages to the mid-20th century, exponents of the mediaeval technological revolution and the birth of hydroelectricity that form part of a representative compendium of the history of waterpower.

— Outstanding features: The hundreds of traditional watermills built since the 11th century, which endured and evolved until the mid-20th century and ensured energy self-sufficiency for the area, including complex water distribution and management systems; the construction of the first mini-power stations marking the emergence of hydroelectricity, following on from the traditional mills, between the end of the 19th century and the beginning of the 20th century; the excellent representation of the various types of hydroelectric dams that illustrate the exploits of hydroelectric engineering in the first half of the 20th century; and the immense repertoire of small-scale waterworks that are scattered throughout the cultural landscape.

Attribute
The enduring legacy of traditional farming systems on the steep slopes of the river canyons of the Ribeira Sacra, grounded in age-old techniques.

— Outstanding features: The terraces or *socalcos* as water-management systems that regulate drainage and the flow of water; the evolving design and inseparable association of the *socalcos* with the watercourses; the breathtaking agricultural terraces on exceptionally steep slopes as epic feats of human settlement.

Attribute
The eremitic and monastic heritage that shaped the distinctive and functional features of the cultural waterscape.

— Outstanding features: Traces left by the monasteries in the development of a water culture in the area, related to the land and watermill *aforamientos* (monastic property rights) throughout history, including the management of river resources, fishing and transport; the hermitages and the considerable number of churches and monasteries that shed light on an essential stage in the evolution of the cultural waterscape; and the distinctive orientations of the monastic landmarks in relation to the watercourses.

Attribute
The unique land-use and land-tenure systems marked by the presence of water.

— Outstanding features: The continued existence of historical forms of occupying the river space and the settlement patterns; the organisation of the territory into parishes, identifying units delimited by watercourses dating back to the 6th century; and the thousands of tiny plots set out by ancestral practices of land and property management adapted to this rugged landscape.

Attribute
The remarkable biocultural capital of a living cultural landscape and the intangible heritage associated with water culture.

— Outstanding features: The survival of traditional knowledge on how to build *socalcos*; the river harvest; the many festivals and traditions associated with rivers and streams; the consecration of fountains, mines and other elements of water heritage; the extraordinary toponymic heritage and the continued use of numerous unique hydronyms; the myths and legends featuring water as the central theme.

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3.1.b. Criteria under which inscription is proposed

Criterion (v)
To be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;

The nominated property bears outstanding testimony to a living cultural waterscape that has evolved over more than 1,500 years, and boasts an extraordinary repertoire of water works, knowledge and uses that have enabled communities to live there.

It is an exceptional example of the evolution of a traditional way of life associated with watercourses that has its roots in local eremitic and monastic traditions, reflecting the constant development of a complex human settlement in the rugged, sheer terrain of river canyons.

The nominated property contains outstanding examples of an epic agriculture that has profoundly shaped the riverside landscape for centuries in the form of terraces or *socalcos* that carpet the slopes of the river canyons, with unique and ingenious transport, channelling and drainage systems, on sharply sloping terrain.

Ribeira Sacra contains unique and remarkably complete examples of hydraulic techniques that were developed for energy self-sufficiency over hundreds of years: the remains of countless old watermills from different periods and with different functions, evidence of the emergence of "white coal" (hydroelectricity) with power stations from the end of the 19th century, and contemporary hydroelectric dams from the mid-20th century. It thus comprises a rich heritage catalogue of works that bear witness to the human adventure of harnessing the power of water, recognised as a clean and sustainable source of energy.

The patterns of occupation and settlement in Ribeira Sacra, which still persist in the distinctive landholding system and in its ancient territorial organisation into parishes, demarcated by watercourses, are a significant example of the human capacity for organisation and adaptation to difficult environmental conditions.

The nominated property attests to the profound interdependence between the cultural and natural heritage associated with the cultural waterscape, which can be clearly identified in intangible elements such as traditions, myths and legends, toponymy and the consecration of the many works associated with the management and use of water.

It is a relatively isolated, fragile and vulnerable cultural landscape, occasionally beset by developments and events in its environment but which, at the same time, has shown a tremendous capacity for adaptation and resilience in these new times.



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3.1.c. Statement of Integrity

The nominated property fulfils the conditions of integrity set out in the Operational Guidelines for the Implementation of the World Heritage Convention. Ribeira Sacra Waterscape contains all the interrelated elements necessary to express the Outstanding Universal Value of the nominated property.

The boundaries of the nominated property have been strategically drawn in terms of integrity. As such, they cover an area of sufficient scale to allow for a full representation of the features and processes that that lend significance to the nominated property, from the spectacular steep river valleys to the sharply sloping terraced hillsides rising from the riverbanks. Moreover, the history of this cultural waterscape and its compositional elements is clearly visible in today's landscape, reflected in particular in an exceptional catalogue of waterworks and water-related heritage features, in the rows of crop terraces (*socalcos*), in the eremitic and monastic landmarks that reflect how the land was settled and that shaped the culture of water, and in the enduring presence of the ancestral micro-plots of land.

The cultural landscape contains more than enough elements to ensure full representation of the values and attributes that convey the significance of the nominated property, both in terms of diversity and density. Of particular note are the many vestiges and waterworks associated with the use of water as a source of energy over the course of time. These structures attest to the time-honoured and enduring management of waterpower to ensure energy self-sufficiency. Each element is a representative fragment of the whole, displaying the best examples of each type of landscape and of the works that illustrate the most important milestones in the centuries-old history of a land powered by water, revealing, step by step, the gradual unfolding of the narrative of the property.

It is important to note the sheer density and quantity of features that convey the overall value of the property. In quantitative terms, 486 watercourses and slopes of up to 85% have been recorded in the area of the nominated property alone. Also within the property, 2,494 ha of *socalcos* have been identified, comprising a large sample of this unique terraced agro-ecosystem, in a landscape divided up into tradi-

tional smallholdings of 96,125 micro-plots, equivalent to an average plot surface area of 394 m^2.

The compositional integrity is also evident in the built heritage, which bears witness to the most important stages of the long evolutionary process of this water-related cultural landscape over more than 1,500 years. Of particular note in this regard are the more than six hundred traditional watermills from different periods, vestiges of the symbiotic relationship of its inhabitants with the watercourses. Given the magnitude of this heritage, however, additional efforts are needed to conserve it. The manifestations associated with the advent of hydroelectric power are also abundant and span a wide spectrum of typologies and modifications, providing the final touches to a continuous and comprehensive account of the power of water in this landscape. The overall picture is rounded off by the 83 well-preserved monasteries from different periods and a multitude of archaeological traces of the hermit presence and of the early occupation of the area.

In short, the cultural landscape has maintained its constituent elements intact, revealing an outstanding symbiotic relationship between its inhabitants and the river courses throughout history, the main features of which are still preserved today. Viewed as a whole, it is a space sculpted by water, where the interaction with a unique water environment is clearly identifiable, including in its settlement patterns, cultural heritage and the different uses of water.

The boundaries of the buffer zone have been established not only to actively contribute to the direct protection of the nominated property, but also to ensure the preservation of the viewsheds and the continuity and integrity of the river landscape of Ribeira Sacra. It is a zone that enriches the cultural heritage related to the nominated property through complementary values and provides a space for manifestations connected to the cultural landscape, including the parishes as an identifying element of the ancestral territorial organisation of local communities. The nominated property is free from major threats and is of sufficient size to demonstrate how multiple systems – agricultural, hydraulic, ecological, territorial, social and spiritual – have interacted and adapted to different situations over time.



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3.1.d. Statement of Authenticity

In accordance with the Operational Guidelines for the Implementation of the World Heritage Convention, the Venice Charter and the Nara Document on Authenticity, the nominated property meets the conditions of authenticity required for inscription on the World Heritage List.

All the components and their constituent elements are credible and genuine demonstrations of the different manifestations and configurations of the waterscapes they represent, and of the architecture, ensembles, waterworks, ethnological elements and, in general, the tangible and intangible heritage associated with them. Their authenticity is evident in the degree to which the qualities pertaining to the attributes conveying Outstanding Universal Value may be clearly identified and understood, particularly through their form, design, functionality, typology, materials, period and location. This is reflected in the features of its landscape components, such as in the functionality and structure of the unique farming systems, in the different types of waterworks from different periods, their function and historical continuity, and in the water-related settlement patterns and plots of land.

The authenticity of the different cultural waterscapes and heritage elements in the nominated property is supported by the cited documentary sources, historical maps and waterworks from different periods, and by religious architecture and settlements that organise and contextualise the cultural landscape. The perceived link between the waterscapes and the works that make up their built water heritage, including the artefacts and movable heritage associated with the management of water and the use of rivers, is shown to be an inseparable bond that reinforces the authenticity of the landscapes and the heritage of the present. The authenticity of the heritage elements is also borne out by the large number of studies, inventories, catalogues and research undertaken on various aspects of the nominated property.

The topographical, geological and hydrological conditions and characteristics of the site are clearly identifiable. Studies of the spatial dimensions of the authenticity of the property have been enhanced by new spatial analysis methods and tools, supported by new cartographic models and spatial databases that have been cross-referenced with historical maps, including land use, vegetation and soil properties.

Similar tools have been used to analyse the authenticity of different manifestations such as *socalcos* (cultivation terraces), the distribution of forest uses and the settlement patterns that have survived over time. In particular, the antiquity and unique water-management functions of the *socalcos* have been confirmed by various surveys and studies, such as the one carried out by CSIC (Spanish National Research Council).

The nominated property features buildings, structures and archaeological remains that credibly and truthfully convey the dimension of Outstanding Universal Value as a site where an exceptional catalogue of waterpower technologies has been developed over the course of history in one and the same context. In the case of the old watermills, the authenticity of these features is unquestionable and is underpinned by an analysis of their construction materials and the design of the different water collection systems, the remnants of the waterworks and historical sources that attest to their use. Similar criteria have been used to identify many other heritage elements associated with water, such as fountains, stepping stones and *pontellas*, *hórreos* and chestnut drying sheds (*sequeiros*). Finally, it should be noted that in the case of working mini-power and hydroelectric power stations, the turbine and pumping systems are not considered heritage elements, since they are constantly changing and undergoing maintenance.

The authenticity of the water-related archaeological, eremitic, monastic and religious heritage is fully endorsed by the enormous number of studies, inventories, excavations and research carried out in the area of the property, including on such notable aspects as the orientation of the churches and monasteries in relation to the watercourses. The only detected aspect that has a bearing on authenticity in terms of site location is the relocation of two churches in the mid-20th century.

Ribeira Sacra has retained a high degree of authenticity as a whole, notably in its water-related heritage, in the farming systems, and in the perdurance of uses and materials, strengthened by the many conservation efforts that today maintain the active social role of this cultural landscape in perpetuating a sustainable economy.

Furthermore, the nominated property is the embodiment of a vibrant, age-old cultural tradition in which genuine knowledge, practices and customs still persist. They are powerful reminders of the character and spirit of an area criss-crossed by endless ribbons of water, where local communities uphold their traditions, illustrating the unbroken sense of culture and identity associated with this territory.

3.1.e. Protection and management requirements

The protection of the nominated property and its various elements is fully safeguarded by the different regional, national and European laws and provisions that address the different realities and features that make up the cultural landscape.

The Ribeira Sacra Waterscape has a robust system of general protection that is sustained by the designation of the entire area as Heritage of Cultural Interest (BIC) in the category of "cultural landscape". Said designation is the pinnacle of the protection system for the nominated property and is fully in line with the essential character of the property as a cultural landscape. It is the highest legal status that current regional and national legislation establishes for the recognition and protection of cultural manifestations and is the highest legal category for the protection and stewardship of cultural heritage properties at regional and national level in Spain. Designating this cultural landscape as a BIC is an innovative approach when compared to other properties with this type of protection, both in Galicia and in the rest of Spain.

The protection of the nominated property is complemented by another set of specific protections that apply to all or part of the territory. Of particular note are the environmental and river resource protections (Natura 2000 Network, Law 5/2006 on the Protection of Rivers and those relating to the Public Water Domain), to which we should add the provisions of the Landscape Protection Law of Galicia, and the land-use classifications set out in the planning instruments.

The nominated property benefits from a Management System that includes a Management Plan and a governance system that are effective and adapted to the characteristics and needs of the cultural landscape, consolidated throughout the nomination process. Both provide for the unified management of all the elements of the property, with a view to the future and sufficient capacity to preserve its Outstanding Universal Value over time and to address potential threats and vulnerabilities. The Ribeira Sacra Waterscape Management Plan is divided into seven programmes that include different actions of vital importance for the planning, development and protection of the property, the landscape and its cultural heritage, with a cross-cutting approach to achieving the proposed strategic objectives. For its part, the governance system ensures that all those involved in one way or another with the nominated property consider themselves to be participants and stakeholders in its management.

To this end, a management structure has been set up for the nominated property under the aegis of the Directorate General of Cultural Heritage of the Xunta de Galicia and coordinated by the Interdepartmental Commission of Ribeira Sacra. The Interdepartmental Commission is made up of representatives of local bodies and agencies, both public and private, covering the broad spectrum of stakeholders involved in the nominated property. Representatives of local bodies and associations include: the Parish Councils and parish communities that make up the cultural landscape and represent the local residents; the Ribeira Sacra Rural Association; the Ribeira Sacra Tourism Consortium; the Regulatory Council of the Designation of Origin; the bishoprics of Lugo and Orense; and NGOs in the fields of cultural heritage, the environment and local development. With regard to representatives of local authorities and public bodies, the Interdepartmental Commission includes the following: local councils; the provincial councils of Lugo and Orense; the Miño-Sil Hydrographic Confederation; and representatives of the other departments of the Xunta de Galicia with competence over aspects relevant to the property, such as the environment, energy, mobility or the rural environment.

The Interdepartmental Commission also has a Standing Committee entrusted with implementing the agreements. The proposed system of governance of the property is complemented by the Scientific Committee, which has an advisory role and will focus its work on all aspects related to the preservation of the property and its attributes.

3.2. Comparative Analysis

Introduction and Methodology

As an introductory reference, it would be useful to put into context the nomination of the Ribeira Sacra Waterscape as a cultural property that could contribute to a more balanced and representative World Heritage List.

Since the Global Strategy was launched by the World Heritage Committee in 1994 with the aim of establishing a representative, balanced and credible World Heritage List, there has been much debate on issues such as the balance between regions or the need for listing "non-classical" properties. This reflection is particularly important when referring to cultural waterscapes, places where water becomes the driving force and has a leading role in the historical production of the landscape and of the cultural heritage that shapes its identity. It is in this field where we see a great imbalance in proportional terms with other typologies or categories of cultural landscapes, despite their importance and the wealth of cultural expressions they contain.

Following the recommendations of the ICOMOS study on the "Global Strategy for a Credible, Representative and Balanced World Heritage List" (ICOMOS, 2004) precisely, in general terms three complementary approaches are considered as a reference for the comparative analysis of the nominated property: a) the typological framework, which corresponds to cultural waterscapes, focusing on inland river areas and systems; b) the thematic framework, which addresses the different elements and expressions of heritage associated with water management; and finally, c) the regional-chronological framework considered as a cross-cutting issue in comparative terms.

The development of the comparative analysis has also taken into account the thematic studies carried out by ICOMOS and other related organisations as a reference, which may be relevant to the values and attributes of the nominated property. Firstly, it should be noted that there are no thematic studies specifically associated with cultural waterscapes. The only thematic studies on cultural landscapes refer to two specific situations with very little relation to the nominated property: Tea Landscapes of Asia (ICOMOS, 2021) and Cultural Landscapes of the Pacific Islands (ICOMOS, 2007).

By contrast, there are several thematic studies on the tangible heritage associated with water management and use that need to be mentioned. On the one hand, there are the thematic studies on "Cultural heritages of water in the Middle East and Maghreb" (ICOMOS, 2017) and "Cultural heritages of water in Eastern and South-eastern Asia" (ICOMOS, 2022) which, although not related to the geographical and cultural frameworks of the nominated property, provide inspiring elements for the development of this analysis. On the other hand, there is the thematic study on "The Water Industry as World Heritage" edited by TICCIH - International Committee for the Conservation of the Industrial Heritage (Douet, 2018). The latter addresses some aspects and cases that are more directly related to the comparative analysis of the industrial heritage of the nominated property. In turn, the intangible and spiritual aspects of the living heritage of water, especially in protected areas, are reflected in several studies carried out by IUCN that will be mentioned throughout the analysis.

Taking into account the characteristics of the nominated property and the aforementioned approaches, a methodological structure has been established to undertake the comparative analysis, the properties to be identified and the aspects to be considered in them. The comparative analysis is thus divided into the following sections:

Typological Framework

This corresponds to cultural waterscapes as a specific sub-typology of cultural landscapes. Given the number and diversity of expressions under this heading, the analysis focuses on cultural landscapes in inland river environments. It therefore focuses on contextualising and establishing the value and level of representativeness of the nominated property in the context of cultural waterscapes and their key components, with a particular focus on living landscapes that have evolved organically, according to the categories set out in the Operational Guidelines for the Implementation of the World Heritage Convention. In general, these are landscapes in which the heritage value is assigned by local communities and which are sustained by a strong link between the population and the territory.

Thematic Framework

The comparative analysis on the expressions of water-related cultural heritage, considered as key elements underpinning the value and features of cultural waterscapes, is inspired by the thematic classification provided in the ICOMOS report "Filling the gaps - an action plan for the future" (2004).

Following this classification, the analysis will address several of the suggested major issues such as:

- (I) Cultural and symbolic associations.
- (II) Expressions of creativity, referring to monuments, groups of buildings and sites;
- (IV) Use of natural resources, including crops and fisheries, management systems and industrial water assets;
- (VI) The development of technologies;

All of this makes it possible to address heritage issues in the comparative analysis such as those associated with hydraulic systems, agricultural uses, testimonies of the uses of water and hydraulic energy for crafts and industry, those related to hydraulic engineering and technologies or the intangible values associated with the management of water and rivers, referring to knowledge, traditions, symbols and beliefs. Furthermore, this involves addressing the different aspects of this cultural heritage, from historical, technological, aesthetic and social/spiritual perspectives.

The extreme diversity of forms of water heritage is worth noting, which is clearly reflected in many categories already recognised by the World Heritage Convention. Man's relationship with water has created legacies that are quite remarkable in their own right, but have also produced a wealth of expressions with much more complex properties.

It is also worth remembering that a relatively large number of properties already inscribed on the World Heritage List contain important hydraulic artefacts that should be further highlighted, although in this comparative analysis we will only mention those properties where this heritage is expressly referenced when it conveys its outstanding universal value or when it appears as a noteworthy feature in the description. This is not surprising since water management and use is a vital element common to all human civilisations, there are no exceptions, and all civilisations have a water culture. Also, underlying the comparative analysis is the assumption that any sustainable development option must nowadays benefit from the cultural heritage associated with water management, with a special focus on living heritage.

Chronological-regional framework

In regional terms, the nominated property is presented as a property preferably assigned to the European sphere, particularly to its Atlantic façade, although it is obligatory to establish comparisons with other regions of the world due its nature. In any case, in geographical terms and where appropriate, the comparative analysis is structured concentrically, taking into account a sequence that develops in an ascending direction from the Iberian Peninsula, to Europe and then to the rest of the world, prioritising the analysis in river areas.

Given that the nominated property corresponds to an organic and evolving cultural landscape, the chronological framework is certainly broad, covering from its origins to the present day, i.e. covering a vast period that starts in the 6th century. In comparative terms, it is only possible to understand the importance and exceptional nature of these cultural landscapes in a permanent evolutionary context that transcends time and different cultures.

It should be made clear that these frameworks are applied in a cross-cutting and differentiated manner when undertaking the comparative analysis and in the selection of the properties to be compared. In this way, the chronological framework is decisive in the thematic comparative analysis, but not in other issues such as the global meanings of the nominated property.

Factors concerning the presentation

The comparative analysis includes a series of observations on the different properties being compared and, finally, a general summary or overall conclusion that helps to justify its representativeness, the criterion of application and thus underpin the Outstanding Universal Value of the nominated property. In addition, the tables at the end of each section show a summary of the properties compared to facilitate their monitoring. They cite properties that are registered in the World Heritage List or on Tentative Lists of States Parties, as well as those sites not nominated or inscribed that are considered relevant to the comparative analysis in relation to the attributes and components of the nominated property. Properties mentioned in the text or tables also indicate the criteria used in the nominations, inscription date if applicable, the country and remarks concerning the similarities or characteristics taken into account.



As Forcadas Fountain © C. Rueda

Typological Framework

This addresses the typology of cultural waterscapes. Given the number and diversity of expressions under this heading, the analysis focuses on cultural landscapes in inland river environments. It therefore focuses on contextualising and establishing the value and level of representativeness of cultural waterscapes and their key components.

In considering the nominated property as a cultural landscape, it is first necessary to place it in its overall comparative context. To date, nearly 200 properties have been included in the World Heritage List as cultural landscapes, a significant proportion of the total of 1,223 properties currently listed. It should be noted that the list of cultural water landscapes recognised as such or equated to this concept is significantly restricted.

Among the properties listed as cultural landscapes, those included in the categories of "intentionally designed and created" landscapes or in the category of "associative cultural landscapes" constitute a minority. The rest fall into the category of "organically evolved landscapes". It is in the latter context that the nominated property is inserted, and more precisely in the subcategory of "living landscape" which retains an active social function in contemporary society, closely linked to the traditional way of life, as opposed to the so-called relict or fossil landscapes.

At this point, in comparative terms the focus of the question is on cultural waterscapes that have evolved organically as living landscapes in river environments. Special attention is given in the comparison to the river environments embedded between mountains and in uplands, in view of the distinctive morphological characteristics of the nominated property characterised by canyons created by deep crevices excavated and intensively inhabited in an extensive Palaeozoic platform or plinth. The summary table of such landscapes inscribed in the World Heritage List, Tentative Lists and other exceptional events not considered, provides an approximate framework of the representativeness of the nominated property.

Alto Douro Wine Region (Portugal) © Fiona Starr / UNESCO



It is evident that the presence of rivers, streams, canals and lakes appear as geographical elements in a multitude of cultural and natural properties, but this does not imply that these areas can be considered cultural waterscapes. Furthermore, it should be noted that river areas are also included in many other cultural properties, natural or mixed, but in this context we will refer to those populated cultural landscapes where water is the predominant or significant element in the shaping of the cultural landscape, both in physical and cultural terms, including its associative values or symbolic meanings.

Comparable properties and sites

Following the aforementioned criteria, a set of potentially comparable sites have been identified, which include properties inscribed in the World Heritage List, properties inscribed on the Tentative Lists and other properties that are equally similar to the concept of cultural waterscapes in river environments, with the dominant presence of watercourses and water bodies as basic elements of their configuration and defining cultural and identity features of the property. The selected sites are shown below with appropriate comments:

Alto Douro Wine Region (Portugal, 2001, (iii)(iv)(v)). The property constitutes a cultural landscape in a mountainous area with a river environment. Over the course of time, multiple rows of terraces have been built for vine cultivation using different techniques, with the technique of the *socalcos* or terraces being highlighted, which began somewhat before the pre-phylloxera period (before 1860). However, the long rows of continuous, regular-shaped terraces, which are one of the fundamental attributes of the property, date from the late 19th and early 20th centuries, when the Douro vineyards were rebuilt after the aforementioned phylloxera attack. It is clear that this cultural landscape has certain similarities with the nominated property, such as the existence of the *socalcos*, although they appeared in this territory at least five centuries later than in Ribeira Sacra, with very different typologies and on less steep slopes. But beyond these similarities, the differences are striking. The first is that it is a strictly vineyard cultural landscape, presented as an exceptional example of the European wine tradition,

very different from the agroecological diversity of Ribeira Sacra. Nor does it have a dense network of streams and tributaries or a long historical tradition that, through its monuments, testifies to the identity and relationships of a cultural landscape associated with water. But in particular, apart from certain channelling, it does not have a diverse hydraulic heritage that bears witness to a long and complex water culture.

Wachau Cultural Landscape (Austria, 2000, (ii)(iv)). Situated on the stretch of the Danube valley between the towns of Melk and Krems, it shows many traces of its continuous organic evolution since ancient times, whether in terms of architecture (monasteries, castles and archaeological sites), urban design (towns and villages) or agricultural use (mainly for the cultivation of vines and apricots). Wachau is a cultural landscape that presents a harmonious interrelationship between water, natural and semi-natural areas, wine terraces, forests and human settlements, brought together by the Danube. Castles and abbeys, such as those in Melk and Göttweig, along with numerous historic settlements and villages, show important material evidence of the history and development of the site over time. Wachau is an excellent example of a river landscape bordered by mountains in which the material evidence of its long historical development is largely preserved. The long historical period of its origin, the presence of monasteries, and the network of terraces, forests and human settlements allow us to conclude a certain formal similarity in general terms with the nominated property. However, the differences are reflected in the morphology of the landscape, where there are no steep river canyons, and in many other key aspects such as the absence of a remarkable hydraulic heritage.

The Loire Valley between Sully-sur-Loire and Chalonnes (France, 2000, (i)(ii)(iv)). This is a cultural landscape along the course of the Loire along 280 km of its course, including the lower and upper reaches of the river. It has been an important main point of communication and trade from Gallo-Roman times until the 19th century, thus favouring the economic development of the valley and its towns. It bears witness to an exchange of human values and a harmonious development of interactions between populations and their river environment over two millennia. This cultural landscape is home to small towns and historic villages, great architectural monuments (castles and chateaux) and farmland (orchards and vineyards), which are the result of the interaction between its inhabitants and the physical environment dominated by the Loire River. In terms of territorial organisation, the combination of rural and urban landscapes stands out. Its features are marked by the vestiges of medieval monasticism, feudal castles and the temporary presence of the royal court. The numerous works uniquely illustrate the ideals of the Renaissance and the Age of Enlightenment in the thinking and design of Western Europe. The hydraulic heritage is basically centred on the channelling works for navigation, the ports or systems of dykes that mark out the river. In relation to the nominated property, some similarities stand out, such as the fact that it is a cultural landscape that unfolds in a river environment, in addition to certain features of its monastic tradition or the links between aesthetics and hydraulics. However, they differ notably in terms of morphology, since the Loire valley is located in a relatively flat area, unlike the steep canyons of the Sil and Miño, and there is no system of terraced occupation on steep slopes. Another major difference lies in the hydraulic developments that mark the landscape: in the Loire Valley, the only recognisable devices are a few windmills



Wachau Cultural Landscape (Auzstria)
© Jakob Hürner / UNESCO



The Loire Valley between Sully-sur-Loire and Chalonnes (France) © Daan Loeg



Lavaux, Vineyard Terraces (Switzerland)
© Régis Colombo / UNESCO

Lavaux, Vineyard Terraces (Switzerland, 2007, (iii)(iv)(v)). It is a distinctly wine-growing cultural landscape associated with an aquatic environment, in a mountainous area on the south-facing slope of the northern shore of Lake Geneva. Narrow, steep terraces, buttressed by stone walls, cover the lower part of the mountain slope between the villages and the lake. Although there is evidence of the cultivation of vines in Lavaux from the time of the Roman Empire, the present-day vineyard terraces date from the 11th century, when the Benedictine and Cistercian monasteries dominated the region. The boundaries of the property include all elements of the vine-growing process and the expanse of the traditional vineyards areas with its system of terraces. Similarities with the nominated property include the long evolution of the landscape over almost a thousand years, the existence of crop terraces, as well as the presence of the monastic orders in its original configuration. However, in this case it is a landscape defined exclusively by vines, unlike the diversity there is in the nominated property, it is not an enclosed landscape as it overlooks a lake and, furthermore, there are no notable traces of hydraulic uses, works or devices that contribute to defining the identity of the cultural landscape.

Upper Middle Rhine Valley (Germany, 2002, (ii)(iv)(v)). Located in the narrowest part of the Rhine that crosses the slate mountains connecting to a wide flood plain, the listed property is defined as an organic cultural landscape whose character is determined as much by its geomorphological and geological setting as by human interventions. This cultural landscape is home to castles, historic towns and numerous vineyards and has been one of the most important transport routes in Europe, facilitating cultural exchange between the Mediterranean region and the north for two thousand years. In spite of some apparent similarities with the nominated property, such as being a relatively enclosed valley defined by a river course or its long evolutionary process, the differences are manifest. In geomorphological terms, this valley is very different from the deep crevices excavated on an extensive Palaeozoic platform that define the nominated property, with historically inhabited and intervened areas on the edges and in the lower areas of the valleys, with a dispersed settlement typology without significant populated urban centres. On the other hand, the imprint of hydraulic heritage in this landscape is basically limited to its functional elements as a historical river transport route.

Madriu-Perafita-Claror Valley (Andorra, 2004, (v)). The cultural landscape of the Madriu-Perafita-Claror Valley is a microcosm that is highly representative of the way in which man has exploited the resources of the highlands in the Pyrenees mountain range over the millennia. It is a valley of glacial origin with spectacular landscapes of steep slopes and glaciers with vast meadows and steep wooded valleys. It is home to numerous small lakes, rivers, springs and wetlands that make up a series of scenic areas of great beauty and importance, including thirty lakes of glacial origin and the Madriu river (mother of the river), which gives its name to the valley, as well as its most important tributary, the Perafita river. It also has a variety of human habitats - in particular, summer pastoral settlements - as well as terraced crops, stone paths and traces of iron smelting. The last notable human intervention in the valley was the work of the hydroelectric company FHASA, in the 1930s, to build the reservoirs and collectors that supply water to the Engolasters dam, which at the time was a very advanced engineering project for the period (1947). Evidently there are no clear similarities in terms of geomorphology, environment, land management and settlement with the nominated property, although the coincidence of terraces and the presence of hydro-electric systems are noteworthy.

Outside the geographical and regional framework corresponding to the nominated property, some of the most important manifestations usually associated with cultural waterscapes should be highlighted due to their significance. These are some of the emblematic terraced landscapes linked to rice growing on the Asian continent. Although not strictly comparable in cultural, agronomic and formal terms, they represent excellent examples of the water culture associated with river

systems in steep areas. They are also outstanding examples of evolving and living cultural landscapes, as is the nominated property.

Cultural Landscape of Honghe Hani Rice Terraces (China, 2013, (iii)(v)). The cultural landscape is marked by spectacular terraces cascading down the slopes of the imposing Ailao Mountains to the banks of the Hong River. Here, the Hani people have developed a complex system of canals to bring water from the forested mountain peaks to the terraces. The resilient land management system of the rice terraces demonstrates an extraordinary harmony between people and their environment, both visually and ecologically, based on exceptional, enduring social and religious structures.

Rice Terraces of the Philippine Cordilleras (Philippines, 1995, (iii)(iv)(v)). This site bears witness to the efforts of the Ifugao people who have been building terraces to grow rice on the mountains for 2000 years, which are perfectly adapted to the curves of the terrain. The Ifugao group of terraces is formed by stone or mud walls and carefully looking after the natural contours of the hills and mountains to form terraced floodplain fields, along with developing intricate irrigation and water harvesting systems from ridge streams. It is worth recalling that in 2010, the Ifugao Ambangal hydroelectric power plant, the product of international action in favour of the sustainable development of local communities, was commissioned in this area and was included as a case of best practices in UNESCO's RENFORUS project.

There are also other cultural water landscapes recognised as such, with certain formal similarities in relation to the nominated property, such as the very different case of the *Kinderdijk-Elshout Mill Network (Netherlands, 1997, (i)(ii)(iv))*, or the more culturally distant *Shushtar Historical Hydraulic System (Iran, 2009, (i)(ii)(v))*. Given that the focus in these examples is on hydraulic elements and infrastructure, they are discussed in more detail in the following part of the comparative analysis dedicated to the thematic framework.

Surprisingly, in European indicative lists there are very few cases of cultural landscapes in river environments with water as one of their protagonists, with the cases of Serbia and Latvia standing out. *The cultural landscape of Bač and its surroundings (Serbia, 2019, (ii)(iii)(v))* is testimony to a multidimensional cultural and historical heritage dispersed in a specific border territory on the left bank of the River Danube. This territory is characterised by its many watercourses, including the Danube and its left tributary, the River Mostonga. The Bač fortress stands out as a true "water city", designed as a defence system adapted to flood zones, unique among the fortifications on the left bank of the Danube. The monastic presence was also an important historical factor in this enclave. In the case of Latvia we find the *Meanders of the Upper Daugava (2011, (v)(viii)(x))*, nominated as a mixed property, whose cultural dimension is underpinned by its sacredness and ritual character. The differences of this sites with the nominated property are substantial, since to begin with we are dealing with territories made up of large plains crossed by river courses or meanders, with little relation or similarity to the agricultural uses, settlement patterns and hydraulic heritage of the nominated property.

On the World Heritage List there are also some cultural landscapes in river canyons with a distant similarity to the nominated property, where the scenic and aesthetic setting may be comparable, although their prominence lies in the presence of archaeological rock sites. This would be the case for the *Zuojiang Huashan Rock Art Cultural Landscape (China, 2016, (iii)(vi))* , which contains numerous rock art sites illustrating the life and rituals of the Luoyue people, who live along the Zuojiang River and spread over a territory of steep outcrops and river canyons. The affinity lies in the presence of cave paintings in river canyons with staging and associative elements reminiscent of the Ribeira Sacra with its petroglyphs, prehistoric settlements and vestiges of hermit cave settlements. With the prominence of rock art, other properties on the Tentative Lists include the *Mahasthan Cultural Landscape and the Karatoya River (Bangladesh, 2023)* located in a flat meandering area. Along the same lines, other cases of inscribed properties, such as *Writing-on-Stone / Áísínai'pi (Canada, 2019)*, may also be cited. These properties are only weakly related to the nominated property and are

Zuojiang Huashan Rock Art Cultural Landscape (China) © Yan Zaoxin / UNESCO



not populated, although they have similarities such as their configuration as a cultural rock landscape embedded in river canyons.

Apart from the properties inscribed or those included in the indicative lists, there are many cases considered as cultural landscapes in river environments that have been identified as such since the consolidation of this idea as a landscape category, both in local development initiatives and in the scientific literature. The cases of river cultural landscapes identified on the Vistula (Brda and Drwęca) and in Scotland, or those closer to the characteristics of the nominated property such as the Tara river canyon (tributary of the Danube) in Montenegro or the famous Gorges du Verdon in the Alps of Provence in France are well known. Transactional initiatives also emerge, such as the various academic cooperation projects aimed at identifying cultural landscapes in mountain river valleys and upland areas, such as those developed between Norway and Poland. All of them bring to the surface the recognition of the great importance of this type of landscapes, hitherto insufficiently taken into account. Beyond European level, we also find paradigmatic examples of non-listed properties such as the Colca Valley Cultural Landscape, an Andean agricultural landscape with more than ten thousand hectares of impressive terraces.

Given the characteristics of the nominated property, other properties that are sometimes associated with cultural waterscapes are not considered comparable. This is the case of artificial extensions of water as a landscape component of a monument or monumental ensemble, such as the Taj Mahal ponds (India), Fontainebleau or the canals and fountains of the gardens in Versailles (France), the Villa d'Este in Tivoli (Italy), the Summer Palace in Beijing (China) or Angkor (Cambodia). Urban waterscapes are also not included in the comparison for obvious reasons.

Finally, there are other categories of properties that include the consideration of being cultural landscapes associated with water in their formulation. In the first group are those cultural landscapes whose raison d'être is based on the management of water scarcity and which are therefore diametrically opposed to what the

Table 1 - PROPERTIES CONSIDERED IN COMPARATIVE ANALYSIS

TYPOLOGICAL FRAMEWORK – CULTURAL WATERSCAPES

Name	Country	World Heritage	Year	Criteria	Remarks
Alto Douro Wine Region	Portugal	Listed	2001	(iii)(iv)(v)	Vineyard landscape with significant differences to the nomination.
Wachau Cultural Landscape	Austria	Listed	2000	(ii)(iv)	Landscape bordered by mountains with no remarkable hydraulic heritage.
The Loire Valley between Sully-sur-Loire and Chalonnes	France	Listed	2000	(i)(ii)(iv)	Flat river landscape with important monumental heritage and aesthetic values.
Lavaux, Vineyard Terraces	Switzerland	Listed	2007	(iii)(iv)(v)	Vineyard landscape with significant differences to the nomination.
Upper Middle Rhine Valley	Germany	Listed	2002	(ii)(iv)(v)	A river landscape, surrounded by vineyards and its importance as a transport route.
Madriu-Perafita-Claror Valley	Andorra	Listed	2004	(v)	Valley of glacial origin with little human transformation of the territory.
Cultural Landscape of Honghe Hani Rice Terraces	China	Listed	2013	(iii)(v)	Monoculture rice landscape with significant differences to the nomination.
Rice Terraces of the Philippine Cordilleras	Philippines	Listed	1995	(iii)(iv)(v)	Monoculture rice landscape with significant differences to the nomination.
Zuojiang Huashan Rock Art Cultural Landscape	China	Listed	2016	(iii)(vi)	The main attributes are manifested in rock art.
Cultural landscape of Bač and its surroundings	Serbia	Tentative list	2019	(ii)(iii)(v)	Extensive river plains without significant water heritage.
Meanders of the Upper Daugava	Letonia	Tentative List	2011	(v)(viii)(x)	Sacralised river meanders without significant hydraulic heritage.
Tara river canyon	Montenegro	Not listed			Typological similarity
Verdon Gorge	France	Not listed			Typological similarity
Colca Valley Cultural Landscape	Peru	Not listed			Typological similarity and spectacular crop terraces over the river.

nominated property represents, even if they present some common elements. Representative examples of this category would be the *Cultural Landscape of the Serra de Tramuntana (Spain, 2011, (ii)(iv)(v))*, a landscape formed by terraced crops and unique interconnected water distribution mechanisms including watermills, or the cultural landscape formed by the *Aflajs, irrigation systems of Oman (2006, (v))*, representative of a form of land occupation and water management in desert environments. A second group of non-comparable cultural waterscapes is that formed by the properties inscribed in the Netherlands and Canada associated with the polders, as they are river landscapes located on coastal wetlands reclaimed from the sea. However, due to the very characteristics of the nominated property, a third group of cultural waterscapes generated by large hydraulic works is considered to be the object of comparison, and is dealt with in the following section on thematic framework. They include examples such as the *Canal du Midi (France, 1996, (i)(ii)(iv)(vi))* and the *Grand Canal (China, 2014, (i)(iii)(iv)(vi))*.

Thematic Framework

This addresses the theme of works associated with the varied cultural heritage of water that has emerged over centuries and its level of representativeness on the World Heritage List. The analysis is established on the basis of the different categories into which these expressions can be subdivided and which are related to the nominated property, always considering river areas:

a) The use of water to supply energy, which, in turn, are divided into two main groups. The first refers to the great diversity of watermills and hydraulic artefacts that have appeared throughout history as devices that transform the kinetic energy of water into mechanical energy for multiple uses such as milling, irrigation, pumping, fulling and blacksmithing. The second focuses on the heritage associated with hydroelectric power, which has its origins in the final decades of the 19th century with the appearance of the electric generator, which allowed it to be connected to hydraulic systems, thus referring to manifestations of industrial heritage.

b) Complex hydraulic systems showing processes of evolution of hydraulic technologies or a great diversity of works associated with water culture from all periods, especially in the chronological space of the nominated property, including manifestations of industrial heritage.

d) Unique agricultural systems associated with river landscapes. References to such cases have already been addressed in the previous section on the typological framework, where terraced crop systems are highlighted as elements of cultural waterscapes in river environments.

c) The Living Heritage of Water. This includes the intangible heritage associated with water in such spaces, including traditional management, uses and customs, rites and traditions.

The analysis therefore focuses on contextualising and establishing the value and level of representativeness of the hydraulic heritage and the expressions associated with the cultures and management of water in river environments and in relation to the nominated property. Table 2 at the end of this section provides the list of properties and sites compared in this section by category together with the relevant summary observations.

It should be noted that when comparing hydraulic works, systems and devices contained in World Heritage sites or tentative lists, only those manifestations are mentioned which are highlights in the description or which appear as listed attributes of each property, conveying characteristic features of the property or of the OUV itself.

Comparable properties

Water energy heritage

Historic water mills

In order to assess the importance of these devices in comparative terms, such as those scattered in substantial number and variety in the nominated property, it is first of all necessary to place them in a European and general context, assessing the extent of this exceptional cultural and technological phenomenon.

Watermills have existed in river landscapes since at least the 3rd century BC. The process of their dissemination, associated with the progress of civilisations, took place first in China and the Mediterranean basin, and then in other parts of Europe and the rest of the continents. The construction of mills in Europe was a progressive process that spread from east to west from the 7th to the 12th century, adapting the various hydraulic typologies to the circumstances of each area (Brown *et al*., 2018). These devices were an essential part of the medieval technological revolution, the importance of which is still not sufficiently recognised. In fact, the old mills were the basis of all food, craft and industrial production until the 19th century.

Some authors estimate, according to evidence, that there were more than half a million watermills in Europe, from their appearance until their heyday at the beginning of the 19th century, which reaffirms the extraordinary importance and the enormous potential heritage value of these vestiges of the past. Their decline was marked at the end of the 19th century by the emergence of other power sources such as the steam engine and, later, hydroelectricity.



Image of one of the surviving waterwheels from the mills that powered the New Lanark factories. © Wkimedia Commons

The records and inventories made by country and at different times are quite eloquent when considering the extent of their presence. At the end of the 17th century, France had more than 95,000 watermills (Reynolds, 1983). In Norway, as in the nominated property, it was the monasteries that introduced watermill technology in the 13th century and, according to a rough estimate, there were about 30,000 watermills by 1830 (Tvedt, 1997). In England, estimates range from 25,000 to 30,000 by 1850 (McGuigan, 1978) and 55,000 in the United States in 1840 (Hunter, 1979). In Germany, 58,000 mills were in operation in 1882 (Müller, 1899). In Poland, almost 10,500 watermills were inventoried at the end of the 18th century (Fajer, 2018). Finally, it should be noted that Pascual Madoz, in his famous *Diccionario geográfico-estadístico-histórico de España y sus posesiones de Ultramar,* referred to 22,000 watermills, hydraulic sawmills and fulling mills listed, among which are many of those existing in the nominated property. In these circumstances it is not surprising that in those times the watermill came to be referred to as the "mother of machines" (Rivals, 2000) and, in this context, the traditional watermills present in the nominated property are representative of a long, exceptional technological and cultural tradition.

On the other side of the world, the figures are also spectacular. In Japan, 56% of total power generation came from hydraulic wheels in 1886 (Minami, 1982) and as a paradigmatic example it is sufficient to point out that in the Himalayan region several authors put the number of devices at 200,000, of which around 60,000 were concentrated in the Hindu state of Uttarakhand, where it is estimated that more than half may be in operation today.

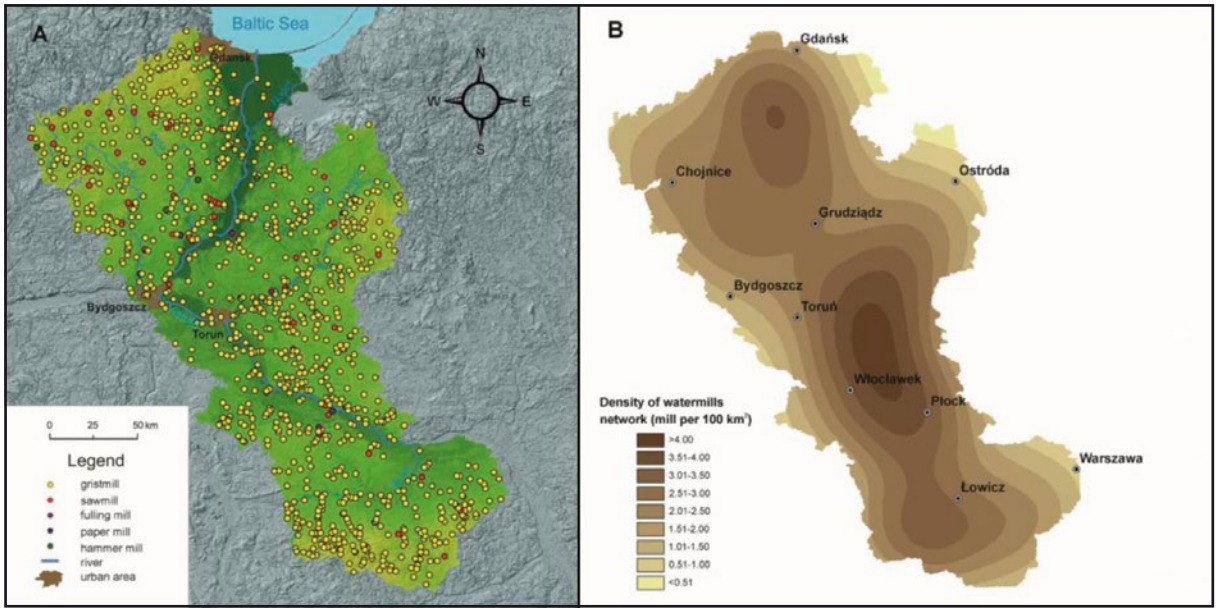
The above data contrasts with the fact that no extensive groups of traditional mills and their associated infrastructure and landscapes are registered in the World Heritage List. The inscriptions that consider watermills as attributes in Europe refer basically to sites related to the beginnings and processes of the industrial revolution in the United Kingdom, more specifically to the textile industry, all inscribed in the same year. In any case, it should also be noted that there is a group of properties in which solitary old watermills stand out as significant or distinctive elements.

New Lanark (United Kingdom, 2001, (ii)(iv)(vi)). This is an industrial settlement developed thanks to the mechanical power of a series of water mills built in the 18th century. It was the site where the utopian philanthropist Robert Owen established a model industrial community in the early 19th century. This industrial village was founded in 1785 and the cotton mills, powered by hydraulic wheels,



Distribution of historic 19th century watermills recorded in the Scottish Highlands. © University of Glasgow

Concentration analysis of old watermills in the final stretch of the Vistula in Poland. © Dariusz Brykała





Site of Saltaire (UK) a model textile industry powered by watermills. © Bruce Rollinson



Remains of the waterworks of the former Cromford factories at the site of Derwent Valley Mills. © Wkimedia Commons

were in operation from 1786 to 1968. At the beginning of the 19th century, the group of buildings was one of the largest industrial groups in the world. The differences with the nominated property, apart from the existence of the water mills, are very significant, as it is a concentrated complex designed for a specific industry, as opposed to the great diversity of typologies, chronologies and mill uses that the nominated property contains, adapted to a rural environment. However, it is worth noting some similarities, such as being a site of the transition to hydroelectricity, when the Bonnington hydroelectric power station, fed by the River Clyde, was opened in 1927 as part of the Lanark hydroelectric scheme. It is also interesting to note that, in 1990, some of the original hydraulic wheels were replaced by modern turbines.

Saltaire (United Kingdom, 2001, (ii)(iv)). Situated in West Yorkshire, Saltaire was a water-powered textile industrial settlement built in the second half of the 19th century, and has survived intact and in good condition. Like the previous case, Saltaire is also an outstanding example of mid-19th century philanthropic paternalism, with a profound influence on industrial social design and urban planning in the UK. However, the background is somewhat different. As the place name suggests, Shipley had a long history as sheep grazing land, so wool was plentiful and the River Aire was a source of water available to power water mills. The first three fulling mills were built between 1500 and 1559. Subsequently, a much larger one was built in the 1740s, bringing production to a larger scale. The industrial era put an end to this traditional water-powered cottage industry, coinciding with the construction of the Providence Mill in 1876, one of the first steam-powered mills. The differences with the nominated property are also significant, as it is a population centre specialised in the textile industry. Moreover, it should be noted that there are practically no traces of the original hydraulic devices. However, in this case we can point out that it is a site with a long milling tradition, although with beginnings much later than the nominated property.

Derwent Valley Mills (United Kingdom, 2001, (ii)(iv)). Located in central England, the Derwent Valley is home to a number of cotton spinning mills dating back to the 18th and 19th centuries and its industrial landscape is of great historical and technological interest. The modern textile industry originated in the Cromford factories, where Richard Arkwright's inventions were first applied to production on a mass scale, albeit under quasi-slave labour conditions. Cromford Mill was the first modern water-powered mill, when Arkwright had a five-storey mill erected, modelled on a nearby silk mill built in 1721. Apart from the watermills, there are very few parallels with the nominated property, as it is a manufacturing centre developed from 1771 onwards, where few traces of the original watermills remain. It is worth noting that today, the still existing Arkwright Society has set itself the goal of reducing its carbon footprint and bringing hydropower back to the heart of Cromford Mills. The initiative is based on the suggestive idea that the industrial revolution started here using renewable hydropower, so this project will return the original source of renewable energy to the site, as it was 250 years ago. General-

ly speaking, this is a principle that also involves the strategic vision of the nominated property.

In any case, it is worth mentioning that the values that motivated the inscription of the three sites mentioned above, and unlike the nominated property, were not based on the heritage of watermills as such, but on other social, economic aspects and more specifically those associated with the history of the Industrial Revolution.

With the exception of the *Shushtar Historical Hydraulic System (Iran, 2009, (i)(ii)(v))*, which is addressed for its specificity in a later section, there are no other properties on the World Heritage List where significant groups of watermills and their associated hydraulic systems are considered as relevant values, with the exception of two very unique sites, also outside Europe. The first would be the case of the mills and hydraulic systems associated with the *Jesuit Block and Estancias of Córdoba (Argentina, 2000, (ii)(iv))*, which include mills that are clearly related to the nominated property due to the same provenance and technological and cultural substratum, although their remains are practically erased. The second case to be reported is that of the *City of Potosí (Bolivia, 1987, (ii)(iv)(vi))*. In the 16th century, Potosí was considered the largest industrial complex in the world. The industrial infrastructure comprised 22 lagoons or reservoirs, from which a forced flow of water produced the hydraulic energy to power 140 mills to grind the silver ore. The ground ore was amalgamated with mercury in earthenware furnaces, moulded into bars, stamped with the mark of the Royal Mint and taken to Spain. These mills were the best examples of the vertical axis mills of the Viceroyalty of Peru. The vertical axis mills were similar in design to many of those still preserved in the nominated property.

It could also be argued that there is some similarity with the cultural landscape of the *Kinderdijk-Elshout Windmill Network (Netherlands, 1997, (i)(ii)(iv))*, but in this case the connection is minimal, being a collection of windmills, not water-powered, in a coastal setting.

As far as the indicative lists are concerned, there are some interesting cases in comparative terms, although they all refer equally to groups of mills engaged in specialised industrial activities. At European level, the group of mills included in *The natural and architectural ensemble of Stolac (Bosnia Herzegovina, 2007, (ii)(iii)(iv)(v)(vi)(vii))* is considered a mixed property . Of particular note at this site is the group of mills and stamping presses along the course of the Bregava River, with their associated bridges and buildings. These mills are known to have appeared in the 17th century, although most of the 180 that have been documented date from the 19th century. A small number of them are still



Engraving of a vertical axis mills characteristic of the Viceroyalty of Peru, which was used in Potosí. © Wkimedia Commons



View of one of the watermills on the banks of the river Bregava in The natural and architectural ensemble of Stolac. © Stolac Museum

preserved. In this case there are certain parallels with the nominated property in terms of number and density of mills, as well as with some of the mill typologies identified.

To the Stolac case can be added the serialised transactional nomination of the *European Paper Mills (from the era of hand-made paper) (Italy, Czech Republic, Germany, Spain, Poland, 2024, (ii)(iii)(iv))* which testify to the hand-made paper industry from the 16th century onwards. An activity that shaped a specific type of building on riverbeds, determined by the need for water as the main source of production and energy. The third notable case is the *First Colonial Sugar Mills in America (Dominican Republic, 2018, (ii)(iv))* , which date back to the 16th century and were located in the vicinity of river courses. These mills were equipped with hydraulic mills for the processing of sugar, the design of which was influenced by the adaptations generated in the Canary Islands and Madeira, with a clear relationship with the milling typologies of the nominated property.

At this point, the existence of watermills and other hydraulic devices such as waterwheels are worth mentioning, which are isolated and emblematic elements of some sites inscribed on the World Heritage List. Sometimes they are elements that have been removed from their original position or from the original building that housed the mill or the millpond. The following cases stand out:

Historic Centre of Cordoba (Spain, 1984, (i)(ii)(iii)(iv)) houses the Albolafia mill. This is a water mill with a large horizontal-axis wheel located on the right bank of the Guadalquivir, between the Roman bridge and the Alcázar de los Reyes Cristianos in the city of Cordoba. During the 14th and 15th centuries this site had five grinding wheels.

The serial property called *Heritage of Mercury. Almadén and Idrija (Slovenia-Spain, 2012, (ii)(iv))* testifies to the intercontinental trade in mercury, which generated important exchanges between Europe and America for centuries. Idrija is situated in a deep river basin surrounded by hills and is the site of the Kamst water wheel, the largest surviving wooden wheel of its kind in Europe.

The property inscribed *Studley Royal Park including the Ruins of Fountains Abbey (UK, 1986, (i)(iv))* contains a solitary watermill. It is the only surviving 12th century Cistercian grain mill in the UK and the oldest surviving building within the site. It is striking to note the parallels with the nominated property in relation to the role played by the monastic orders in the introduction of these mills to many parts of Europe.

In the *Old Town of Lijiang (China, 1997, (ii)(iv)(v))*, two large antique waterwheels are located at its main entrance, one of the emblems of the town. In this case, these are not mills as such, but waterwheels for irrigation ditches, which were widely used throughout China from the Sui and Tang dynasties onwards.

As indicated at the beginning of this section, it is logical to think that given the enormous number of mills that proliferated in Europe between the 12th century and the end of the 19th century, there is a vast milling heritage not identified on the World Heritage List or on the Tentative Lists. Among the many examples, and simply as a reference to show this gap, the unique fortified watermills of the Gironde should be highlighted. Built between the 14th and 15th centuries in Entre-Deux-Mers and on the left bank of the Garonne, the fortified watermills of the Gironde are remarkable due to their architectural features. They were made from carved stone, with very thick walls, and were equipped with defensive elements to protect them from attacks by regular troops, but also from the hordes of brigands who ravaged the territory during the Hundred Years' War. These mills, as well as the land and water, belonged to the lords and the monastic and military religious orders, practising a kind of serfdom that required the peasants to grind their grain in these stately mills. In this case, the role of the monastic orders in the promotion and ownership of water mills is also highlighted, with a certain parallelism with the nominated property.



View of the two large waterwheels at the entrance to the Old Town of Lijiang. © Yunnan Tours

Hydroelectricity and World Heritage

From the end of the 19th century and the first decades of the 20th century, a new paradigm shift took place with the emergence of hydroelectricity. First with the reconversion of some traditional mills into hydroelectric plants, converting the water wheels into turbines, and then with the generalisation of these mini-hydroelectric plants throughout Europe, although this was a worldwide phenomenon. As is evident in the significant fact that in 1925, 33,500 small hydropower plants with capacities between 0.75 and 75 kW were authorised in Germany (Kur and Wolf, 1985). The magnitude of these interventions has been highlighted by the magnificent database from the RESTOR Hydro project of EREF (European Renewable Energies Federation), which reports the existence of nearly 50,000 abandoned or potentially active sites of small hydropower plants that have existed and still exist in Europe.

At the same time as the emergence of these facilities, countless large dams and reservoirs for hydroelectric production have been built since the beginning of the 20th century. Apart from their disputed impacts, it should be noted that in both cases we are dealing with a set of works that have provided and continue to provide renewable and sustainable energy sources, without greenhouse gas emissions, something truly remarkable if we consider the great weight of the hydroelectric contribution in the global energy mix, especially in a context of climate emergency.

In comparative terms, it must be acknowledged that there are extremely few properties that include dams or hydroelectric power plants as attributes on the World Heritage List, despite the striking fact that there are 45,000 large dams in the world for multiple uses and from different eras, including power generation (Douet, 2018). Not to mention that in many cases they have been exceptional examples of engineering and creative endeavour of human genius. Similar reasoning can be applied to mini-hydropower plants, whose historical role and contribution to the development and well-being of many small communities is under-recognised.

In this context, the comparable properties under this heading are listed below:

Rjukan-Notodden Industrial Heritage Site (Norway, 2015, (ii) (iv)). The property is set amidst a spectacular landscape of mountains, waterfalls and river valleys, where the natural topography allowed for large-scale hydroelectricity generation. The technological site comprises of dams, tunnels, water pipelines, power stations, pioneer power lines, industrial area, workers' villages, railway lines and river transport infrastructure. It was created by the Norsk Hydro company to produce chemical fertilisers to meet the growing demand for agricultural fertilisers in Western countries at the beginning of the 20th century and is an example of a new global industry at the beginning of the 20th century. It is presented as an exceptional combination of industrial heritage linked to the landscape, testifying to an important exchange in terms of technological development at the beginning of the century. As an infrastructure it differs significantly from the hydroelectric dams present in the nominated property, as the water catchment system is located in the upper reaches of the Måna River and is transported by large pressure pipes, creating a different type of hydroelectric landscape.

Water Management System of Augsburg (Germany, 2019, (ii) (iv)). This represents a sustainable water management system that evolved in successive phases through the application of an innova-



View of one of the hydroelectric power plants at the Rjukan-Notodden Industrial Heritage Site (Norway). © Visit Norway



Aerial view of the Hochablass hydroelectric complex in Ausburg (Germany). © Stadtwerke Augsburg



Image of the hydraulic system of the Villa Gregoriana in Tivoli (Italy). © Wikimedia Commons

tive hydraulic engineering concept, demonstrating an innovative use of water resources over more than seven centuries. It includes elements such as the network of canals and reservoirs, built between the 15th and 17th centuries, to expressions such as the Hochablass complex, which represented the modern state-of-the-art hydraulic engineering of the late 19th and early 20th century with the emergence of hydroelectric power stations, which still supply sustainable energy today.

In addition to the Hochablass complex, the site houses the infrastructure of nine small hydroelectric power stations built at the beginning of the 20th century, the precedent of which was the Stadtbach power station that supplied the cotton mill, then the largest spinning mill in the German Empire. The differences with the nominated property are notable, starting with its consideration as an urban landscape and the late start of hydraulic exploitation for energy purposes. But despite this character, another coincidental feature is that the nominated property recognises as attributes the set of small elements associated with the management and enjoyment of water (fountains, small hydraulic solutions, passes and canals).

Other significant cases can be found in the indicative lists to complement the panorama. The first is *The Aniene valley and Villa Gregoriana in Tivoli (Italy, 2006, (i)(ii)(iii)(iv))*, whose artisan and industrial development was based on water as a driving force, with the first hydroelectric power station being inaugurated in Acquoria in 1886, making the town of Tivoli the first in Italy to have electric lighting. Another case is the *Levadas of Madeira Island (Portugal, 2017, (i)(iii)(iv)(v))*, a unique multifunctional system, which transports water for human consumption, agricultural purposes and electricity production, with several mini-hydroelectric plants located along its course. Finally, *Cat Tien National Park (Vietnam, (vii)(ix)(x))* is nominated as a natural property and is a particularly important site in socio-economic terms for the region, as its ecosystem is actively involved in flood control and at the same time integrates the Tri An hydropower plant, which is also a source of water supply for Dong Nai province, Ho Chi Minh City and Ba Ria - Vung Tau province.

Hydraulic systems

The category of hydraulic systems is identified among the various forms of water heritage. These refer to the hydraulic development of the territory, as a hydraulic-technological complex, and in many cases as cultural landscapes. Some of these systems have already been addressed in the previous sections as cultural waterscapes, discussing their possible parallels or differences with the nominated property, such as the Dujiangyan irrigation system, the rice paddies of the Philippines, the *aflaj* irrigation systems of Oman, and in the Netherlands, Beemster Polder, where the Kinderdijk-Elshout mills are located.

However, taking into account the dimension of the nominated property understood as a multilayer technological hydraulic complex, some of the few listed properties are identified below, which, in addition to those mentioned above, are expressions that can be assimilated to this category, either due to the diversity of elements or their functional composition.

Maulbronn Monastery Complex (Germany, 1993, (ii) (iv)). The Cistercian abbey of Maulbronn is the most complete and best preserved medieval monastic complex north of the Alps. It represents the survival of a Cistercian monastic establishment, in particular through the survival of its extensive water management system. It has an elaborate system of reservoirs, irrigation canals and drains located along the river valley and in the surrounding hills, which are used for water supply, fish farming and farm irrigation. Despite changes in the 19th century, with the draining of several reservoirs and also the enlargement of the town of Maulbronn, the water management system remains one of the most extensive and best preserved Cistercian water systems. It is worth noting that, in this case, the Cistercian idea of water and territory is also embodied in the Ribeira Sacra in a very particular way.

Upper Harz Water Management System (Germany, 1992, (i)(ii)(iii)(iv)). The mining water management system in the Upper Harz, a river valley south of the Rammelsberg mines and the town

of Gosla, has accompanied ore mining for the production of non-ferrous metals for almost 800 years. It was started in the Middle Ages by Cistercian monks and developed massively from the end of the 16th century until the 19th century. It offers a very complex but perfectly coherent system of artificial ponds, small canals, tunnels and underground drains. In particular, it enabled the development of water power, which was used in the mine and in metallurgical processes, making it a representative site of mining innovation in the western world. Huge hydraulic wheels, such as the one in Roeder's tunnel, helped the miners to extract the ore from the depths of the mountain and power the pumps. Three of these devices can still be seen in their original locations. Today, water from the Oder Teich river still flows through this area and drives the turbines installed in the two recent underground hydroelectric power plants. Apart from the complexity of the system, this site bears very little relation to the nominated property. However, attention should be drawn to the fact that in the case of the nominated property some parts of the hydropower sites are underground, also housing turbines.

Beyond Europe, the paradigmatic case of the *Shushtar Historical Hydraulic System (Iran, 2009, (i)(ii)(v))* must be mentioned. The property, which is a masterpiece of human creative ingenuity, includes a wide variety of elements such as bridges, dams, canals, buildings and watermills. Shushtar shows a complete repertoire of hydraulic techniques developed continuously since the 5th century BC to enable the occupation of semi-desert lands. The diversion of a river from through mountain outcrops generated large civil engineering structures that made multiple uses of water possible: urban water supply, irrigation, fish farming, water power and transport systems. The site includes a number of notable buildings such as the castle of Salâsel, the control centre of the entire hydraulic system, Kolâh-Farangi tower, which measures the water level, and a whole series of dams, bridges, ponds and watermills, testifying to a technical culture that dates back eighteen centuries. Also worthy of mention is the presence of a hydroelectric power station completed in 1940. It should also be highlighted that, apart from the obvious cultural, technological, typological and environmental gaps, this site has many conceptual similarities with the nominated property. It is located in a space embedded between canyons, it has an extreme diversity and density of hydraulic elements, in particular multiple watermills. And the most interesting thing is that, as in the nominated property, the evolutionary sequence of the processes and the hydraulic heritage can be read here.

Finally, it should be noted that there is a particular group of sites that is methodologically often associated with this category of properties. These are the canals and, in particular, the great canals such as the Canal du Midi (France) or the Grand Canal (China). This point has already given rise to a standard thematic approach (Annex to the Operational Guidelines for the Implementation of the World Heritage Convention). However, despite being considered as complex systems and landscapes created by large hydraulic works, sometimes cultural landscapes, no similarities can be sought with the nominated property, beyond the fact that the reservoirs of the nominated property also generate specific landscapes as hydraulic systems.



Maulbronn Monastery Complex (Germany). © Natasha Lazic



Partial view of the historic hydraulic system at Shushtar (Iran). © UNESCO

Table 2 - PROPERTIES CONSIDERED IN COMPARATIVE ANALYSIS

Name	Country	World Heritage	Year	Criteria	Remarks
THEMATIC FRAMEWORK – OLD WATERMILLS					
New Lanark	United Kingdom	Listed	2001	(ii)(iv)(vi)	Industrial settlement created around 18th century watermills.
Saltaire	United Kingdom	Listed	2001	(ii)(iv)	Industrial textile settlement with a long tradition of waterlills.
Derwent Valley Mills	United Kingdom	Listed	2001	(ii)(iv)	17th century textile industrial centre powered by waterwheels.
Jesuit Block and Estancias of Córdoba	Argentina	Listed	2000	(ii)(iv)	Remains of mills and hydraulic systems with some similarity to the nominated property.
City of Potosí	Bolivia	Listed	1987	(ii)(iv)(vi)	Similar horizontal wheel mills used in the mining industry.
The natural and architectural ensemble of Stolac	Bosnia and Herzegovina	Tentative list	2007	(ii)(iii)(iv)(v) (vi)(vii)	Set of water mills specialised in paper production
European Paper Mills (from the era of hand-made paper)	Italy, Czechia, Germany, Spain, Poland	Tentative list	2024	(ii)(iii)(iv)	Six examples of an industry dependent on watermills.
First Colonial Sugar Mills in America	Dominican Republic	Tentative list	2018	(ii)(iv)	Remains of 16th century watermills with similar typologies.
THEMATIC FRAMEWORK – ISOLATED WATERMILLS					
Historic Centre of Cordoba	Spain	Listed	1984	(i)(ii)(iii)(iv)	Remnant of a mill with a large water wheel.
Heritage of Mercury. Almadén and Idrija	Slovenia, Spain	Listed	2012	(ii)(iv)	Large hydraulic mining mill at Idrija.
Studley Royal Park including the Ruins of Fountains Abbey	United Kingdom	Listed	1986	(i)(iv)	The only surviving 12th century Cistercian grain mill in the UK.
Old Town of Lijiang	China	Listed	2012	(ii)(iv)(v)	Two large water wheels have been preserved.
THEMATIC FRAMEWORK– HYDROPOWER SITES					
Rjukan-Notodden Industrial Heritage Site	Norway	Listed	2015	(ii)(iv)	Pioneering hydroelectric power station from the early 20th century.
Water Management System of Augsburg	Germany	Listed	2019	(ii)(iv)	Water management system including hydroelectric power plants and mini-hydroelectric power plants.
The Aniene valley and Villa Gregoriana in Tivoli	Italy	Tentative list	2006	(i)(ii)(iii)(iv)	Historical tradition of mills and pioneering hydroelectric power plant in Italy.
Levadas of Madeira Island	Portugal	Tentative list	2017	(i)(iii)(iv)(v)	Multifunctional system including hydroelectric power plants.
HYDRAULIC SYSTEMS					
Maulbronn Monastery Complex	Germany	Listed	1993	(ii)(iv)	Cistercian water management system.
Upper Harz Water Management System	Germany	Listed	1992	(i)(ii)(iii)(iv)	Hydraulic management system for a mining area.
Shushtar Historical Hydraulic System	Iran	Listed	2009	(i)(ii)(v)	Complex hydraulic system with conceptual similarities to the nominated property.

General Conclusions

As the comparative analysis has shown, the category of cultural waterscape is not as widely represented as it might at first appear, even less so if we limit the analysis to watercourses. A wide variety of properties inscribed on the World Heritage List that are associated with cultural landscapes are logically excluded from this consideration. Such properties include those that feature artificial expanses of water as landscape components of a monument or monumental ensemble, urban waterscapes, or cultural landscapes associated with a specific large-scale water project, such as large navigable canals, which, on the whole, do not bear any remarkable similarities to the nominated property.

Some of the compared sites are cultural landscapes in wide, open river valleys, with large meandering rivers over extensive floodplains, in which the geomorphological and hydrological features, settlement and land-use systems differ markedly from the deep clefts and river canyons of the nominated property. The sites identified in the analysis as being located on steep riverside slopes and uplands are primarily wine-growing landscapes, in contrast to the high agro-ecological diversity of the Ribeira Sacra waterscape. These comparable sites also differ from the system of territorial occupation that distinguishes the nominated property, with its multitude of small settlements that stretch from the edges of the valleys to the riverbanks. Ribeira Sacra also stands apart for its unique micro-plots with deep historical roots, criss-crossed by the myriad streams that make the nominated property so remarkable; moreover, in no other site is the dense drainage network and profusion of watercourses so exuberant as to underpin its status as a cultural waterscape beyond the relationship with the main river or waterway.

Given that one of the constituent elements of the nominated property is its terraced farming system, it should be noted that such practices are already sufficiently represented on the World Heritage List. However, neither in the properties compared in the analysis, nor in other inscribed sites where these practices are found, are there similar structures that predominantly function as hydraulic devices designed to control surface run-off and organise drainage in water-saturated landscapes, in addition to creating soil and curbing soil



A cova © R. Vilanova



Xabrega © R. Vilanova

erosion. This water functionality is only found in the inscribed properties in the distant rice paddies of Southeast Asia, where natural, cultural, functional and structural aspects differ markedly from the manifestations of the nominated property.

With the exception of one case of a sparsely populated high-mountain cultural waterscape, a substantial part of the related inscribed cultural landscapes are located along important historical trade and communication routes, which has had, at times, a significant impact on the character of their cultural expressions and settlement systems, as well as on the associated water heritage. These cases bear no resemblance to Ribeira Sacra, where seclusion and a deeply rural character have been a constant since ancient times, exemplifying one of the most unique processes of adaptive evolution in a rugged and difficult territory, inhabited and fashioned by communities in relative isolation.

It should be noted that the monastic legacy is also apparent in several of the sites compared in this landscape category, with in some cases similar implications for territory and water management. However, Ribeira Sacra is distinguished by the eremitic traditions that influenced the way the territory was shaped from the outset, the imprint of which was kept intact for centuries by the desire for isolation.

It is true that the analysis mentions other inscribed sites that may be associated with cultural waterscapes with similar physical features, but these are relict landscapes, not living or lived landscapes as in our case, where the predominant values consist of rock art manifestations, or settlements and vestiges of ancient or lost civilisations.

Finally, it should be noted that, as mentioned in the analysis, there are many cultural waterscapes recognised as such in gorges and river canyons located in upland and mountain areas, both in Europe and in the rest of the world, which are not inscribed on the World Heritage List or registered on the Tentative Lists. They all bear witness to the human adventure of coexisting with water in extreme situations and in places difficult to inhabit, creating unique expressions in each case. Ribeira Sacra is thus a representation of these little recognised cultural waterscapes.

An inherent and defining component of cultural waterscapes is expressed through the cultural heritage associated with the management and use of water. This legacy is what determines, in most cases, the unique features of a cultural waterscape. They are the tangible expression of water culture in the territory.

In this context, ancient watermills represent a major chapter in the human adventure of domesticating water and are the expression of a great technological revolution that lasted in Europe from the Middle Ages to the end of the 19th century. The information provided in the foregoing sections of the comparative analysis attests to the fact that their vestiges form a vast and exceptional heritage that has so far been insufficiently valued in the context of the World Heritage Convention.

This is illustrated by the fact that the inscriptions in Europe referring to historic watermills correspond only to a limited number of sites related to the beginnings and processes of the industrial revolution in the United Kingdom, while the watermills themselves are not considered in said inscriptions as outstanding attributes of the properties. In the other inscribed properties analysed, there are isolated watermills from different periods, associated with monumental ensembles, sometimes out of place and with little or no relevance to the OUV of the inscribed property. The only inscribed property where watermills and waterworks from different periods are identified as values is the Shushtar Historical Hydraulic System in Iran, although it features typologies and water-management systems in cultural contexts quite different from the nominated property. Among the few cases on the Tentative Lists, the ensemble of historic mills and stamping mills along the course of the Bregava River in Bosnia-Herzegovina is notable for its similarities. The number of mills is certainly considerable, and the site is nominated as a mixed property, but their function relates exclusively to an ancient tradition of industrial craftsmanship.

Continuing with the comparative review of the harnessing of waterpower, we note that few inscribed properties attest to the importance of the emergence of hydroelectricity as a global phenomenon that has had an impact on the future of many isolated communities, on decentralised urban sup-

ply and on the development of historical industries. What we have in mind here is the large number of waterworks on different scales that have provided and, in many cases, continue to provide renewable and sustainable sources of energy, free from greenhouse gas emissions, something truly worthy of note if we consider the substantial contribution of hydropower to the global energy mix, especially in a context of climate change.

Just as with the old watermills, they are under-represented, despite their extraordinary number, technological diversity and importance. The inscribed properties that are associated with hydroelectricity consist of two cases in Norway and Germany, featuring ensembles with a specific industrial purpose or elements that form part of urban water-management systems. Meanwhile, the Tentative Lists include the interesting case in Tivoli, testifying to the emergence of hydroelectricity, and the Levadas on the island of Madeira, a multifunctional hydraulic system that includes the production of electricity.

What sets the nominated property apart from these last two contexts is that it is a unique case in which the works associated with the use of water for energy are representative expressions of these technologies over a long period of time, from the watermills of the Middle Ages and their development up to the 19th century, to the first mini-hydroelectric power stations of the early 20th century and finally the great waterfalls of the middle of the last century. It thus contains an exceptional compendium of hydraulic technologies and the different uses that have been continuously developed over the centuries. But what is also exceptional in comparative terms is the sheer density, number and diversity of these structures in the nominated property.

As for hydraulic systems relating to the development of the water-management systems of territories under the category of technological hydraulic ensembles, in addition to the aforementioned case of Iran, the World Heritage List includes two sites in Germany, with which the nominated property shares some similarities due to the shared monastic heritage and the river environments in which they are located. In these cases, the complexes are clearly distinct from Ribeira Sacra, as they relate to mining and water supply uses. In this context, it should be noted that one of the aspects that also distinguish the nominated property is that it includes the myriad works and expressions associated with the presence and management of water which, in addition to the mills, take the form of consecrated fountains, small bridges, mines, pools, canals, weirs and other unique elements such as *hórreos* and drying sheds, considered as a whole as elements of a complex water-management system and living expressions of the local water culture. All associated with a rich intangible heritage related to water in its different manifestations.

From the above, we may conclude that the nominated property fills one of the gaps in the World Heritage List, as recommended in the report "The World Heritage List: Filling the Gaps – an Action Plan for the Future" (ICOMOS, 2004). It would make an outstanding contribution to the representativeness of the list by adding a genuine cultural waterscape in a unique river environment. It is, in short, an exceptional landscape associated with such a vital element of human existence and culture as water that, at the same time, offers valid experiences to draw inspiration for the challenges of the future.

Belesar © D. Estevez



3.3. Draft Statement of Outstanding Universal Value

a) Brief Synthesis

The nominated property showcases an outstanding cultural waterscape, popularly known as Ribeira Sacra, which is bounded by spectacular river canyons at the confluence of the Sil and Miño rivers (Galicia, Spain), located on the Atlantic facade of humid Iberia.

It is an epic landscape, shaped by the culture and heritage of water and fed by the countless streams, brooks and rivers that define its identity, beauty, composition and unique settlement patterns. It traces the origins and evolution of a territory sculpted by water and is paradigmatic of a culture of water: one can clearly discern the marks of its construction over more than 1,500 years of continuous occupation, dating back to the ancient eremitic and monastic traditions that are deeply rooted in the region.

The culture of water in these places is revealed through an exceptional water heritage that includes archaeological sites, waterworks from all periods of history, including a significant water industry heritage, the unique drainage systems of the *socalcos* (terraces), and many other vernacular features in the form of consecrated fountains and mines, canals, weirs, crossings and bridges, river routes and other exceptional works associated with water.

The power of water is a central theme in the narrative of the cultural landscape. In the area of the nominated property there is a remarkable catalogue of water-use heritage features that bear constant witness to the energy self-sufficiency of each period. These range from traditional watermills from different centuries, which can still be seen throughout the property in exceptional numbers and density, to the mini-power stations or *factories of light* that emerged at the end of the 19th century, to the hydroelectric dams of the mid-20th century.

In short, Ribeira Sacra is a cultural landscape in which we can piece together the history of the wondrous relationship between water, humans and ingenuity, not only in ensuring their survival and wellbeing, but also in harnessing to the full all possible uses of water.

b) Justification for Criteria

Criteria (v)

be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;

The nominated property bears exceptional testimony to a living cultural waterscape that has evolved organically over more than 1,500 years, and boasts an extraordinary repertoire of water works, knowledge and uses that have enabled communities to live there.

It is a complex landscape in which traditional forms of settlement persist alongside unique micro-plots that provide meaningful evidence of the ability of humans to organise and adapt to difficult environmental conditions. The property also features outstanding expressions of an agriculture practised on rugged terrain that has profoundly shaped the riverside landscape over the centuries in the form of *socalcos* (terraces) that carpet the slopes of the river canyons.

Ribeira Sacra contains a unique and remarkably complete example of hydraulic techniques that were developed for energy self-sufficiency over hundreds of years: countless traditional mills from different periods and with different functions, evidence of the emergence of white coal with hydroelectric power stations from the end of the 19th century, and contemporary dams from the mid-20th century. It thus comprises a rich heritage catalogue of works that bear witness to the human adventure of harnessing the power of water, recognised as a clean and sustainable source of energy.

The nominated property attests to the profound interdependence between the cultural and natural heritage associated with the cultural waterscape, which can be clearly identified in intangible elements such as traditions, myths and legends, toponymy and the consecration of the many works associated with the management and use of water.

c) Statement of Integrity

The boundaries of the component parts of the property have been strategically drawn in terms of integrity. As such, they cover an area of sufficient scale to allow for a full representation of the features and processes that lend significance to the nominated property, from the spectacular steep river valleys to the sharply sloping terraced hillsides rising from the riverbanks. Moreover, the history of this cultural waterscape and its compositional elements is clearly visible in the landscape, reflected in particular in an exceptional catalogue of waterworks and water-related heritage features, in the rows of crop terraces (*socalcos*), in the eremitic and monastic landmarks that reflect how the land was settled and that shaped the culture of water, and in the enduring presence of the ancestral micro-plots of land.

The cultural landscape contains more than enough elements to fully represent the values and attributes that convey the significance of the nominated property, both in terms of diversity and density: the many watercourses, the great profusion of water-related works, the rich historical heritage, and the diverse riverside crops and uses.

The boundaries of the buffer zone have been established not only to actively contribute to the direct protection of the nominated property, but also to ensure the preservation of the viewsheds and the continuity and compositional integrity of the river landscape of Ribeira Sacra.

The nominated property is free from major threats and is of sufficient size to demonstrate how multiple systems – agricultural, hydraulic, ecological, territorial, social and spiritual – have interacted and adapted to different situations over time.



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d) Statement of authenticity

All the components and their constituent elements are credible and genuine demonstrations of the different manifestations and configurations of the waterscapes they represent, and of the architecture, ensembles, waterworks, ethnological elements and, in general, the tangible and intangible heritage associated with them. Their authenticity is evident in the degree to which the qualities pertaining to the attributes conveying Outstanding Universal Value may be clearly identified and understood, particularly through their form, design, functionality, typology, materials, period and location. This is reflected in the specific features of its components, such as in the recognisable typologies of the waterworks and water-management systems of different periods, in the water-related layout of settlements and plots, or in the functionality and structure of the unique farming systems.

The authenticity of the different cultural waterscapes and heritage elements within the nominated property is confirmed by the cited documentary sources and historical maps. The authenticity of the heritage elements is also attested by the large number of studies, inventories, catalogues and research undertaken on various aspects of the nominated property.

Furthermore, the nominated property is the embodiment of a vibrant, age-old cultural tradition in which genuine knowledge, practices and customs still persist. They are powerful reminders of the character and spirit of an area crisscrossed by endless ribbons of water, where local communities uphold their traditions, illustrating the unbroken sense of culture and identity associated with this place.

Ribeira Sacra has retained a high degree of authenticity as a whole, notably in its water-related heritage, in the farming systems, and in the perdurance of uses and materials, strengthened by the many conservation efforts that today maintain the active social role of this cultural landscape in perpetuating a sustainable economy.

e) Requirements for protection and management

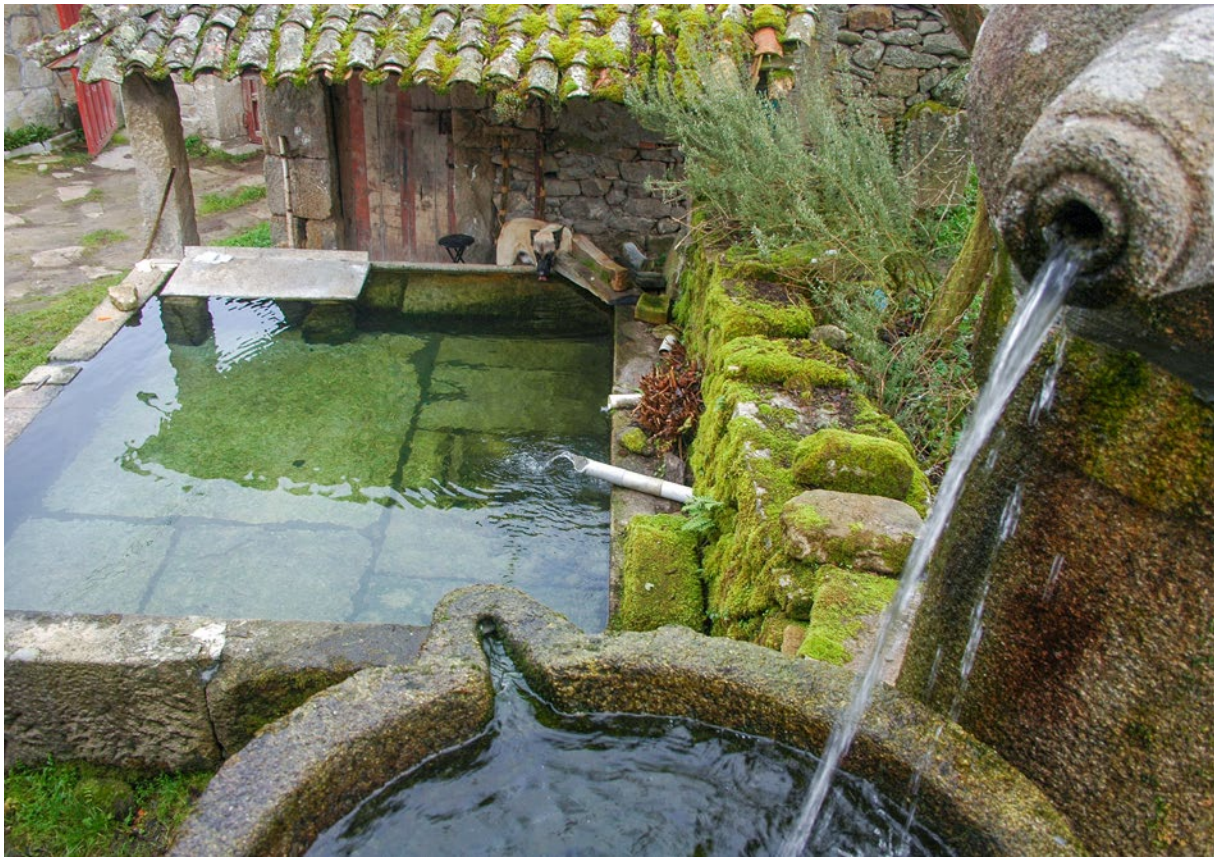
The protection of the nominated property and its various components is fully safeguarded by the different regional, national and European laws and provisions that address the different realities and features that make up the cultural landscape.

The Ribeira Sacra Waterscape has a robust system of general protection that is primarily sustained by the designation of the entire area as Heritage of Cultural Interest (BIC) in the category of "cultural landscape". This is the highest legal status that current regional and national legislation establishes for the recognition and protection of cultural manifestations and is the highest legal category for the protection and stewardship of cultural heritage assets at regional and national level in Spain.

The nominated property benefits from a Management System that includes a Management Plan and a governance system that are effective and adapted to the characteristics and needs of the cultural landscape. Both provide for the unified management of all the elements of the property, with a view to the future and sufficient capacity to preserve its Outstanding Universal Value over time and to address potential threats and vulnerabilities. The Management Plan is divided into seven programmes that include different actions of vital importance for the planning, development and protection of the property, the landscape and its cultural heritage, with a cross-cutting approach to achieving the proposed strategic objectives. For its part, the governance system ensures that all those involved in one way or another with the nominated property consider themselves to be participants and stakeholders in its management.



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Ribeira Sacra
Waterscape

4. State of conservation and factors affecting the nominated property

4.a. Present state of conservation

4.b. Factors affecting the nominated property

4.b (i) Development pressures and management response

4.b (ii) Environmental pressures, natural disasters and risk preparedness

4.b (iii) Responsible visitation, other human activities and sustainable use

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4.a Present state of conservation

The Ribeira Sacra cultural waterscape, as a landscape ensemble, and each of the attributes that convey its Outstanding Universal Value are, in general, in a good state of conservation.

The positive conservation balance of the nominated property at the present time responds to the state and characteristics of an organic, evolving and living landscape, which accumulates sediments of secular human action in an outstanding landscape historically built around water, over deep valleys that the water itself has modelled. The good conservation of its main features and attributes, and the exceptional conditions of panoramic visibility and proximity, with hardly any disturbances, make it possible to understand and enjoy this exceptional waterscape between canyons and valleys, entrenched, but open at the same time to an evolutionary human intervention, of very long diachrony, which has been coherent in each historical and technological moment with the potential of water as an environment and as a resource.

Excellent conservation of a relief of river canyons and valleys

As a landscape sculpted by water on the scale of geological time, the first thing to note is the excellent state of conservation of the natural forms of the relief, of its rocky base and of the steep slopes of the entrenched valleys and authentic canyons in some stretches. The very good state of conservation can be seen both on the steepest, almost vertical slopes of the chanelled sections, and on those others which, even with steep or moderate slopes, generally on less resistant rocks, have been carefully terraced by the peasant communities.

In the Sil canyons on granite, the evolution of the walls is mainly due to natural geomorphological processes. The massiveness and resistance of the rock, the presence of natural vegetation in the crevices that scratch the escarpments, and scarce human intervention, reduced to a few old, small quarries that are now inactive, generate configurations of great natural strength and remarkable formal purity. In this lithic context of the canyons, covered by a discontinuous vegetation that allows the rocky outcrops to emerge, the monumental Santo Estevo cut, an expression of the contemporary nature of the waterscape, already aged by the patina of time, is integrated into the nature and stony image of the cultural landscape.

When the slope is slightly reduced and some soil is generated, the steep slopes that embrace the Miño and the Sil, especially the more shady north-facing ones, are covered today, as in the past, with a dense forest cover, traditionally humanised and exploited by the peasant communities. This wooded and cultural tapestry, of outstanding floral, ecological and productive interest, stabilises the slopes, protecting them from erosion and enabling the conservation of the underlying natural geoforms

Part of the slightly less steep slopes of the Miño and Sil, preferably those facing south, also show a good state of conservation of their topographic profiles and an effective control of potential soil erosion. Here, the geomorphological and edaphic conservation of the slopes is the result of a very long, wise human intervention of terracing for agricultural crops. The staggering of thousands of narrow terraces that shape the slopes makes them productive through careful construction that simultaneously creates soil and arranges surface run-off, but without disturbing either the direction or the degree of the steep slopes. The *socalcos*, finely adapted to the topography and the characteristics of the surface lithology, thus enhance the landscape, which never loses the vertiginous nature of these valleys.

Another interesting aspect that explains the good physical and edaphic state of conservation of the slopes, particularly the terraced slopes, is the care with which, in general, important pieces of natural wooded vegetation have been preserved. These wooded or mixed patches of forest and scrubland control erosion and prevent possible landslides both in the upper part of the terraced slopes, close to the *bocarribeiras*, and in the middle and lower areas where the slope is steeper, as shown in the two attached pictures

Conservation of the dense hydrographic network: good environmental and ecological status of waters in accordance with European and Spanish regulations

The very dense hydrographic network that sculpts and brings together the landscape is also in a good state of conservation, which cannot be separated from what has already been said about the excellent conservation of the abrupt relief of the Ribeira Sacra. Although the whole network functions as a system, it is useful to refer, on the one hand, to the state of the more than 400 small brooks that flow down the slopes and, on the other hand, to the conservation of the rivers Miño and Sil and the lower course of their most important tributaries within the nominated property.

The hundreds of small rivers and streams that flow into the larger watercourses, many of them of a temporary nature, especially the shorter ones, have their sources in the *bocarribeiras* or on the adjacent high plains. They are highly natural, with hardly any hydromorphological alterations, even those that have traditionally been used for energy production. They have abundant natural rapids and cascades, given the





Above, excellent state of conservation of the steepest geoforms of the Sil canyon excavated in granite; on the left, downstream, Santo Estevo cut between rocky escarpments of quartzite and granite. Below, panoramic view from the Cividade viewpoint showing the difference between the steepest and rockiest wall of the Sil Canyon in O Corisco and the slightly less steep slope, covered by the splendid chestnut grove of Santa Cristina de Parada de Sil. © R. Mata







Above, wooded forest cover conserved on the upper part of the terraced slope of the Miño in Belesar, which helps to stabilise the steep slope and counteract erosion; below, in Souto Chao, at the foot of the *socalcos*, natural vegetation covers and protects the steepest part of the slope. © R. Mata

steep gradient they have to overcome, and, although there are no precise measurements for most of them, their waters are of high quality, as they flow through traditional forestry or agricultural areas, with low presence of polluting uses. Their high-quality water supply is therefore very important for the good environmental status of the larger rivers.

The Miño and the Sil in a large part of their course within Ribeira Sacra and the lower course of their main tributaries up to the confluence constitute bodies of water modified by the presence of the reservoirs referred to in the description of the hydroelectric industrial heritage. In accordance with Directive 2000/60/EC establishing a framework for Community action in the field of water policy (Water Framework Directive, WFD) and its transposition into Spanish water legislation and hydrological planning, these dammed river waters must, in accordance with current legislation, aspire to what is known as "good ecological potential".

Royal Decree 817/2015, of 11 September, which establishes the renewed and stricter criteria for monitoring and assessment of the state of surface waters and environmental quality standards, indicates that the aforementioned "good ecological potential" occurs when the indicators of biological quality elements show slight differences with respect to the values corresponding to nearby free waters and if the chemical and physicochemical indicators are within the ranges of values that guarantee the functioning of the ecosystem and the achievement of the values of the aforementioned biological indicators. In addition, in order to achieve good ecological potential, concentrations of specific pollutants must meet the relevant environmental quality standards.

The aforementioned regulation assigns the assessment and monitoring of the environmental status of water bodies, both natural and modified, to the Hydrographic Confederations and to hydrological planning. The 2022-2027 Hydrological Plan for the Miño-Sil Demarcation and its Strategic Environmental Study, in accordance with the provisions of the aforementioned Decree, include precise information and maps of the environmental state of the main watercourses and bodies of water in the Demarcation.

According to this information, the entire modified course of the rivers Miño and Sil and their tributaries in Ribeira Sacra has an "overall good" or "superior" status for some indicators. In terms of biological indicators according to phytoplankton, the standardised EQR (Ecological Quality Ratio) for the biological quality element complies with the limits established for good ecological potential in RD 817/2015. In 2020 the EQR of the Miño in Santo Estevo was valued at 0.913 (out of 1.0) and 0.77 in the case of the Miño in Belesar, clearly positive indices. The physicochemical

indicators (presence of organic matter; oxygenation conditions; salinity-conductivity; nutrient conditions; state of acidification and priority and preferential substances) also present good or very good conditions, complying with the limits established by European and national regulations, and by the Hydrological Plan itself (Ministry for Ecological Transition and the Demographic Challenge. *Hydrological Plan for the 2022-2027 cycle, Annex 2.1., pp. 63 et seq. and Strategic Environmental Study of the Hydrological Plan for the 2022-2027 cycle of the Miño-Sil Geographical Demarcation, pp. 115 et seq.)*

Of the remaining rivers and small natural watercourses for which the Hydrological Plan provides information, the environmental state is very good (Búbal, Souto Varela, Fondós, Aguianza, Mao and Lor) or good (Cabe and Edo) and only moderate in the case of the river Asma.

The conservation of vegetation cover

A large part of this waterscape of canyons and deep valleys is covered by a diverse plant mosaic of agricultural, herbaceous and forest species and communities, adapted to the variety of geo-ecological situations of the territory and to a long human intervention that has shaped a plant landscape with a high cultural content. The good general state of conservation of the non-agricultural plant cover is due both to the characteristics and territorial layout of the mosaic and to the floral and ecological diversity it contains.

The *soutos* or chestnut forests, whether private or collective, which are essential to the historical peasant exploitation and very present in the landscape, still conserve their structure and distribution in good condition, even though they have lost part of their traditional use. The same is true of the oak woodlands - *carballedas* (oak groves) (*Quercus robur*) and *reboleiras* (*Q. pirenaica*) -, of the holm oak and cork oak enclaves, exponents of the Mediterranean bioclimatic influence in the eastern sector of the Ribeira, and of the large areas of scrubland, also important in traditional farming, which mainly cover part of the steepest slopes and certain flat lands of the *bocarribeiras*, together with agricultural areas and meadows.

In general, there has been a positive evolution of the native broadleaf and scrub woodland cover, with the frequent appearance of mixed formations, both within small private farms and in communal woodlands. This progression of the natural vegetation, typical of a living and evolving waterscape, raised in deep valleys, responds to the environmental recovery of certain marginal lands, ploughed and put under cultivation at the time of the greatest contemporary demographic pressure at the end of the 19th century and the first half of the 20th century. The forest plantations



Well-preserved riverside vegetation in the lower reaches of the river Edo, with its distinct winter and spring physiognomy, which introduces perceptual and aesthetic diversity into the landscape, as well as biological diversity. © R. Mata

carried out within the property and its buffer zone, on private and collective estates and mostly with the local pine (*Pinus pinaster*), have in many cases reached their maturity and possibilities for timber exploitation, within the multifunctional economic strategy of certain peasant farms and some common forests.

The presence of non-native species within the perimeter of the property is very rare. The Ribeira Sacra Landscape Action Plan, approved by Order of the Galician Government on 15 July 2021, in accordance with the Autonomous Community's Landscape Protection Law, has environmental and landscape restoration as one of its axes, with a programme for the eradication of species with an impact on landscape values, revegetation with native species and the recovery of characteristic polyculture or fruit trees.

Special mention should be made of the riverside vegetation associated with the river courses, particularly the free courses, due to its ecological interest and close relationship with water and its good state of conservation. Next to them are preserved groves of alders and willows, with the presence of the *Salix salviifolia* species, an endemism from the west of the





Above, a small but valuable grove of alder and ash trees next to the abundant Fondós stream, a tributary of the Miño, bordering the parishes of Erbedeiro and Nogueira de Miño; below, the most wooded section of the Sil Canyon, a Special Area of Conservation of the Natura 2000 Network within the nominated property. © R. Mata

Iberian Peninsula, which are often joined by maples, oaks and chestnut trees.

The very good state of conservation of these groves is linked to the quality of the circulating water and also to the respect of the *socalco* farmers for this riverside vegetation along the streams that run down the steep slopes. These are linear habitats of very high ecological value, which at the same time contribute to preserving the natural drainage network and regulating run-off on terraced slopes. Most of these natural plant formations are the basis of habitats of Community interest according to Directive 92/43/EEC. Its high floral, ecological, cultural and landscape interest justifies the fact that the area with the greatest presence of these plant communities in Ribeira Sacra has been included as a Special Area of Conservation, with the name Cañón del Sil, in the Galician Natura 2000 Network, which has its corresponding conservation and environmental regulation regime.

Persistence and functionality of the parish structure and the historic village system

The good condition of the features and attributes mentioned so far is inseparable, within the cultural landscape as a holistic and integrating fact, from the adequate conservation of certain values and attributes referring to the historical patterns of territorial organisation and agricultural use in this exceptional waterscape of canyons and deep valleys.

In this sense, what is striking is the secular stability and the validity, in a social and economic context obviously different from the original one, of the structure and territorial limits of the parishes and of the inherited settlement system.

The rural parishes, territorial entities with a monastic function in origin, but capable of integrating a variable number of entities of dispersed population and providing them with cohesion and community identity bonds, are still alive in the Ribeira Sacra area. The transcendence of the rural parish as the basic articulating cell of the territory in Galicia, below that of municipality, is reflected in its Statute of Autonomy - basic regional law - which recognises “rural parishes as local entities of Galicia”, with specific legal personality.

The dense parish structure of Ribeira Sacra, already fully consolidated in the 11th century, as we have seen in section 2.a, has a special significance in the waterscape of the Ribeira. The 76 parish districts of the property and their buffer zone, and the villages they encompass, are closely linked to water. The river courses, both the major rivers and many streams in the deep valleys of the Ribeira, were the boundaries of the parish territories, clearly adapted to the hydrographic segmentation of the slopes. All of them retain their function today. This is in addition to the good state of ecological conservation of the watercourses and the

maintenance of their function as boundaries and articulators of the parish spaces for more than a millennium.

As noted above, the rural parish structure integrates and cohesively links a large number of villages and smaller places within the nominated property and its buffer zone. This historical settlement system, of very small peasant settlements, with organic forms, many of them originally linked to the medieval manors of the monastic territories, conserves two of its major features and attributes in the cultural landscape of Ribeira Sacra in very good condition.

The first of these is the very structure of the settlement system and its configuration. The passing of the centuries and socio-demographic changes have not erased the constellation of small villages, which have retained their small size, their traditional relationship with the surrounding land through a dense network of paths and their clean boundaries with the agricultural environment, with hardly any new buildings scattered over the fields. The good conservation of the inherited settlement structure is contributed to by urban planning, which, as stated in section 5b, defines, in accordance with the Galician Land Law of 2016, the category of "traditional or common rural settlements". For these settlements, the planning establishes precise and very small limits, which in Ribeira Sacra barely represent 1.6% of the total surface area, where new buildings can be accommodated, when justified. These must be identified with "typological, aesthetic and constructive characteristics and materials, colours and finishes in keeping with the rural landscape and the traditional buildings of the settlement" (art. 24.7).

In addition to its morphological and territorial structure, the village system also preserves another of the most characteristic features and values of the cultural landscape in very good condition: the location patterns of the settlements in relation to the forms of relief modelled by the water. As in the past, many villages are located overlooking the *bocarribeiras*, with a full view and control of the river and the river canyon. Others maintain their location on steep slopes or terraced hills between streams and the main river (the Miño or the Sil) with remarkable purity, whose courses border and delimit the agricultural lands of the village; some, finally, retain their historic locations on large steps or terraces modelled by the successive enclaves of the river network, particularly in the eastern part of the nominated property.

The preservation of the traditional system of terraces on a historical smallholding plot system

The cultural landscape of Ribeira Sacra has kept alive the traces of a centuries-old smallholding plot system, currently made up of more than 90,000 plots of land with an average surface area of barely 400m^2 . This figure roughly corresponds to an ancestral unit of measurement, the *cavadura*, equivalent to the area that a person was able to cultivate in a day using traditional methods.

The plot system of very small farms is the legacy and testimony today of a long history of land exploitation through the *foro* system, whereby the large monastic landowners and some nobles, and the new large *foro* owners after the disentailment of the 19th century, ceded the use of the land in very small production units for long periods of time (three voices or three kings) to the peasants. The conversion of peasants into full owners after 1926, following the law on the liberation of the *foros*, has perpetuated the family and smallholding structure of the farm, which has been fully preserved and functional up to the present day.

The tiny cadastral plot system, adapted in detail to the shapes of the local relief, are the basis of the monumental terracing of the steep slopes of the Ribeira Sacra. The peasantry preserves and maintains it in perfect condition with tireless work, fully respecting, unlike what is observed in other contemporary terraced landscapes, the metrics and technique of the traditional *socalcos.* The terraces of Ribeira Sacra are still, as they were in the past, a prodigious series of narrow steps, even smaller than the very small plots of land on which they are based. Heavy machinery has not been brought in here to open wide steps and transform the morphology of the slopes as in other landscapes.

Each terrace was and still is a delicate work of vernacular engineering that builds up the slope to make soil and regulate water run-off, but without altering its abrupt profile. This conservation of the *socalcos*, almost as worthy as their construction itself, is due to the fact that they are used for economically viable agriculture for family farms, which currently revolves around their use in the wine sector, but which in the past and still today has known other fruit crops, such as cherry trees, or vegetable gardens.



Good state of conservation of the historical settlement structure with different patterns of location of the small villages according to the relief. On the left, Cerreda, on the edge of the *bocarribeira* of the Sil canyon; on the right, above, a stepped system of small hamlets on slopes in the parish of Ribeiras de Miño; below, hamlets on stepped levelled areas in the parishes of Lumeares and Abeleda. © R. Mata





Excellent visibility conditions of the waterscape, high purity and legibility

This exceptional landscape retains excellent panoramic visibility and close-ups of its configuration and attributes, in particular the water that shapes and articulates it. The deep valleys of the rivers Miño and Sil and the frequent presence of villages, parish churches and monasteries on the *bocarribeiras* and steep slopes, linked by historical paths, offer numerous itineraries and points of observation of the landscape from these authentic heritage balconies with the water of the rivers Miño and Sil, and some of their major tributaries, always as a reference point. It is worth highlighting the good or very good state of conservation of the exterior surroundings of those religious buildings, heritages of cultural interest, with a high potential for views over the waterscape, which qualifies the perceptive experience.

Ribeira Sacra, especially the Sil Canyon, also has a dense network of institutionalised viewpoints, with locations and designs that are fully integrated into the landscape, offering spectacular views of great formal purity, without interference that would disturb the interpretation and public enjoyment of the waterscape. Navigation on the two main rivers also allows for the contemplation of the steep slopes and the landscape features above them.

The calm courses of the Miño and the Sil upstream of the dams strengthen the perceptive force of the narrow watercourses in the landscape. The water acts both as a mirror of the steep slopes and as a visual reference point from the edges of the entrenched valleys, without ever losing the image of the deep river canyons.

Figure 4.a.6. Some examples of viewpoints in the Sil valley, well designed and integrated in the landscape, with the water body as a reference. All of them provide clean, undisturbed views of different sections of the river canyon and its constituent features and attributes. Above, on the left, viewpoint of A Capela in Vilachá; on the right, viewpoint on the quartzite cliffs of Penas de Matacás. Below, viewpoint of Souto Chao, with a 180º panoramic view. © R. Mata







The challenge of the conservation of water heritage

When analysing the state of conservation of the hydraulic heritage of the nominated property related to the domestication of water power, different typologies of works and expressions can be distinguished: the historical water mills, the small power stations that mark the emergence of hydroelectricity from the end of the 19th century and the hydroelectric dams of the mid-20th century, all of them marking a story of continuous evolution over time. To all this must be added the myriads of small works associated with the presence of water, such as canals, small bridges or *pontellas*, *sequeiros* (chestnut drying places), fountains and mines, without forgetting that the *socalcos* are in themselves a kind of ingenious hydraulic system, as mentioned above.

In the Ribeira Sacra geography, crossed by hundreds of rivers, streams and brooks, there are many remains of mills and hydraulic devices from different periods that illustrate the more than seven centuries of milling history of the area. This is a varied and extensive group of structures that emerge among the chestnut and oak woods and copses on the banks of the watercourses, and which bear witness to the continuous effort to harness the power of water for milling grain or other activities such as fulling. Such has been the profusion of these devices in the area of the nominated property that some authors have even described them as the water *socalcos*, in comparison with the infinity of crop terraces located in the river canyons of the nominated property.

There are several aspects to consider when analysing the state of conservation of traditional watermills. Firstly, it should be borne in mind that, in terms of built heritage, traditional mills have followed a process of historical evolution since their introduction in the 11th century. Their number increased exponentially over the centuries, but each mill also evolved over time in line with the innovations that took place, both in the collection system and in the driving machinery. In fact, most of the remains of identified mills that have survived in a good state of preservation date from the 17th and 18th centuries, a period which saw the last great expansion of milling and the adaptation of many of the existing mills to the new technologies of the period, when wooden wheels were replaced by more efficient metal solutions. In other words, in order to analyse this heritage in terms of conservation and authenticity, it must be borne in mind that they were always evolutionary devices.

In this first context, when describing the state of conservation of these expressions, it should be noted that it is a dispersed heritage of which innumerable vestiges are preserved, which, according to some estimates, may number up to a thousand when taking into account the nominated property and the buffer zone. The first difficulty of the analysis is that a detailed inventory of all these elements is not yet available, an issue that is addressed in the Management Plan. Furthermore, it should be borne in mind that all the mills in the area ceased to be operational from the end of the 19th and beginning of the 20th century, with the introduction of new energy drivers such as electricity.

Given the current situation and under these circumstances, we find different categories in the state of conservation of watermills. On the one hand, there are the remains of very old mills, even dating back to before the 18th century, of which only the remains of the millwork and some elements of the catchment system are preserved. On the other hand, there are the later or renovated mills that have been in operation since this time. The state of conservation of these elements varies greatly. The best conserved ones obviously correspond to numerous watermills that have been restored by various public and private initiatives. This is the case, for example, of the group of 28 mills and two fulling mills of the Xábrega stream, or some of the elements located on the banks of the Asma. There are also many other mills that survive in an acceptable state of conservation. Such is the case of the Pesqueiras mill or the Gaio mill in Chantada with three *rodeznos* (mill wheels), which has been put back into operation for the service of those who wish to grind grain in the traditional style.

Another aspect to take into account is that a mill is not only the building and the mechanical devices for grinding or other tasks. In reality, these are larger spatial systems that include works such as weirs, diversion dams and conveyance and drainage canals. Some authors are inclined to speak of ecosystems modified by watermills and others identify them as specific cultural landscapes according to the territorial, environmental and scenic influence of these areas. Therefore, apart from considering the state of conservation of the mills themselves, it can be affirmed that in the Ribera Sacra area, these milling ecosystems enjoy an enviable state of conservation, both in terms of the quality of the identified environments and of the additional constituent elements themselves, most of which are recognisable.

One dimension to consider is that as important as the mill itself was the knowledge that led to the choice of the site according to the available flow, the characteristics of the terrain and materials, the slope and other physical factors associated with the dynamics of the water. Given the state of conservation of most of the milling areas along the banks of rivers and streams, it can be considered that the imprint of this ancient know-how is palpably preserved in practically the entire territory.

As a general reflection, it should be emphasised that guaranteeing an acceptable state of conservation for the large number of recoverable historic mills that survive is certainly a titanic task. For this reason,

the Management Plan is committed to focusing efforts on the most representative areas with the best conserved elements, with a view to expanding the scope of conservation in the future, depending on the resources.

In terms of harnessing the power of water, the second group to be analysed are the small power plants that mark the emergence of hydroelectricity from the end of the 19th century. In this case, mention should be made of a whole series of pioneering works such as Eléctrica de Belesar, Electra do Mato, the Ribeiraos electricity factory and Electra Popular de Chantada, all of which were replaced over time or are now abandoned. A very different situation is "A Fábrica da Luz" (Factory of Light), fed by the river Mao and which was one of the first hydroelectric infrastructures built in Galicia, in operation until well into the 20th century. In 2011, at the initiative of the Parada del Sil Town Council, this industrial heritage was recovered and converted into a place for leisure and training. Although the turbines have not been preserved, the canals and weirs are still there, as well as the masonry of the power station building. A better fate has befallen six other mini-power stations that are still in operation today and were built at this early stage in the history of hydroelectricity. These are the Bubal I, Tarrío, Pesqueira, Regueiro, Regueiro, Castro Caldelas and Villar mini-power stations, with a nominal capacity of between 4 and 13 MW, which capture water from streams that flow into the rivers Miño or Sil via dams.

With regard to the hydroelectric dams, considered as macro-sculptures entrenched in the riverbeds of the cultural landscape and as emblematic works of hydraulic engineering of the time, it should be noted that their state of conservation is optimal, taking into account the exhaustive controls that make it necessary to maintain the original structural and functional parameters, including the strict technical and safety standards and the emergency plans required for this type of infrastructure in all phases of its long useful life. These works also feature construction and architectural elements related to the Modern Movement that enrich them, as in the case of the control building of the Belesar power station, duly preserved and protected due to its uniqueness.

Associated with the construction stages of the dams, the villages of the workers who made this human feat possible are preserved. Some of them have been reused, while others, such as the workers' village of A Chaira, created to house the workers who built the Santo Estevo dam, are abandoned. These works deserve to be recovered as an integral part of the memory of the site in its recent history.

Interior of the old Gaio water mill. Spectacular grain mill equipped with three vertical-axis waterwheels, of which a large part of its constituent parts are still in an acceptable state of conservation. © R. Vilanova



Detail of the chamber that houses the mechanical drive mechanism of a typical water mill of this area, popularly known as "hell". In the case of this mill in Algueira, it can be seen that both the transmission mechanism and the hydraulic wheel have been restored. © C. Rueda



Picture of the exterior of the old "Fábrica da Luz", a hydroelectric power station fed by the river Mao and which was one of the first built in Galicia, in operation until well into the 20th century. Today it has been revived as a leisure and training centre. © R. Vilanova



The preservation of the dispersed ethnographic water heritage

In addition to the devices associated with the energy management of water over time, mention should be made of the ethnographic heritage connected with the presence of water. First and foremost, there are the innumerable passes and small bridges or *pontellas* (small stone bridges) that dot the cultural landscape in order to ford the dense tangle of streams and brooks. In general, these small works are in a good state of conservation and are usually maintained by the local people or by the local administrations acting in the area of the property. In addition to their regular use by the local population, their conservation has been reinforced by the rehabilitation of multiple trails and themed routes within the framework of the active and sustainable tourism offer that has been consolidated in this area. Their maintenance is also addressed in the Management Plan.

Another important heritage is made up of the presence of a multitude of fountains (many are sacred), washing places and mines that contribute another of the features of identity to the way of living and inhabiting this area. Their state of conservation is highly variable, depending on the degree of both public and private maintenance, and is also mentioned in the following section that deals with sacralised expressions of this type.

Also related to water, or rather to the drying of products, are the interesting *sequeiros* (chestnut dryers) that are scattered throughout the chestnut forests of almost all the municipalities of the Ribeira Sacra. The most outstanding due to their state of conservation are the *sequeiros* of Parada de Sil (Ourense) and those in the area around the Mazo de Santigoso (Lugo). The latter is an ethnographic complex made up of twelve buildings, each of which bears the name of the owner or the house to which it belonged and which were in use until a few years ago, when the last resident to dry chestnuts using the traditional method passed away. At the end of 2017, the Pobla do Brollón Town Council with the help of Leader funds cleaned and marked the route that allows access to them. The gradual abandonment of this traditional activity logically conditions the maintenance of these buildings, whose conservation will depend on other factors such as educational and tourist use.

Picture of a small traditional small stone bridge or *pontella*, an example of the innumerable works of this type that make the cultural landscape of water unique. © C. Rueda





The monasteries and their surroundings are exceptional sacred balconies overlooking the rivers and main watercourses, which are in a very good state of conservation. In the picture, the monastery of Santa Cristina de Ribas de Sil located in a spectacular spot in the soto de Merilán. © R. Vilanova

State of conservation of the monastic and religious heritage associated with the waterscape

The nominated property contains many vestiges of early hermit occupations and a veritable forest of churches, monasteries and other religious buildings that bear witness to the omnipresence of the monastic orders. This permanence formed the spiritual and power foundation on which some of the most defining elements of the cultural waterscape were laid, permeating the character of many of the works and interventions that have led to their construction, from the encouragement of ancestral terrace crops to the introduction of watermills.

The monastic imprint is especially palpable in the monasteries located in the Ribeira Sacra area. The monasteries of Santo Estevo de Ribas de Sil, Santa Cristina de Ribas de Sil and San Paio de Abeleda are located in the river valleys of the Sil, while in the river valleys of the Miño we find the monasteries of San Paio de Diomondi, Santo Estevo de Ribas de Miño, San Xoán da Cova, Santa María de Pesqueiras, Santo Estevo de Chouzán, Santo Estevo de Atán and Santa María de Nogueira de Miño. In addition, there is a large number of churches.

In general, the heritage elements analysed currently enjoy a state of conservation between optimum and very good, the majority of which are not at risk. However, it should be noted that the population and social changes that have affected the area have meant that many of the religious buildings have lost their use, which affects their capacity for conservation and maintenance. In this case it is the various administrations that act in the area, which are largely responsible for the rehabilitation and maintenance of a heritage that was once looked after by the neighbours and religious communities. Depending on the particular case of each element, it should be noted that year after year rehabilitation, adaptation and maintenance works have been carried out on practically all properties of this type. Examples of this permanent activity are the recent interventions of conservation and restoration of the church of Santo

Estevo de Ribas de Miño, or those undertaken in the churches of Santa María de Nogueira de Miño and Santa María de Pesqueiras by the Xunta de Galicia.

However, new uses and new visitors have led to changes in favour of the conservation of this heritage, for example, the converted Monastery of Santo Estevo de Ribas de Sil, which is now a National Parador, the chapel of A Chaira, which has undergone a pictorial intervention, or the Monastery of Santa Cristina, now a tourist attraction in the area, among others. The case of the monastery of Santo Estevo de Ribas de Sil is paradigmatic in the field of rehabilitation, constituting a successful intervention that has managed to exquisitely combine the rescue of a great monastery with the use of high-quality tourist accommodation, maintaining the integrity of its constituent elements. This reconversion, which is not new in Ribeira Sacra, is a symptom of a cultural landscape that remains continuous and adapts to the times.

Another dimension associated with the state of conservation, and not often highlighted, is that most of these works are in fact exceptional sacred balconies overlooking rivers and major watercourses. The excellent state of conservation of the surroundings of most of these enclaves and the conditions of panoramic visibility are a factor worth highlighting.

In addition to monasteries and churches, other lesser expressions of sacred heritage, generally associated with water, have been recognised, such as: hermitages, *cruceiros* and *petos de ánimas* ((altars dedicated to the souls of the deceased), *hórreos* with crosses and fountains, washing places and mines with crosses. If we were to analyse them separately, their state of conservation varies in relation to the above-mentioned landmarks, although it can be considered generally acceptable. However, regardless of the protection policies applied, it must be acknowledged that, as this is a very numerous heritage of lesser importance, with less and less use and therefore less maintenance, the risks associated with its conservation are greater.

State of conservation of water-related intangible heritage

As a living landscape, the conservation of the intangible heritage of water features prominently in the strategy for the future of the nominated property.

One of the most unique aspects of this heritage is the excellent state of conservation of the knowledge inherited and accumulated over generations in the art of building *socalcos* with their characteristic dry-stone enclosures. The maintenance of the existing ones, the growing recovery of some abandoned ones, and even the ploughing of new terraced plots, attest to the vigour of this tradition. This is a tradition that is also guaranteed by the declaration of Ribeira Sacra as a Heritage of Cultural Interest (BIC), which determines the conditions for the conservation of the existing *socalcos* or their rehabilitation, always using traditional techniques and materials.

The extraordinary toponymic heritage is another cornerstone of the hydrological memory of the nominated property. In this case, efforts to recognise, identify and preserve this heritage have intensified in recent years, especially under the declaration process. In this area, a considerable number of fossil toponyms of pre-Roman languages and the identification of the very extensive catalogue of hydronyms in this area stand out.

The educational community and the local administrations themselves have placed special emphasis on the recovery and recognition of the oral tradition and the myths and legends related to water and rivers, fountains and springs. In addition to this, there is a boom in harvest festivals, maintaining and reinforcing traditions of great ethnographic interest associated with the presence of the river, such as the "*papeiros*" and "*rabudos*", an ancestral means of communication between river banks.

4.b. Factors affecting the nominated property

4.b (i) Development pressures and management response

The nominated property is not affected or at risk, nor are there any significant current or potential residential or urban pressures from agriculture, industry, tourism or new infrastructures. Although reservoirs have had an impact in the past on the fragmentation of the landscape and its natural components, just as large agricultural terraces did centuries ago, it should be remembered that the declaration of the area as a Heritage of Cultural Interest (BIC) in the category of cultural landscape, offers sufficient guarantees to limit the extent of possible negative pressures over time, in line with the development of the Management Plan for the property which is currently in its application stage.

In this line, it is worth noting firstly that the settlement pattern is characterised by small, compact and dense villages, close to each other, with no large or tall buildings that create an impact on the landscape. Neither have industrial areas, extractive industries or major transport infrastructures been established in this area, nor are there any plans to create them, apart from a railway line whose origins date back to the 19th century, a network of roads of little importance and the jetties from which the river routes depart. However, it is always necessary to take into account the possible pressure that may be exerted by dispersed illegal or unregulated buildings, even though there have been very few cases of this type detected in recent times.

The pressure of tourism can be considered limited, as the tourist offer is oriented towards rural tourism, contributing to the rehabilitation of buildings and their conservation through use, as is the case with the interpretation centres, usually located in buildings of great heritage value. The implementation of interpretative facilities, such as viewpoints, signs or signposting of trails are subject to the protection regime of the Heritage of Cultural Interest (BIC), and in recent times have been gradually renewed as a result of a coordinated strategy under the Ribeira Sacra Landscape Action Plan and the Landscape Covenant, ensuring a high degree of integration into the environment, as provided for in the Management Plan of the property. In any case, the tourist flow and the influx of visitors always constitute a risk factor if the admissible carrying capacity limits are exceeded in their future development. The Management Plan therefore envisages a sustainable tourism strategy supported by various plans and programmes already in place or in progress, which address key issues such as tourism sustainability, soft mobility and public use of space.

San Fiz de Asma. © R. Vilanova



There is a process of the arrival of new inhabitants who occupy the territory, either temporarily or permanently, but due to their intensity and evolution they cannot be considered as an unbearable pressure. The effects are generally considered positive in terms of their contribution to the recovery of agricultural activities and the conservation of the environment and heritage, ensuring the use of criteria respectful of the landscape in the rehabilitation of existing buildings. In this sense, one of the mirrors in which to look at could be the Special Territorial Plan of San Fiz de Asma, a land-use planning figure approved in 2024 and which protects the traditional typologies of vineyard huts, as well as their use in the face of tourist development in an area of the Ribeira Sacra with a special density of this type of agricultural buildings and river terraces.

Special mention should be made of agriculture, particularly viticulture, the maintenance of which contributes to the conservation of the landscape of the property and is the subject of action strategy planning. Currently, the Strategy for the Economic, Territorial and Tourist Revitalisation of the Wine Regions of Galicia 2021-2026 is being implemented, which sets out actions to be undertaken in each of the Designations of Origin of Galicia, including Ribeira Sacra, taking the wine sector as a revitalising and shaping factor of the Cultural Landscape and reinforcing its relationship with the tourism sector. In any case, the growth of vegetation should be noted as a risk factor, whether spontaneous or in the case of pine reforestation and forest clearings that occur in the *bocarribeiras*, which can contribute to the degradation, or even destruction, of the abandoned *socalcos*.

Other crops such as chestnuts, cherry trees and olive trees are also worth mentioning which, although they often obscure the *socalcos* on which they are planted, do not produce or do not cause an impact or pressure on the landscape which they enrich. At the same time, the growing concern for health and environmental sustainability among consumers is boosting organic production, so that there are already more than a hundred certified organic operators (CRAEGA, 2024) in the area. Other agricultural productions with strong growth in the last decade have been organic cider apples, boosted by the installation in Chantada, in the vicinity of the nominated property, of a production industry based on the recovery of native varieties, as well as honey and mushrooms. All these activities are fully compatible with the values of the landscape and contribute to its preservation.

Inside of the Santo Estevo hydropower plant. © R. Vilanova



In terms of hydroelectric production, no new interventions are detected or planned beyond those already consolidated with the waterfalls and reservoirs built in the mid-20th century. Maintenance work and technological improvements in this case do not cause new pressures or territorial changes. It should also be remembered that hydroelectric companies are obliged to establish very strict protocols to minimise impacts and not increase the territorial scope of their activities.

In short, the high level of legal protection and the type of activities that are produced in the territory, determine a low incidence of factors linked to development pressures on the area of the nominated property, none of them affecting/having impact on the authenticity or integrity of the nominated property or its setting. As noted at the beginning, Decree 166/2018, which declared the Ribeira Sacra cultural landscape a Heritage of Cultural Interest (BIC), provides an effective framework for managing any pressures due to development.

4.b (ii) Environmental pressures, natural disasters and risk preparedness

The cultural landscape is no stranger to the effects of global change, which include phenomena perceived on a local scale such as the gradual loss of biodiversity, the consequent reduction or fragmentation of natural habitats, or the introduction and expansion of invasive alien species, which in many cases are the result of global factors. The effects of some of these pressures are increased as a consequence of climate change, as the surface area of critical habitats for certain species, especially reptiles, amphibians, or even birds, is reduced.

The effects of climate change are gradually beginning to be felt in some activities such as agriculture. The detailed analysis carried out in the field by the Spanish National Research Council (CSIC), with consistent series of data since 2008, together with the data also managed by the Ribeira Sacra Designation of Origin, indicate that this area is no stranger to the impact of global warming and, more specifically, on viticulture. Recent years have seen higher temperatures, drier weather, and longer sum-

mers, an effect that is particularly noticeable at river course level. In fact, these changes are reflected in practices such as the grape harvest, which used to start in mid-September, but in recent years has been brought forward to the second half of August. Weather disruptions associated with global warming also include spring frosts and the frequency of we see phenomena such as hail storms. These changes will not only have an impact on the use of traditional agricultural terraces which, in the case of viticulture, will tend to move upwards, but will logically have an effect on the behaviour of the different ecosystems of the Ribeira Sacra and on the environmental services they provide. On the other hand, it is worth remembering that hydroelectric activity in this territory can make a significant contribution to climate action and the reduction of emissions.

In this context of change, invasive alien species are a pressure factor to be taken into account. The problem caused in certain areas of the Ribeira Sacra by different species of Acacia, especially the *mimosa* (*Acacia dealbata*) and, to a lesser extent, the Eucalyptus (*Eucalyptus viminalis or E. smithii*), mostly established in former cultivated areas, reforested areas or areas disturbed by man, should be highlighted. In the aquatic environment, fish populations such as the American perch *(Micropterus salmoides*) and the common carp (*Cyprinus carpio*), as well as the American crayfish *(Procambarus clarkii* Girard) and the signal crayfish (*Pacifastacus leniusculus* Dana) stand out. The presence of the American mink (*Neovison vison*) or the recent invasion of the Asian hornet (*Vespa velutina*) should be mentioned among the terrestrial fauna species. Measures in this respect are taken into account in the Programme for the conservation of natural values and the environment of the Management Plan for the property and, more specifically, in the Ribeira Sacra Landscape Action Plan approved in 2021. It is noted in this regard that control of alien species has been carried out in different areas of the nominated property, especially on woody plant species (acacia and mimosa).

On the other hand, forest fires are a serious environmental risk factor throughout Galicia. However, this risk has to be qualified in the case of the nominated property. The high level of agricultural activity in the area and the use of the fruit of tree species constitutes a differential fact in comparison with the timber use system that prevails in other rural areas of Galicia. This provides protection against possible forest fires, as native species are not pyrophytes, as are fast-growing timber species.

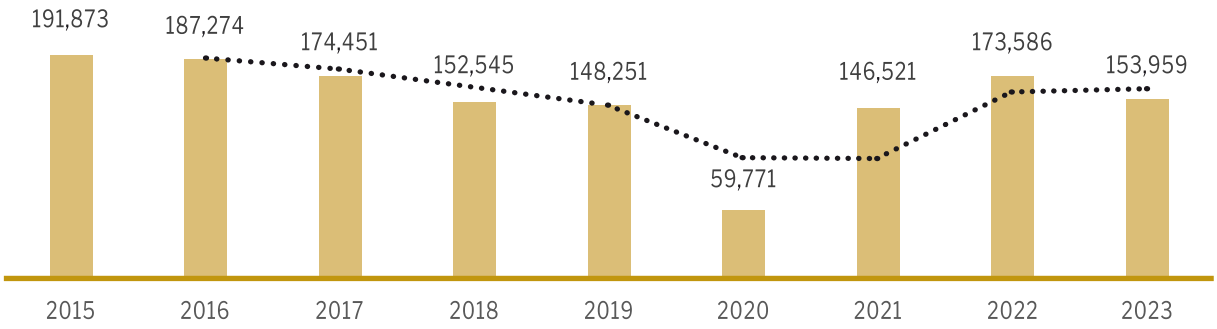
Risks caused by natural disasters have a low impact on the territory. Taking into account short and medium return periods, the most recurrent disasters are those associated with storms and cyclones, floods caused by natural processes and earthquakes, although the Ribeira Sacra area is not included among the areas of greatest seismicity established by the National Geographic Institute of Spain. Natural disasters would be linked to adverse climatic conditions, especially those that affect the stability of the terrain or are capable of temporarily modifying hydrological characteristics or may cause natural fires. In this respect, the General State Administration and the administration of the Autonomous Community of Galicia have drawn up various plans for the prevention of environmental risks which are currently in force.

In relation to other risks that may be associated with climate change, we can mention the changes in the abiotic conditions of the environment. These include thermal changes (often more extreme temperatures, increased periods of drought or rainfall in smaller historical series, or greater changes in water regimes). As for the changes in the biotic conditions of the environment caused by these phenomena, although they are generally of minimal impact, the desynchronisation of natural processes or the migration of species are frequent. In relation to drought, there is a Special Drought Plan which sets out a series of actions and measures depending on the scenario.

4.b (iii) Responsible visitation, other human activities and sustainable use

The pressure of tourism can be considered limited, as the tourist offer is oriented towards rural tourism, contributing to the rehabilitation of buildings and their conservation through use, as is the case with the interpretation centres, usually located in buildings of great heritage value. The implementation of interpretative facilities, such as viewpoints, signs or signposting of trails are subject to the protection regime of the Heritage of Cultural Interest (BIC), and in recent times have been gradually renewed as a result of a coordinated strategy under the Ribeira Sacra Landscape Action Plan and the Landscape Convenant, ensuring a high degree of integration into the environment, as provided for in the Management Plan of the property. In any case, the tourist flow and the influx of visitors always constitute a risk factor if the admissible carrying capacity limits are exceeded in their future development. The Management Plan therefore envisages a sustainable tourism strategy supported by various plans and programmes already in place or in progress, which address key issues such as tourism sustainability, soft mobility and public use of space.

Until the 1990s, no tourist activities could be identified in the territory, apart from accommodation services, concentrated in the urban centre of Monforte and its surroundings, outside the area of the nominated property, which welcomed business travellers. The history of tourism in Ribeira Sacra dates back to 1993,



Visitors in hotel and rural tourism establishments in the geodestination of Ribeira Sacra (2015-2023)

Source: Compilation based on data from the Galician Tourism Agency.

with the first river tour from the Doade jetty and the opening of the first rural tourism houses.

The key moment would be the granting of a Tourism Revitalisation Plan and the creation of the Ribeira Sacra Tourism Consortium to manage it in 2005. After the implementation of the Plan, the 20 town councils that made up the Tourism Consortium at the time were unanimous in their decision to continue working together.

Since then, tourist demand has been growing steadily, although the level of visitors to the area can be considered relatively low in comparison with other areas of Galicia and Spain, to which long journey times and relatively difficult access contribute. In addition, the degree of deseasonalisation is greater than in other destinations in the area, with demand not peaking as high in the summer period thanks to the attraction of the destination at other times of the year, such as spring and, in particular, autumn.

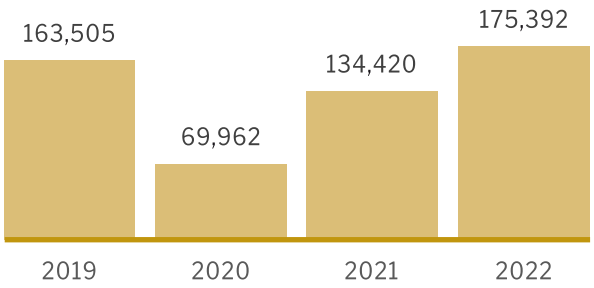
According to the provisional figures for hotel occupancy and rural tourism survey (National Institute of Statistics and the Galician Institute of Statistics), the Ribeira Sacra geodestination received a total of 153,959 travellers in 2023, with the evolution shown in the following table.

While this figure is useful for assessing the general trend in demand, it does not give an accurate picture of the level of tourist visitors in the area of the nominated property, as it refers to a much larger area than the candidacy. The Ribeira Sacra destination is currently made up of 26 town councils totalling 304,830 hectares, far more than the 16,471 hectares of the cultural landscape and the 31,979 hectares of the buffer zone. Furthermore, this statistic refers only to the number of people staying overnight in tourist accommodation establishments, and does not include the number of day visitors.

For a more accurate analysis of the impact of the tourist traffic on the nominated property, the data that allows a closer approximation of the evolution of this traffic, is that of the users of the river routes, as this is the main tourist product of the destination and as it is developed entirely within the scope of the candidacy. According to data provided by the nine main companies operating these services, the number of river route users in 2022 amounted to 175,392 people, moderately exceeding pre-pandemic values.

Aware of the need to anticipate possible pressures and preserve the values of the territory, the Ribeira Sacra Tourism Consortium has continued to work towards a sustainable tourism strategy, in which mobility plays a key role. Its importance is particularly accentuated in the area around the rivers, coinciding with the area of the nominated property, as it is an orographically complex territory with often winding and narrow roads in an area of high natural and scenic value. It is precisely in this area that congestion problems are occasionally experienced at specific points at certain times of the year.

In 2021-2023, a Tourism Sustainability Plan was developed, aligned with the goals of the Management Plan for the World Heritage candidacy, which, among other aspects, allowed for the development of a Sustainable Mobility Plan and the implementation of a tourism observatory that, through the use of technology, will monitor the behaviour of tourists and allow for an effective measurement of the impact of tourism on the territory. A manual of good practices for visitors was also created under this Plan, selected as an exemplary action in the “Green Book for the sustainable management of cultural heritage” published by the Ministry of Culture and Sport of the Government of Spain.



River route users (2019-2022)

Source: Compilation based on data from the Ribeira Sacra Tourism Consortium.

A new Tourism Sustainability Plan 2024-2026 is currently being developed, which focuses on the improvement and/or expansion of sustainable mobility alternatives, and on the search for new methods for managing carrying and reception capacity. Together with actions aimed at further strengthening tourist intelligence or waste management, the creation of shuttle bus services to points of interest is envisaged, which will reduce the presence of private vehicles and contribute to the compatibility of conservation and tourist use, in development of the Sustainable Mobility Plan.

All this is reinforced by the approval of the application submitted by the Ribeira Sacra Tourism Consortium to the MOVES Singular Projects II Programme, to implement an intermodal, smart and sustainable network of river and electric land transport that contributes to the decarbonisation of the area of the nominated property.

In addition, the Management Plan that accompanies this dossier also incorporates the drafting of a Public Use Plan. All measures would serve to move towards rational and sustainable visitor and tourism management.

These initiatives constitute elements that illustrate the consolidation process of the sustainable tourism model in the Ribeira Sacra Waterscape. The great challenge for the future is to underpin a strategy that combines tourism and responsible public use with the needs for preservation of the property and its main attributes, and how these activities can directly benefit the local population, the main guarantors of this cultural landscape. In this way, the strategy to be followed, endorsed by the Management Plan and in line with the policies and guidelines of UNESCO's World Heritage and Sustainable Tourism Programme, is based on criteria such as the following:

a) To develop a system of visits, activities and tourism products based on the different values that convey the importance of the nominated property. It is therefore vital that the promotion, information about the property, presentation and interpretation of each site or component take into account as a matter of priority the attributes that express Outstanding Universal Value.

b) To commit to an adapted and sustainable tourism model with a local base. This entails supporting and promoting local businesses active in tourism, training and support for local guides, and partnerships with other activities, services and quality economies that are generated both within the property and in the buffer zone.

c) To integrate the story of the property's values into the design of activities and commit to the generation of new innovative tourism products based on knowledge and sustainability. This requires new partnerships between tourism agents, experts and academia. In addition, the survival of local knowledge can also become an invaluable resource for tourism and an active factor in the conservation of the property as a living cultural landscape.

e) To consolidate an alternative of sustainable mobility and zero or low-emission modes of land and river transport, for activities associated with site visits. One of the often least considered aspects of tourism and public use in sensitive areas is precisely that of mobility, a factor that drastically determines the sustainability of destinations and visitors' perception of the values of the space.

f) To ensure the minimum impact and multi-functionality of infrastructures associated with tourism activity. This is based on the premise of avoiding unnecessary works that duplicate functionality with its consequent impact on the territory, as well as establishing the premise that any new intervention in spaces that can be visited must become an opportunity for the recovery of elements of the cultural and landscape heritage of the area, guaranteeing the minimum impact on the cultural waterscape.

In short, Ribeira Sacra is becoming a destination fully committed to sustainable tourism management, a paradigm of decarbonisation, in line with the Sustainable Development Goals of the United Nations (SDGs) and quality, as shown by the fact that it is one of the Spanish destinations distinguished with the Integral System of Tourism Quality in Destinations (SICTED).





A Cova river beach. © CTRS
River routes in electric boats. © R. Vilanova





Ribeira Sacra
Waterscape

5. Protection and Management of the nominated property

- 5.a. Stakeholders
- 5.b. Protective designation
- 5.c. Means of implementing protective measures
- 5.d. Existing plans related to municipality and region in which the nominated property is located
- 5.e. Property management plan or other management system
- 5.f. Sources and levels of finance
- 5.g. Sources of specialisation and training in conservation and management techniques
- 5.h. Visitor facilities and infrastructure
- 5.i. Policies and programmes related to the presentation and promotion of the nominated property
- 5.j. Staffing levels and expertise (professional, technical, maintenance)

© A. Rodicio

5.a Stakeholders

Many stakeholders are involved in the complex management and preservation of the nominated property. Firstly, there are the people that live there (1,177 inhabitants), spread out in small settlements and grouped in the traditional parishes. Part of this population is responsible for the maintenance of the terraced farming landscape, the vast majority of which is privately owned in highly fragmented plots. However, a substantial part of the nominated property falls into the category of *montes vecinales de mano común*, a form of communal ownership that provides for customary use of the land.

Relevant stakeholders include the social and private entities that interact with the nominated property, such as: the Council of Parishes, which represents the inhabitants, the Ribeira Sacra Rural Association, the Ribeira Sacra Tourism Consortium, the Regulatory Council of the Ribeira Sacra Designation of Origin, the Bishoprics of Lugo and Ourense, in addition to a number of local cultural and environmental NGOs. With regard to the built cultural heritage, it should be noted that most of the traditional watermills are in the hands of local owners and that the Catholic Church owns a large percentage of the religious monuments or buildings, making them key stakeholders in the heritage elements of the nominated property.

The hydrographic network is a public good managed by the Miño-Sil Hydrographic Confederation, which falls under the General State Administration, and is thus one of the main stakeholders in the area, as it also oversees hydroelectric power generation.

Finally, the remaining government stakeholders are the local councils, the provincial councils, and the relevant departments of the Xunta de Galicia, with the Directorate General of Cultural Heritage playing a leading role.

5.a (i) Ownership and inhabitants

Most of the surface area of the nominated property is publicly or communally owned, especially the area made up of the local common land, the water surface of the rivers and reservoirs, and the extensive and dense network of public paths. The rest corresponds to an atomised private landholding in the hands of the inhabitants of the area and, occasionally, of other private institutions such as the Church.

With regard to public property, it should be noted firstly that 30% of the surface area of the property is made up of riverbeds and their so-called river police areas, which are the border areas established for their conservation and protection. The river network is the spinal cord of this landscape and one of the main reasons for its uniqueness, and through it flow the rivers Miño and Sil, as well as their main tributaries Navea, Bibei, Cabe, Lor, Mao or Búbal, as well as hundreds of tributaries and watercourses with more or less seasonal flows. The water network is therefore a public domain asset managed by the Miño-Sil River Hydrographic Confederation, which is part of the General State Administration.

There is also an extensive network of paths and roads that are also publicly owned. The majority of these roads are locally or municipally owned by each of the town councils that make up the cultural landscape. This is a vast local connection network between the town centres, which are made up of roads that are not very wide, normally asphalted or concreted. Due to the orographic layout of the territory there are hardly any traces of main roads or even of secondary network roads.

The next category of ownership corresponds to the *montes vecinales de mano común* (wooded common lands), a system of communal ownership characteristic of Galicia, which survives in this territory, based on the parish. This land represents a quarter of the total surface of the area. This is a form of common ownership by the social group, without an administrative entity, who make customary use of the vegetation, provided they can prove their status as neighbours with a house and usual residence, and are subject to the assembly decisions of the parish community.

The remaining land holdings are privately owned, mostly by the inhabitants of the nominated property. As a whole, this constitutes a very unique system of land ownership characterised by extreme small-scale holdings, since it is an incredibly fragmented system of property ownership distributed among the local population that settles in the very population settlements of the cultural landscape and the surrounding areas. This feature is one of the most remarkable unique aspects of the property. In fact, there are a total of 96,125 plots on an area of 16,471 ha. Large landholdings representing communally owned land or scrubland communities are excluded, which are usually not very productive land or communal forestry, the average plot size is 394 m^2, with the *moda* (the most repeated statistical value) being 128 m^2. These data testify to the survival of one of the features that differentiate the cultural landscape in terms of authenticity, since traditionally the exploitation of the agricultural terrace was determined by the *cavada* or *cavadura*, a unit of measurement of the territory typical of Ribeira Sacra, whose approximate average size is 426m^2. This measure represents the unit of work, that is, the human effort of one person to work a plot of land, as opposed to the usual one the rest of Galicia, *the ferrado*, which is a unit of yield or production.

In addition, mention should be made among the private owners of the property and land located in Ribeira Sacra, of the Catholic Church, which owns a significant percentage of the monuments and buildings listed as being of cultural interest. The Ribeira Sacra is basically divided by the river Sil between the di-

oceses of Lugo to the north and Ourense to the south and to belong the parish churches, rectory houses, chapels, convents and monasteries, as well as part of the extensions of land that traditionally constituted their sustenance, known as *igrexarios* or *dextros*, and whose structure can be read in the structure that is maintained in the plots of land.

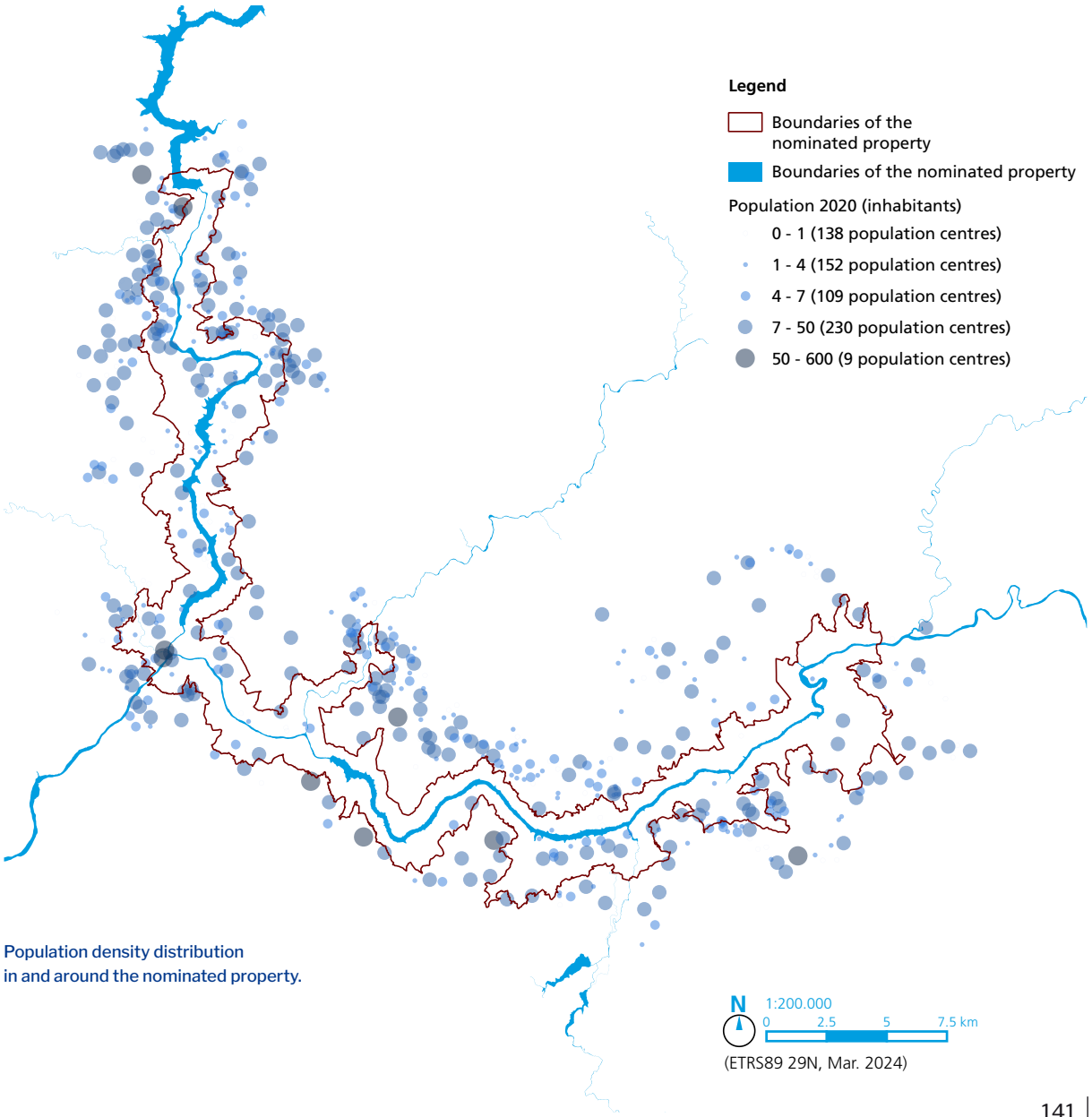
Finally, the attached table shows the number of inhabitants in the nominated property and buffer zone according to information extracted from the 2022 census of the INE (National Statistics Institute).

Inhabitants of the nominated property (2022)	
Area	**No. of inhabitants**
Area of the nominated property	1,177
Buffer Zone	4,909

5.a (iii) Participation

All key stakeholders and actors of the nominated property have been involved in the nomination process since its origins. The initiative for the nomination of Ribeira Sacra site to the World Heritage List dates back to 1996, with the registration on Spain's Tentative List. After conducting several preliminary studies aimed at further examining the territory and its values, the declaration of the cultural landscape as a Heritage of Cultural Interest (BIC) in 2018 was the definitive backing for the process of launching the candidacy.

With the aim of ensuring a balanced, effective and inclusive participation of all stakeholders and rights-holders, several actions have been carried out since then to involve the administrations with competences in the territory, associations, companies and local communities in the identification of



Population density distribution in and around the nominated property.



Snapshot of one of the meetings of the Council of Parishes in which the issues related to the candidacy and the future of the cultural landscape are discussed. © M. Crecente

the values of the territory, the coordination of the candidacy and the definition of the most appropriate measures for the management and protection of the nominated property.

Effective participation in the nomination process has taken the form of numerous general and sectoral meetings, including meetings with local residents, mayors, representatives of the Ribeira Sacra D.O., those responsible for tourism and the Tourism Consortium, local cultural heritage experts, representatives of the hydroelectric sector, as well as the holding of information days and seminars and international meetings open to all stakeholders. These actions have been stepped up following the process of reformulating the candidacy. It should be noted that since 2017, at the start of the process, 52 meetings, presentations, information days and seminars; 3 Council of Parish meetings; 2 Scientific Committee meetings; and 3 Interdepartmental Commission meetings have been held.

The shared responsibility of all actors involved in the maintenance of the nominated property is embodied in the governance system presented in chapter 5e. The *Comisión Interdepartamental de la Ribeira Sacra* (Ribeira Sacra Interdepartmental Commission) is made up of representatives of local bodies and entities with interests in the area, both public and private, covering the broad spectrum of actors involved in the nominated property, including the Council of Parishes.

The Council of Parishes is the representative body of the parish communities, with at least one representative from each of the 72 parishes included in the nominated property called upon to sit on it. Its formal constitution took place on 17 December 2019, when the attendees signed a document backing the candidacy, expressing the admiration that the local population feels for the landscape in which they live, and expressing their will to preserve it and committing themselves to its conservation.

In its current operation, the Council of Parishes holds two key meetings per year, one in spring and one in autumn, the results of which have been a fundamental part for the organisation of the candidacy and the definition of the management strategies. In these sessions, neighbours share information about spaces, techniques, cultural manifestations and initiatives in varying degrees of development associated with the waterscape. They also assess the results of the practical application of the Management Plan, allowing deviations and opportunities to be detected, which are brought to the attention of the Ribeira Sacra Interdepartmental Commission by the representatives of the Council of Parishes appointed for this purpose.

In addition to these two annual meetings, a parallel programme of activities helps to strengthen the links between the different members of the Council of Parishes and to spread the knowledge of the values of the cultural landscape among the inhabitants of the different parishes. Sectoral forums, recreational and cultural activities or specific visits, complemented by social networking, are the tools that contribute to maximising the effectiveness of this social participation body.

As a complement to the governance system, as reflected in chapter 5e, the Ribeira Sacra Waterscape Scientific Committee, with an advisory role and composed of experts from the various disciplines involved in the understanding of the territory, provides knowledge and expert vision to the various challenges that arise associated with management.

In addition to the information on the nominated property shared with the various actors, full information on the candidacy is available in English and Spanish at the link https://ribeirasacrawaterscape.com and is updated regularly.

5.b. Protective designation

The protection of the nominated property and its different elements is fully covered by the different, regional, national and European protection categories, laws and provisions that include the different realities and expressions that make up the cultural landscape.

With regard to the framework for the protection of natural and cultural properties, it should be pointed out that the Spanish case is unique in that it is a decentralised state model known as the "Autonomous State", which was built in the years following the enactment of the Spanish Constitution of 1978, which some authors define as a true cultural and natural constitution. The development of the different Statutes of Autonomy, such as that of Galicia, identifies the competences assumed within the constitutional framework that are of interest to them. Thus, the Autonomous Community of Galicia has exclusive competence in matters of historical, artistic, architectural and archaeological heritage of interest to Galicia, as well as other competences such as spatial and urban planning, and some relating to landscape and protection of nature. On the other hand, the State exclusively reserves certain competences of significant importance in the area in question, such as those relating to the delimitation, protection and restoration of the public water domain. We thus have a legal framework for protection that encompasses European guidelines, national and regional legislation, with no overlapping.

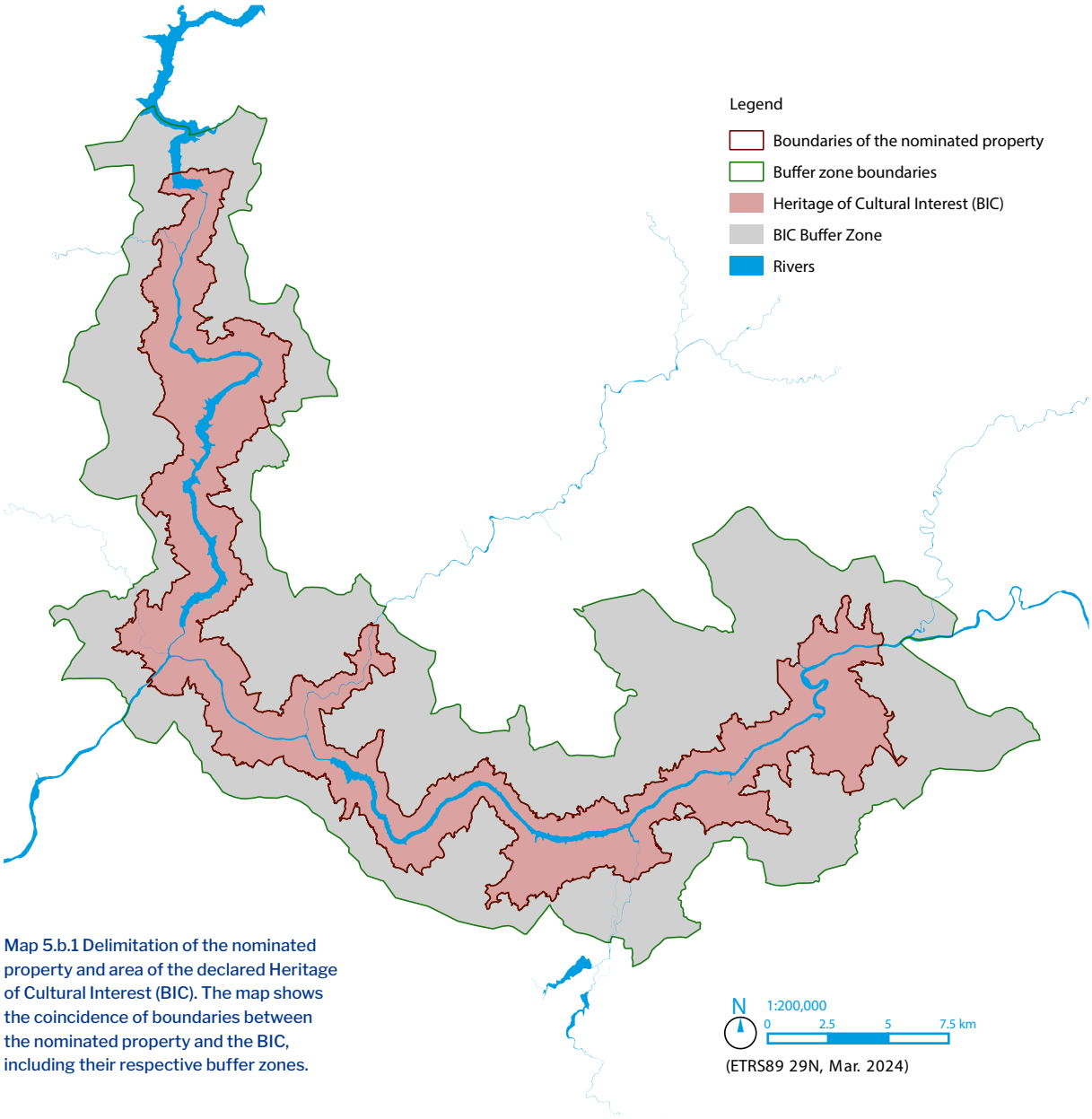
Protection of the property as a whole

The Ribeira Sacra Cultural Waterscape has a robust basic protection system based on the declaration of the entire area as a Heritage of Cultural Interest (BIC) in the category of cultural landscape, by Decree 166/2018, of 27 December of the Conselleria de Cultura y Turismo (Regional Ministry of Culture and Tourism) of the Xunta de Galicia. Such a designation is at the apex of the protection system specifically established for the nominated property and is fully in keeping with the essential nature of the property as a cultural landscape.

The Heritage of Cultural Interest (BIC) is constituted as the legal figure that the current autonomic and state legislation advocates to recognise and protect cultural manifestations, configured as the highest legal category in the protection and guardianship of cultural heritage assets at autonomous community level and in the Spanish State.

The text of the declaration as BIC expressly mentions the 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage, which was ratified by Spain on 4 May 1982. Its wording is inspired by the concepts developed in the Practical Guidelines for the Implementation of the World Heritage Convention by defining the area as: "A living, organically continuing landscape, that retains an active social role in contemporary society, closely associated with the traditional way of life, and in which the evolutionary process is still in progress. At the same time, it exhibits significant material evidence of its evolution over time". Among the inspiring principles, reference is also made to the European Landscape Convention, signed by Spain in 2000 and ratified in 2007.

CULTURAL LANDSCAPE PROTECTION SYSTEM		
PROTECTION OF THE PROPERTY AS A WHOLE Law 5/2016 of 4 May on the cultural heritage of Galicia		
Heritage of Cultural Interest (BIC) - 2018 The entire area declared as a Cultural Landscape	→	**SPECIFIC PROTECTIONS**
		Environmental and river resource protection
		Natura 2000 Network (SAC) EU and Spain - 25% of the property.
		Ecological flows. EU Directive and Spain (Water Law and Miño-Sil Hydrological Plan).
		Public water domain (Water Law), SP.
		Protection of rivers (Law 5/2006), GA.
		Protection of the landscape
		Law 7/2008 on the protection of the Galician landscape, GA
		Planning instruments, GA
		Rural land (98.4 % of the property)
		Rural settlement land (1.6 % of the property)



Map 5.b.1 Delimitation of the nominated property and area of the declared Heritage of Cultural Interest (BIC). The map shows the coincidence of boundaries between the nominated property and the BIC, including their respective buffer zones.

The declaration is based on Law 5/2016, on the cultural heritage of Galicia (LPCG), which includes cultural landscape among the categories of cultural heritage. Cultural landscape in article 10.1.h) of the LPCG is the "place identifiable by a set of singular tangible and intangible cultural qualities, combined works of nature and humankind, which is the result of the interaction and interpretation process that a community makes of the natural environment that sustains it and that constitutes the tangible support of its identity." It should also be specified in relation to this provision that, by virtue of the provisions of Article 148.1 of the Spanish Constitution (CE, 1978) and Articles 27.18 and 32 of the Statute of Autonomy of Galicia (EAG, 1981), the Autonomous Community of Galicia has exclusive competence in matters of historical, artistic, architectural and archaeological heritage of interest to Galicia and the defence and promotion of the cultural values of the Galician people.

On this basis, a protection procedure was developed that is novel and incomparable with any other that has been carried out before, both in Galicia and in the rest of Spain, achieving the nominated property the recognition of the highest cultural value in its entirety, with its specific protection regime.

The annexes to the declaration include an extensive list of movable and immovable assets and manifestations of intangible cultural heritage specifically listed in the field of cultural landscape, taking into account that the established protection regime is based on the need to combine the comprehensive

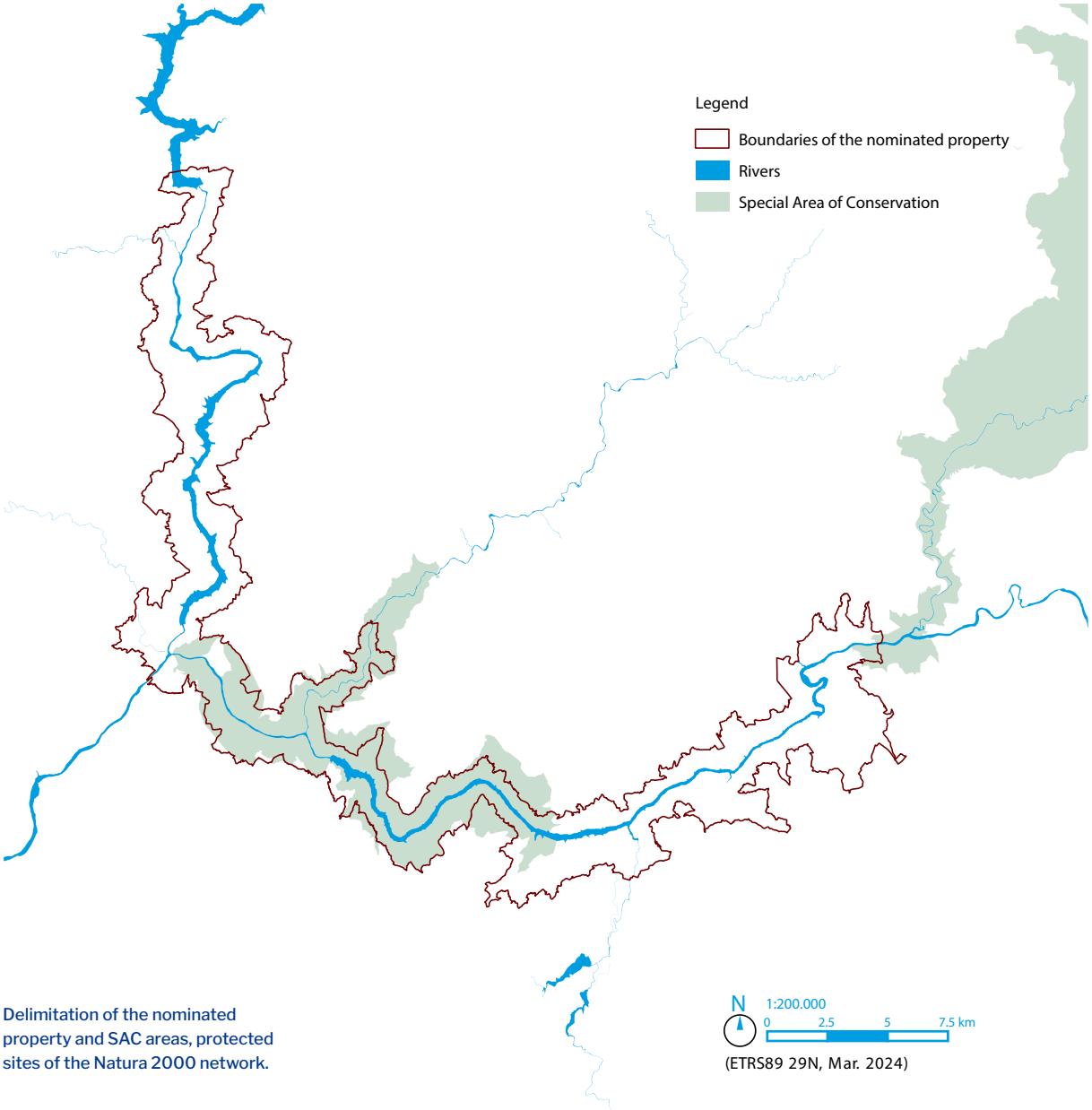
protection of those relevant manifestations of built cultural heritage with measures to safeguard the most relevant manifestations of intangible cultural heritage, and the conservation and maintenance of the characteristics of a built landscape whose functionality must be preserved.

It should be noted that the protection system established for the area as a Heritage of Cultural Interest (BIC), including the buffer zone, maintains its prevalence with regard to the conditions of territorial implantation, as it responds to the provisions of the legislation in force both in terms of land and territorial planning and in terms of the protection of cultural heritage.

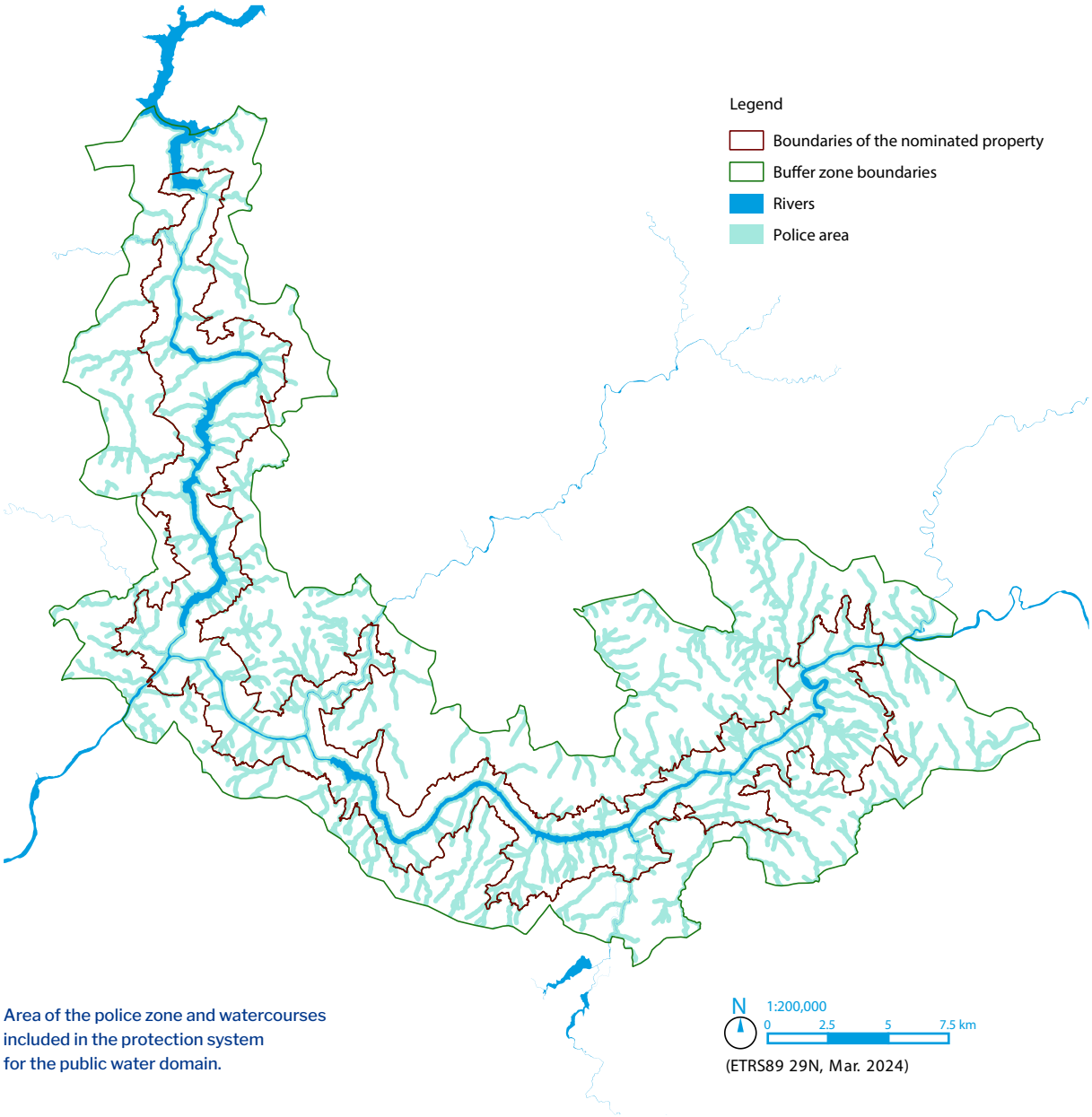
Environmental protection and protection of river resources

The protected areas of the Natura 2000 Network

There are two sites included in the Natura 2000 Network within the scope of the cultural landscape, created by Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, as Special Areas of Conservation (SAC). This includes almost the entire SAC of the Cañón del Sil (Sil Canyon), comprising the municipalities of Nogueira de Ramuín, Pantón, Parada de Sil and Sober, and part



Delimitation of the nominated property and SAC areas, protected sites of the Natura 2000 network.



Area of the police zone and watercourses included in the protection system for the public water domain.

of the SAC of Os Ancares-O Corel at the eastern end of the nominated property, which includes land in the municipality of Ribas de Sil in Ribeira Sacra.

The two areas together cover an area of 4,312 ha within the nominated property, representing 25% of its surface area. These protected areas are concentrated in the last kilometres that the river Sil runs through until it meets the river Miño. They constitute one of the greatest geological wonders of Galicia, where the climatic singularities of the area favour the coexistence of autochthonous forests with Mediterranean species such as strawberry trees and cork oaks, where crops are grown on steeply sloping terraces.

Nineteen types of Habitats in Annex I to Directive 92/43/EEC have been identified in the SAC of the Cañón del Sil, of which four are priority habitats. The largest group is that of Forests, which includes 7 habitats (maximum value in the group of Wetlands and River Corridors of the Natura 2000 network in Galicia) and among which the presence of Holm oak woods (only included in this natural area), riverside woods of *Salix alba* and *Populus alba* (only present in 2 areas of this group) and the Cork oak and Chestnut trees (very restricted distribution in the group of Wetlands and River Corridors of the Natura 2000 network in Galicia) should be highlighted. Other groups also important in terms of habitats included are the natural and semi-natural grass formations, and the rocky habitats and caves, each with 4 types.

A total of 19 taxa from Annex II of Directive 92/43/EEC and 27 from Annex IV are listed in the Cañón del Sil, including the odonates *Macromia splendens, Gomphus graslinii* and *Oxygastra curtisii*, as inverte-

brate species of conservation concern. Present in the ichthyofauna group are: *Chondrostoma duriense* and *Chondrostoma arcasii* and a total of 14 species of Annex I to Community Directive 2009/147/EEC can be counted among the birds as a whole.

Protection of river areas and water use

Protection of rivers

Law 5/2006, of 30 June, for the protection, conservation and improvement of Galician rivers, which declared the conservation of the natural river heritage as a priority of general interest of the Autonomous Community of Galicia, including the biodiversity of the flora and fauna of the Galician rivers, as well as the related ethnographic and historical-cultural heritage. This law determines the obligation of the Galician public administrations to guarantee their protection, conservation and improvement.

The public water domain

According to the revised text of the Spanish Water Law, approved by Royal Legislative Decree 1/2001, of 20 July, the public water domain includes, among other assets, the courses of natural streams, whether continuous or discontinuous, and the beds of lakes and lagoons and those of surface reservoirs in public watercourses. The public water domain and the use of water are regulated and protected through this legislation and its specific regulations. The river basin is the management unit, and in the case of Ribeira Sacra this task is entrusted to the Miño-Sil Hydrographic Confederation, a state-owned and state-competent body.

The Hydrographic Confederations or basin organisations were created in 1926 by Royal Decree Law, and are defined in the Water Law as public law entities with their own legal personality and distinct from the State, attached for administrative purposes to the Ministry for Ecological Transition and the Demographic Challenge, through the Directorate General for Water, as an autonomous body with full functional autonomy.

The protection system for the public water domain, which includes watercourses, riverbanks and banks, is complemented by the establishment of *police* and *easement* areas. The police area is a one-hundred-metre-wide lateral strip, counted from the line that delimits the riverbed, in which the use of the land and the activities that take place there are conditioned, which represents about 30% of the surface area of the nominated cultural landscape. In turn, the easement area is the strip of land bordering the public water domain, within the police area, with a width of five metres, which is reserved for surveillance, fishing and rescue uses, and is subject to a more severe protection regime.

Ecological flows

In accordance with the Water Framework Directive (2000/60/EC) and in accordance with the provisions of Articles 42 and 59 of the revised text of the current Water Law, the ecological flows of the rivers Miño and Sil in the area of the property are regulated by the Hydrological Plan of the Miño-Sil River Basin District (Chapter III of the regulations). The ecological flows set are for ordinary hydrological situations and for situations of prolonged drought.

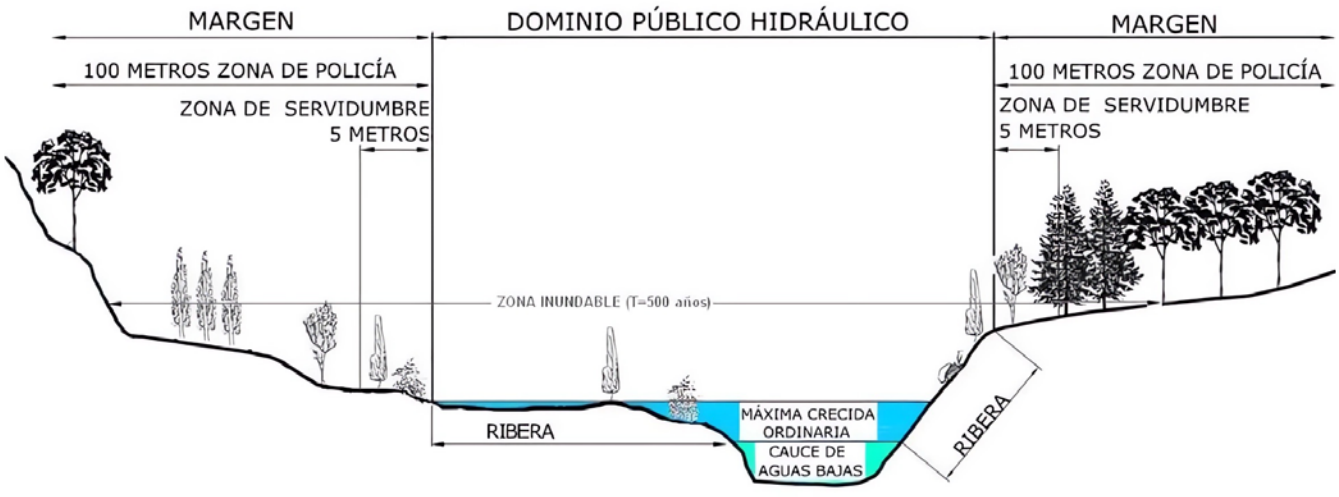


Diagram of river protection areas, public water domain and police zone.

The Galician Landscape Protection Law

Finally, it is important to note that Galicia has its own landscape protection law (Law 7/2008, of 7 July, on the protection of the Galician landscape), approved by the Parliament of the Autonomous Community, and the corresponding Regulation, approved by Decree 96/2020, of 29 May. Galicia is therefore one of the five Spanish autonomous communities with a specific landscape law, and an exceptional case from the regulatory point of view. This legal framework should be considered as an overlay or reinforcement of the protection system for the nominated property based on its declaration as a Heritage of Cultural Interest (BIC) in the category of cultural landscape. It allows for the development of specific instruments for its preservation, combining the competences of the different administrations in line with the Management Plan for the nominated property.

The autonomous community law, which adopts the definition and goals of the European Landscape Convention of the Council of Europe (Florence, 2000), ratified by Spain in November 2007, aims at the legal recognition, protection, management and planning of the Galician landscape, in order to preserve and organise the elements that make it up "within the framework of sustainable development", understanding that the landscape has a global dimension of general interest for the Galician community, as it transcends the environmental, cultural, social and economic fields. With that in mind, the law promotes the integration of the landscape in all sectoral policies that have an impact on it. For this, the Xunta de Galicia promotes coordination and cooperation between those regional ministries with competence in territorial and urban planning, environmental and cultural matters and the town councils as those responsible for the application of planning policies in their territories.

The law establishes the instruments for its development and application in order to ensure, as appropriate, the protection, management and planning of Galician landscapes. These instruments are (i) the Galician Landscape Catalogues; (ii) the Landscape Guidelines; (iii) the Landscape Impact and Integration Studies and (iv) the Landscape Action Plans. At the moment, there is a characterisation and valuation study of the "large landscape area" of the "*Ribeiras encaixadas do Miño e do Sil* (River banks wedged between the Miño and the Sil)", of which the nominated property forms part, and of the Landscape Action Plan of Ribeira Sacra approved by Order of the Regional Ministry of the Environment, Territory and Housing on 15 July 2021.

Protection arising from land-use and urban planning instruments

Law 2/2016, of 10 February, on Galician land establishes that the general management plans and the basic municipal plans must classify the municipal territory in all or some of the following categories: urban, rural settlement, land for development and rustic. In this context, it is significant and consistent with the values to be preserved in the cultural landscape that most of the land within the nominated property is classified as rural land (98.4 % of the surface area) and a small portion of it has been classified as rural settlement land (1.6 % of the surface area) by urban planning instruments. Therefore, in terms of the protection associated with planning, it should be noted that no land is classified as urban land or land for development. In the buffer zone we find a similar situation, with the exception of the urban land of the town of Castro Caldelas.

In the case of rural land, the aforementioned law establishes, among other precepts, that interventions in this area are restricted, and always in a justified manner, to possible buildings destined for residential uses linked to agricultural or livestock exploitation, and to those of an artisanal nature or of a reduced dimension that house complementary activities of first transformation, storage and packaging of products for the primary sector, provided that they are directly related to the nature, extension and destination of the farm or exploitation of the natural resource.

In the scarce rural settlement land delimited by urban planning in the nominated property, the Law foresees that it be destined for characteristic uses, complementary or compatible with residential building in the rural environment and with the needs of the population residing there. Any new building must be identified with the characteristics of the place, being aimed at consolidating the existing rural fabric. The typological, aesthetic and building characteristics and the materials, colours and finishes will be in keeping with the rural landscape and the traditional buildings of the settlement and, in any case, the necessary corrective measures will have to be adopted to guarantee the minimum visual impact on the landscape and the minimum alteration of the natural relief of the land.

5.c. Means of implementing protective measures

The means for ensuring protective measures are largely derived from the application of the thorough regulatory and legislative coverage that affects the nominated property in its multiple dimensions, as described in sections 5.b and 5.d. These arbitrate a whole set of mechanisms to put into practice the determinations related to the protection and conservation of the property, as well as the maintenance of its Outstanding Universal Value.

The Interdepartmental Commission for Ribeira Sacra, as the coordinating body for the management of the nominated property, within the scope of the competences of the different departments it incorporates, is responsible for promoting the protection measures set out in the Management Plan and will ensure their efficient implementation, under the supervision of the Directorate General for Cultural Heritage of the Xunta de Galicia.

Related to the protection of the cultural waterscape

As already mentioned in the preceding section, it is worth noting that the whole of the nominated property is located within the Ribeira Sacra Heritage of Cultural Interest (BIC), declared as such in the category of cultural landscape. This declaration implies the recognition of the highest level of protection in the field of cultural heritage, guaranteeing that all actions and uses must ensure the conservation of the integrity of the property.

The department in charge at the Xunta de Galicia, for the protection and conservation of cultural heritage is the Directorate General for Cultural Heritage, which is integrated into the structure of the Regional Ministry of Culture, Language and Youth (Conselleria de Cultura, Lingua e Xuventude). Its functions are described in Decree 146/2018 of 20 May. This Directorate General is in charge of managing and coordinating the actions of the Regional Ministry related to the artistic, historical, archaeological, palaeontological, architectural, ethnological, anthropological, industrial, scientific and technical heritage in Galicia and, in particular, those concerning the nominated property.

Its main functions include the protection, conservation, enhancement, dissemination and promotion of cultural heritage, as well as its research and transmission to future generations. It also deals with the delimitation and protection of the Pilgrims' Roads to Santiago, the legal and administrative management of cultural heritage and the promotion of archaeological activities.

In addition, the Directorate General issues reports and studies for the competent authorities, manages the conservation and restoration of cultural heritage, exercises expropriation powers when necessary, and prepares heritage-related agreements and publications. It also proposes training programmes and dissemination actions, directs the Integrated Territorial Plan for the Pilgrims' Roads to Santiago and draws up land-use planning instruments to protect their cultur-

Winter Pilgrims' Road through the Ribeira Sacra. © R. Vilanova



al values. In general, it performs any other function related to the management of cultural heritage that may be entrusted to it.

As defined in article 39 of Law 4/2016, of 5 May, on the cultural heritage of Galicia, all interventions intended to be carried out in heritages of cultural interest (BIC), as is the case of the nominated cultural landscape, as well as in its protective environment or in its buffer zone, will have to be authorised by the competent regional ministry for matters of cultural heritage. The same article states that the regional ministry responsible for cultural heritage may order the suspension of any unauthorised intervention on a heritage of cultural interest.

Furthermore, Decree 166/2018, which declares the Ribeira Sacra cultural landscape to be a Heritage of Cultural Interest (BIC), includes the specific protection regime for this cultural landscape in its annex VI. It establishes the need to draw up a specific territorial or urban planning instrument containing the necessary determinations to ensure its protection and safeguard its values, the development of which constitutes one of the actions of the Management Plan.

In the meantime, and prior to the preparation of this document, the aforementioned Annex VI establishes regulations for intervention, directly applicable and fully operational since 2018, which establish which interventions, due to their potential impact on the values of the site, must have prior authorisation from the Directorate General for Cultural Heritage, in addition to the general regime for properties forming part of the cultural landscape.

Likewise, Law 4/2016, of 5 May, on the cultural heritage of Galicia, establishes a system of penalties for administrative offences relating to the protection of the cultural heritage of Galicia, establishing that the body competent to initiate the penalty procedure may agree on provisional measures such as the suspension of the actions that constitute the alleged infringement and the seizure or sealing of materials and tools. When the activities presumed to constitute an infringement are subject to a municipal licence or prior notification to the town council, the competent regional ministry in matters of cultural heritage will inform the town council concerned so that, if appropriate, it can order the proceedings to be halted.

In addition, title XVI of the Penal Code determines offences relating to land use planning and urban development, protection of historical heritage and the environment, including the demolition or alteration of buildings uniquely protected for their historical, artistic, cultural or monumental interest and damage to property of historical, artistic, scientific, cultural or monumental value, or to archaeological, terrestrial or underwater sites.

The protection regime has been fully operational since the approval of the declaration of the cultural landscape, and there have been no problems or significant incidents related to its application. In the 2018-2023 period, the Directorate General for Cultural Heritage processed 182 files in the field of BIC, of which 174 were favourable and 8 were unfavourable.

In turn, town councils have a technical office with which the Directorate General for Cultural Heritage collaborates through continuous contact in the processing of each file and with which coordination is maintained through training and information. The town councils have technical and economic support through the Provincial Councils (Diputaciones Provinciales) of Lugo and Ourense.

Relating to environmental protection and protection of river resources

In addition, the cultural landscape includes two sites found in the Natura 2000 network. This includes almost the entire SAC of the Sil Canyon (Cañón del Sil) and part of the SAC of Os Ancares-O Caurel at the eastern end of the nominated property. The aim of the Natura 2000 Network is the maintenance or re-establishment, in a favourable state of conservation, of certain types of habitats and species, in their natural distribution areas, by means of special areas for their protection and conservation.

Council Directive 92/43/EEC of 21 May 1992, on the conservation of natural habitats and of wild fauna and flora and Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds form the backbone of the European Union's biodiversity conservation policy and constitute the regulatory framework for the Natura 2000 Network at EU level.

Pursuant to Article 149.1.23 of the Spanish Constitution, the State has competence over basic legislation on environmental protection, without prejudice to the powers of the Autonomous Communities being able to establish additional protection rules. In accordance with Article 27.30 of the Statute of Autonomy of Galicia, the Galician Autonomous Community has exclusive competence for additional regulations on environmental protection under the terms of Article 149.1.23 of the Spanish Constitution.

The competent regional ministry for the conservation of natural heritage is responsible for establishing the necessary conservation measures in special areas of conservation and special protection areas for birds that respond to the ecological requirements of the natural habitat types and species present in such areas, which involve: a) Appropriate management plans or instruments, site-specific or integrated into other development plans; b) Appropriate regulatory, administrative or contractual measures.

The Galician Natura 2000 Network Master Plan is the basic instrument for the planning, development and management of the network of Special

Esther Teijeiro, organic viticulturist, taking care of her vines in Pincelo. © R. Vilanova



Areas of Conservation (SACs) and Special Protection Areas for Birds (SPAs). This is a management plan for the natural resources of all areas included in the Galician Natura 2000 Network. The Plan defines a programme of measures aimed at harmonising the conservation of habitats and species with the customs and uses necessary to guarantee the socioeconomic development of the municipalities included in its scope of application.

The Master Plan of the Galician Natura 2000 Network pinpointed most of the protected natural space included in Ribeira Sacra in Zone 2 (Conservation Area), which includes territories with a high and medium conservation value. In these areas, non-traditional activities that may lead to a decrease or reduction of the conservation status of habitats and populations of flora and fauna species of interest for conservation are regulated, with the fundamental aim of achieving the orderly use of natural resources. There is also a small area pinpointed in Zone 3 (General Use Area), which must be able to absorb most of the activities, in order to reduce the pressure of these on areas that have habitats or species of high fragility.

The Master Plan of the Galician Natura 2000 Network classifies uses as permitted, subject to authorisation or prohibited, depending on the aforementioned zoning. Permitted uses are those that are compatible with the goals of the SAC and SPA



Os Peares river beach. © D. Estévez

declaration and can therefore be developed without special limitations.

With the aim of clarifying the permitted uses on land dedicated to agricultural activity in a Natura 2000 Network area, the joint Instruction of the regional Directorate General for Nature Conservation and the Directorate General for Forest Management and Production, dated 26 June 2016, seeks to clarify which uses are permitted on land dedicated to agricultural activity in Natura 2000 Network areas. In general terms, this instruction recognises the marked traditional nature of primary sector activities in rural areas and their relationship with the rational use of resources, considering that this activity is compatible with the conservation of natural areas.

The allowed uses do not require authorisation from the regional body responsible for nature conservation, without prejudice to other sectoral authorisations. The body responsible for the authorisation of permitted uses in Natura 2000 Network areas is the regional Directorate-General for the Conservation of Natural Heritage. It exercises this competence in the case of interventions that affect two provinces and those subject to environmental impact.

At present, the respective territorial heads of the Regional Ministry of Environment and Territorial Planning are responsible for issuing the rest of the authorisations, after the report of the respective services for nature conservation.

Protection of rivers and the public water domain

The State is responsible for the hydrological planning to which all actions on the public water domain must be subject.

The entire area of the nominated property is included in the management area of the Miño-Sil Hydrographic Confederation, constituting the central part of this demarcation, whose current hydrological planning is the Hydrological Plan of the Miño-Sil Hydrographic Demarcation (2022-2027), in which the limitations on uses in the police and easement areas are implemented and the authorisation procedure is established.

Any private use of water and the use or exploitation by private individuals of watercourses or property located in them requires an administrative concession Chapter 5 of the aforementioned Hydrological Plan establishes and regulates the regime for “ecological flows” of the river Miño and Sil, set both for ordinary hydrological situations and for situations of prolonged drought. These flows allow the functionality and structure of the aquatic ecosystems and associated terrestrial ecosystems to be sustainably maintained, contributing to achieving good ecological status or potential in both rivers. It is important to note that the ecological flows constitute, according to current water legislation, a prior restriction to be considered in the exploitation system and an environmental goal to be met. The Hydrographic Confederation is responsible for monitoring and inspecting the ecological flows through its river guards.

No type of construction may be carried out in easement areas unless it is deemed suitable or necessary for the use of the public water domain or for its conservation and restoration. The buildings that are authorised will be executed in the least unfavourable conditions for the easement itself and with the minimum occupation of it, so much in its ground as in its built area. The effectiveness of the easement must be guaranteed, seeking its continuity or alternative location and communication between the areas of its layout that are limited or severed by the easement.

In the watercourse police area (100 metres wide measured horizontally from the riverbed), any use or activity that is an obstacle to the current when there are floods or that may cause degradation or deterioration of the condition of the body of water and the aquatic ecosystem is subject to supervision and protection.

At present, a Navigation and Mooring Management Plan for Ribeira Sacra, promoted by the Hydrographic Confederation, a pioneer in Spain, is being processed, which aims to respond to the different uses from the perspective of conservation and the good condition of the waters.

Concerning the general protection of the landscape

The Institute of Territorial Studies dependent on the Regional Ministry of the Environment and Climate Change of the Xunta de Galicia, has been entrusted with the functions of planning, protection and management of the landscape, which includes the implementation of specific instruments and the functions of training and dissemination in landscape matters.

In addition to this body, the Advisory Board to the Galician Landscape was created in 2018, whose regulation corresponds to Decree 19/2018 of 1 February. This is a technical and advisory body made up of administrations and experts involved in landscape policies and serves as a forum for the pooling of sectoral initiatives.

Given the uniqueness of the nominated property and its landscape values, this organisation has promoted a Landscape Action Plan and a Landscape Pact in Ribeira Sacra, presented in section 5i of this nomination dossier.

Related to land use and urban planning

Article 135 of Law 2/2016 of 10 February, on Galician land, establishes that the owners of all types of land, constructions, buildings and installations must comply with the requirements established in the general management plans and municipal basic plans in accordance with the established land classification. In the case of the nominated property, most of it corresponds to rustic land (94.4%) and a small proportion to rural settlement land (1.6%).

This law also governs the administrative acts of municipal competence of the urban planning licence and prior notification, the purpose of which is to submit building and land use acts to municipal control, taking into account their categories. The Law establishes that the following acts are subject to a municipal licence, without prejudice to the authorisations that may have been granted in accordance with the applicable sectoral legislation:

- The acts of building and use of the land and subsoil which, in accordance with the general regulations on building planning, require a building works project.
- Interventions on properties declared to be of cultural interest or listed due to their unique cultural, historical, artistic, architectural or landscape characteristics or values.
- Demolitions, except those deriving from resolutions of proceedings for the restoration of urban planning legality.
- Earth retaining walls, as established by regulations.
- Parcelling, segregation or other acts of division of land in any class of land, when they do not form part of a reparcelling project.
- The implementation of any installation for residential use, whether provisional or permanent.
- The felling of masses of trees or shrub vegetation on land incorporated into urban transformation processes and, in any case, when such felling is derived from legislation protecting the public domain.

The remaining acts of building and use of land and subsoil not subject to licence, are subject to the system of municipal intervention of prior communication.

Fishing in Os Peares. © D. Estévez



5.d. Existing plans related to municipality and region in which the nominated property is located

In addition to the Management Plan for the nominated property (see Section 5.e and Annex II), this section lists the various plans, planning instruments, guidelines and strategies that affect the nominated property.

The attached summary list is structured in five main areas: cultural heritage, landscape and natural heritage, economic development, territorial and urban planning and sustainable tourism. The list in each section begins with the plans that are specific to the nominated property and its buffer zone, duly marked with an asterisk (*), which are those that will be listed in section 7.b. Each section continues with a mention of the regional and national plans that directly or indirectly affect this territory, providing a more global context of reference.

CULTURAL HERITAGE				
Planning and management instrument	**Promoting or competent entity**	**Approval date**	**Scope of the nominated property**	**Purpose**
Conservation master plans for historic Paradors (*)	Spanish Tourism Board (Turespaña)	2024	Santo Estevo Parador	Refurbish buildings declared Heritage of Cultural Interest (BIC) that form part of the Parador network
Guide of good practices for actions in the Caminos of Santiago (Pilgrims' Roads)	General Directorate of Cultural Heritage - Regional Ministry for Culture, Language and Youth	2016	Scope of the nominated property through which the Winter Pilgrims' Road runs	Facilitate the procedures and methodologies for interventions in the field of the Pilgrims' Roads to Santiago
Other related plans at regional and national level				
Galician Network for Cultural Dynamisation in Rural Galicia	Regional Ministry for Culture, Language and Youth	In process	The entire area of the nominated property (Galicia)	Promote collaboration between entities and administrations
Culture Generation Plan (Plan Xeración Cultura) 2023	Regional Ministry for Culture, Language and Youth	2023	The entire area of the nominated property (Galicia)	Strengthen the cultural sector
National Plan for Industrial Heritage	Ministry of Culture	2001 (revised in 2016)	The entire area of the nominated property (Spain)	Preserve and value industrial heritage
National Plan for the Safeguarding of Intangible Cultural Heritage	Ministry of Culture	2016	The entire area of the nominated property (Spain)	Preserve and value intangible heritage
National Plan for Traditional Architecture	Ministry of Culture	1990	The entire area of the nominated property (Spain)	Preserve and value popular architecture
National Plan for Abbeys, Monasteries and Convents	Ministry of Culture	2015	The entire area of the nominated property (Spain)	Establish coordinated strategies for knowledge, protection, research and conservation of this heritage site
National Archaeology Plan	Ministry of Culture	In process	The entire area of the nominated property (Spain)	Preserve and value archaeological heritage
National Heritage Education Plan	Ministry of Culture	2013 (revised in 2024)	The entire area of the nominated property (Spain)	Promote research, create networks and form collectives in the transmission of heritage

CULTURAL HERITAGE				
Planning and management instrument	**Promoting or competent entity**	**Approval date**	**Scope of the nominated property**	**Purpose**
National Preventive Conservation Plan	Ministry of Culture	2011	The entire area of the nominated property (Spain)	Strengthen the conservation of cultural heritage
National Research Plan for the Conservation of Cultural Heritage: Observatory for Conservation Research	Ministry of Culture	2011	The entire area of the nominated property (Spain)	Promote public access to cultural property without compromising its preservation for future generations
National Cultural Landscape Plan: Spanish Observatory of the Council of Europe's Landscape Convention	Ministry of Culture	2012	The entire area of the nominated property (Spain)	Establish appropriate mechanisms for the identification, protection and management of the Cultural Landscape

LANDSCAPE, RIVERS AND NATURAL HERITAGE				
Planning and management instrument	**Promoting or competent entity**	**Approval date**	**Scope of the nominated property**	**Purpose**
Hydrological Plan 2022-2027 Miño-Sil basin (*)	Miño-Sil Hydrographic Confederation	2023	Affects the entire area of the nominated property	Ensure the good condition and adequate management and protection of the public water domain and waters
Ribeira Sacra Landscape Action Plan (*)	General Directorate of Natural Heritage - Regional Ministry of Environment and Climate Change	2021	Scope of the nominated property coinciding with routes of landscape interest 16 and 17 as they pass through AEIP-05-03 Ribeira Sacra	Improve the landscape and achieve landscape quality goals.
Management Plan for the Ribeira Sacra and Serras do Oribio and Courel Biosphere Reserve (*)	General Directorate of Natural Heritage - Regional Ministry of Environment and Climate Change	2021	Scope of the nominated property overlapping with the Ribeira Sacra and Serras do Oribio and Courel Biosphere Reserve	Plan and manage the Ribeira Sacra territory
Master Plan for the Galician Red Natura 2000 (*)	General Directorate of Natural Heritage - Regional Ministry of Environment and Climate Change	2014	Scope of the nominated property overlapping with the Cañón del Río Sil and Ancares-Courel SACs	Plan and manage Natura 2000 Network sites
Recovery plan for the European pond turtle *(Emys orbicularis* L.) (*)	General Directorate of Natural Heritage - Regional Ministry of Environment and Climate Change	2013	Nominated property (Potential breeding area)	Recovery of the European pond turtle in large areas such as the basin of the river Miño and the river Sil.
Galician catalogue of endangered species (*)	General Directorate of Natural Heritage - Regional Ministry of Environment and Climate Change	2007 (revised in 2014)	Threatened species in the area of the nominated property (Galicia)	Protect flora and fauna and their habitats
Galician catalogue of singular trees (*)	General Directorate of Natural Heritage - Regional Ministry of Environment and Climate Change	2015 (revised in 2024)	Singular trees in the nominated property	Protect species or taxonomic units with extraordinary or remarkable features
Other related plans at regional and national level				
PLADIGA (Plan for the prevention and defence against forest fires in Galicia)	Regional Ministry for Rural Environment	2007 (Revision 2023)	The entire area of the nominated property (Galicia)	Defend forest land and forest influence areas
Galician Landscape Strategy	Regional Ministry for the Environment and Climate Change	2016	The entire area of the nominated property (Galicia)	Protection of the landscape

LANDSCAPE, RIVERS AND NATURAL HERITAGE				
Planning and management instrument	**Promoting or competent entity**	**Approval date**	**Scope of the nominated property**	**Purpose**
Galician Climate Change and Energy Strategy 2050	Regional Ministry for the Environment and Climate Change	2019	The entire area of the nominated property (Galicia)	Mitigate and adapt to climate change
Galicia's green infrastructure strategy	Regional Ministry for the Environment and Climate Change	In process	The entire area of the nominated property (Galicia)	Ecological connectivity and ecosystem services
National Strategy for Green Infrastructure and Ecological Connectivity and Restoration	Ministry for Ecological Transition and Demographic Challenge	2021	The entire area of the nominated property (Spain)	Ecological connectivity and ecosystem services

ECONOMIC DEVELOPMENT				
Planning and management instrument	**Promoting or competent entity**	**Approval date**	**Scope of the nominated property**	**Purpose**
Model village (*)	Galician Agency for Rural Development - Regional Ministry for Rural Affairs	2021	Municipalities of A Pobra de Brollón and Sober	Reclamation of agricultural land surrounding settlements
Protected Designations of Origin (PDO) and Protected Geographical Indications (PGI) (*)	Galician Food Quality Agency - Regional Ministry of Rural Affairs	-	Scope of the nominated property overlapping with the PDO. Ribeira Sacra and with PGI such as Aguardientes de Galicia, Ternera de Galicia, Castaña de Galicia or Miel de Galicia	Regular monitoring and disclosure of product characteristics.
Other related plans at regional and national level				
PEPAC 2023-2027 - Strategic Plan for the CAP	Regional Ministry for Rural Affairs	2022	The entire area of the nominated property (Spain)	Sustainable rural development based on the primary sector
Strategic programme for chestnut and chestnut production	Regional Ministry for Rural Affairs	2022	The entire area of the nominated property (Galicia)	Promote chestnut production and trade
Strategy of economic, territorial and tourist revitalisation of the wine regions of Galicia.	Regional Ministry for Rural Affairs	2021	Scope of the nominated property overlapping with the PDO Ribeira Sacra	Revitalise the wine-related sectors
Network of Entrepreneurship and Employment Support Hubs	Regional Ministry of Employment, Trade and Emigration	2022	The entire area of the nominated property (Galicia)	Support and promotion of entrepreneurship
Strategic plan for agricultural training in Galicia	Galician Food Quality Agency - Regional Ministry of Rural Affairs	2020	The entire area of the nominated property (Galicia)	Offer training to strengthen the agricultural sector and sustainable rural environment

LAND USE AND URBAN PLANNING				
Planning and management instrument	**Promoting or competent entity**	**Approval date**	**Scope of the nominated property**	**Purpose**
General Municipal Development Plan for A Peroxa (*)	A Peroxa Town Council	1999	Scope of the nominated property in the municipality of A Peroxa	Define and regulate the urban planning of the municipality
General municipal development plan for A Teixeira (*)	Town Council of	2019	Scope of the nominated property in the municipality of A Teixeira	Define and regulate the urban planning of the municipality

LAND USE AND URBAN PLANNING				
Planning and management instrument	**Promoting or competent entity**	**Approval date**	**Scope of the nominated property**	**Purpose**
General Municipal Development Plan for Castro Caldelas (*)	Town Council of	1999	Scope of the nominated property in the municipality of Castro Caldelas	Define and regulate the urban planning of the municipality
General Municipal Development Plan for Nogueira de Ramuín (*)	Town Council of	2001	Scope of the nominated property in the municipality of Nogueira de Ramuín	Define and regulate the urban planning of the municipality
General Municipal Development Plan for Ribas de Sil (*)	Ribas de Sil Town Council	2009	Scope of the nominated property in the municipality of Ribas de Sil	Define and regulate the urban planning of the municipality
General Municipal Development Plan for Sober (*)	Town Council of Sober	2013	Scope of the nominated property in the municipality of Sober	Define and regulate the urban planning of the municipality
General Urban Development Plan for Chantada (*)	Chantada Town Council	1985	Scope of the nominated property in the municipality of Chantada	Define and regulate the urban planning of the municipality
Subsidiary Planning Regulations for Carballedo (*)	Carballedo Town Council	1991	Scope of the nominated property in the municipality of Carballedo	Classify and regulate land use
Subsidiary Planning Regulations for Monforte de Lemos (*)	Monforte de Lemos Town Council	1985	Scope of the nominated property in the municipality of Monforte de Lemos	Classify and regulate land use
Subsidiary Planning Regulations for O Saviñao (*)	O Saviñao Town Council	1983	Scope of the nominated property in the municipality of O Saviñao	Classify and regulate land use
Subsidiary Planning Regulations for Parada de Sil (*)	Parada De Sil Town Council	1985	Scope of the nominated property in the municipality of Parada de Sil	Classify and regulate land use
PBM - Pantón Municipal Basic Plan (*)	General Directorate for Land Use and Town Planning - Regional Ministry for the Environment and Climate Change	2018	Scope of the nominated property in the municipality of Pantón	Provide basic planning for populations of less than 5,000 inhabitants
PBM - Municipal Basic Plan of A Pobra do Brollón (*)	General Directorate for Land Use and Town Planning - Regional Ministry for the Environment and Climate Change	2018	Sphere of the nominated property in the municipality of A Pobra do Brollón	Provide basic planning for populations of less than 5,000 inhabitants
ARI - Area of Integral Rehabilitation specific to the Ribeira Sacra (*)	Galician Housing and Land Institute - Regional Ministry of Housing and Infrastructure Planning	2020	The entire area of the Nominated Property	Rehabilitate urban surroundings
ARI - Integral Rehabilitation Area specifically for the Pilgrims' Road to Santiago de Compostela (*)	Galician Housing and Land Institute - Regional Ministry of Housing and Infrastructure Planning	2010 - 2019	Scope of the nominated property in the municipality overlapping with the Winter Pilgrims' Road	Rehabilitate urban surroundings

LAND USE AND URBAN PLANNING				
Planning and management instrument	**Promoting or competent entity**	**Approval date**	**Scope of the nominated property**	**Purpose**
ARI - Area of Integral Rehabilitation " Rural Council of Sober " (*)	Galician Housing and Land Institute - Regional Ministry of Housing and Infrastructure Planning	2011	Scope of the nominated property in the municipality of Sober	Rehabilitate urban surroundings
Special Plan for Protection, Infrastructures and Provisions of the Local Consortium of the Peares (*)	Advisory Board on Town and Country Planning and Urban Development	2019	Scope of the nominated property in the municipalities of Pantón, Carballedo, A Peroxa, Nogueira de Ramuín	Determine on land classified to preserve the environment and the landscape, ordered infrastructures and community facilities.
Other related plans at regional and national level				
Galician Spatial Planning Guidelines (DOT)	General Directorate for Land Use and Town Planning - Regional Ministry for the Environment and Climate Change	2011	The entire area of the nominated property (Galicia)	Guide planning and guide interventions with an impact on the territory
Autonomic basic plan	General Directorate for Land Use and Town Planning - Regional Ministry for the Environment and Climate Change	2018 (Updated in 2023)	The entire area of the nominated property (Galicia)	Promote responsible and sustainable land management
Galician Public Transport Plan	Regional Ministry for Housing and Infrastructure Planning	2019	The entire area of the nominated property (Galicia)	Establish a sustainable and efficient public road transport model

SUSTAINABLE TOURISM				
Planning and management instrument	**Promoting or competent entity**	**Approval date**	**Scope of the nominated property**	**Purpose**
PST - Tourism Sustainability Plan in Ribeira Sacra. Commitment to sustainable mobility and continuous improvement (*)	Ribeira Sacra Tourism Consortium	2023	The whole area of the nominated property (Ribeira Sacra Geodestination)	Improve competitiveness at destination and facilitate green and digital transition.
PST - Ribeira Sacra Sustainability Plan (*)	State Secretariat for Tourism, Galician Tourism Agency and Ribeira Sacra Tourism Consortium	2020	The whole area of the nominated property (Ribeira Sacra Geodestination)	Improve competitiveness at the destination and promote safe and sustainable tourism
Other related plans at regional and national level				
Plan for the Modernisation and Competitiveness of the Tourism Sector	Ministry of Industry and Tourism	2022	The entire area of the nominated property (Spain)	Improve the current model
Master Plan for the Pilgrims' Roads to Santiago in the Autonomous Community of Galicia 2022 - 2027	Galician Tourism Agency	2021	Nominated property (Winter Pilgrims' Road)	Analyse current status and define strategic lines
Master Plan 2021-2023	Galician Tourism Agency	2021	The entire area of the nominated property (Galicia)	Improve national and international positioning in the aftermath of the COVID-19 crisis

5.e. Property management plan or other management system

The nominated property has a Management System that includes an effective Management Plan and governance system adapted to the characteristics and needs of the cultural landscape, which have been consolidated throughout the nomination process. Both establish the unified management of all the components of the property, with a vision for the future and sufficient capacity to guarantee the preservation of its Outstanding Universal Value over time and to face possible threats and vulnerabilities. The Ribeira Sacra Waterscape Management Plan itself is developed in detail in Annex II of this nomination dossier.

The Management System and Management Plan respond to the requirements expressed in the Practical Guidelines for the Implementation of the World Heritage Convention. The Management Plan is also consistent with the policies adopted by the World Heritage Committee, which affect any management plan or system. These include, among others, the World Heritage-focused Climate Action Policy Paper (2023), the Strategy for Disaster Risk Reduction at World Heritage properties (2007), the World Heritage Strategy for Capacity Building (2011) and the Policy Paper for the Integration of a Sustainable Development Perspective into World Heritage Convention Processes (2015).

The Management Plan has also been inspired by the experiences and lessons learned in World Heritage sites and the recommendations set out in the various supporting documents of the World Heritage Centre or UNESCO itself, such as "World Heritage Cultural Landscapes: A Handbook for Conservation and Management" (2009) or "Enhancing our Heritage Toolkit 2.0 (EoH 2.0): Assessment of the effectiveness of the management of World Heritage properties and other heritage sites" (2023).

Governance of the nominated property

The governance system adopted ensures that all actors involved in one way or another with the nominated property consider themselves as participants and leading players in its management. The management structure, specifically established as a governance system for the nominated property, is therefore based on a participatory approach involving all stakeholders and actors involved in this multifaceted cultural waterscape, under the coordination and direction of the body responsible for its direct management, the Xunta de Galicia, which has exclusive powers over the heritage in question and, more specifically, Regional Ministry of Culture, Language and Youth.

Decree 146/2024, of 20 May, establishing the organic structure of the Consellería de Cultura, Lingua e Xuventude (Regional Ministry of Culture, Language and Youth), stipulates in Article 1 that this regional ministry is the department of the Xunta de Galicia to which the issues related to the protection and pro-motion of the cultural heritage of Galicia correspond; and Article 14 attributes to the Dirección Xeral de Patrimonio Cultural (Directorate General of Cultural Heritage) the duties of management and coordination of the actions of the Regional Ministry in matters of cultural heritage. By virtue of these competences, and considering that this territory was declared a Heritage of Cultural Interest (BIC), as already de-scribed in section 5.b of the nomination dossier, the management and coordination of the issues related to the management of the nominated property falls to the Dirección Xeral de Patrimonio Cultural (Directorate General of Cultural Heritage) of the Xunta de Galicia.

In order to address the challenges related to the management of this area and the maintenance of its values in a participatory manner, the *Comisión Interdepartamental de Ribeira Sacra* (Interdepartmental Commission of Ribeira Sacra) was created in 2020, by virtue of Decree105/2020 of the Regional Ministry of Culture and Tourism of the Xunta de Galicia, bringing together the main stakeholders of the nominated property. The aim of the Interdepartmental Commission of Ribeira Sacra is to coordinate the implementation of integrated policies and actions that will improve the state of conservation and the conditions for the appraisal and dissemination of the values and attributes of the cultural landscape, as well as the well-being of the local communities that support it, and whose action is the true creative force of the landscape and its preservation.

Meeting with municipal technicians held on October 15, 2019. © M. Crecente





Constitutive meeting of the Interdepartamental Commission (November 5, 2020)



Meeting with local representatives (July 23, 2019). © M. Crecente

The Interdepartmental Commission of Ribeira Sacra thus becomes an essential part of the management system of the nominated property, fulfilling the functions of being the channel for the active participation of the local communities of the Ribeira Sacra cultural landscape and the representative associations of civil society and, at the same time, acting as a collegiate body for the coordination of the sectorial actions of the different departments of the public administrations in the area, in all issues concerning the management of the values and attributes of the nominated property. In this way, the Interdepartmental Commission is the body for participation and coordination of the nominated property and its Management Plan.

According to the decree of constitution, the functions assigned to the Interdepartmental Commission of Ribeira Sacra are as follows:

a) To present the initiatives of the different representative bodies and entities in the territory for an effective management with guarantees for the conservation of its Outstanding Universal Value.

b) To follow the strategies, plans, policies and actions of the Xunta de Galicia and representative bodies and entities in the Ribeira Sacra cultural landscape and to monitor their results.

c) To coordinate and promote the actions of the Xunta de Galicia in this area, without prejudice to the exercise of the competences of each department.

d) To support and promote the lines of action for the protection, conservation, research and dissemination of the values of the cultural landscape by the bodies and entities representing Ribeira Sacra in its territory, and especially those promoted jointly by the municipal entities through the Tourism Consortium of Ribeira Sacra.

e) To propose the necessary measures for the homogenisation, development and application of the regulations in force in relation to the area.

f) To draw up proposals to be submitted to the different public administrations, public and private entities, as well as individuals in relation to the situation and potential of Ribeira Sacra as a cultural landscape.

g) To adopt a periodic report on the status of the cultural landscape.

The Interdepartmental Commission of Ribeira Sacra is made up of representatives of local bodies and entities with interests in the territory, both public and private, covering the broad spectrum of actors involved in the nominated property, including:

Representatives of the administrations and public bodies concerned:

- The town councils that converge in the area (Carballedo, Castro Caldelas, Chantada, Esgos, Monterramo, Nogueira de Ramuín, Pantón, Parada de Sil, Paradela, Monforte de Lemos, A Peroxa, A Pobra do Brollón, A Pobra de Trives, Portomarín, Quiroga, Ribas de Sil, San Xoán de Río, O Saviñao, Sober, Taboada, A Teixeira and Xunqueira de Espadanedo, as well as the town councils of Bóveda, Manzaneda and Chandrexa de Queixa);
- The Provincial Councils of Lugo and Ourense;
- The Miño-Sil Hydrographic Confederation;
- Spanish Ministry of Culture, as a State Party;
- The other related regional ministries of the Xunta de Galicia on relevant issues that affect the property: environment, energy, mobility or rural environment.

Representatives of local entities and associations:

- The parish communities or Council of Parishes that make up the cultural landscape (neighbourhood representation).
- The Ribeira Sacra Rural Association;
- The Ribeira Sacra Tourism Consortium;
- Regulatory Board of the Denomination of Origin of Ribeira Sacra;
- The bishoprics of Lugo and Ourense;
- NGOs in the field of cultural heritage and local development.

The presidency of the Interdepartmental Commission of Ribeira Sacra is held by the head of the regional ministry responsible for cultural heritage. The members of the Commission are also the heads of each of the regional ministries responsible for the environment, territory, housing, infrastructures, mobility, energy, economy, employment, industry and the rural environment of the Xunta de Galicia. The Interdepartmental Commission of Ribeira Sacra will operate in plenary session and will also have a Permanent Commission in charge of the executive resolution of the agreements.

The governance system of the nominated property is complemented by the Scientific Commission of the Ribeira Sacra Waterscape. The Scientific Commission has a consultative nature and will focus its work on all issues related to the preservation of the nominated property and its attributes, as well as contributing knowledge and expertise to the various challenges associated with management as they arise. Given the complexity of the property, experts from the various disciplines involved in understanding the property are represented, including members of academia, research centres and agencies involved in the issues involved in the preservation of the nominated property. This is composed of local, national and international experts.

Meeting of the Council of Parishes held on March 9, 2024. © X. Gago



Outline of the governance system of the Ribeira Sacra Waterscape

RESPONSIBLE ENTITY

Directorate General of Cultural Heritage
Regional Ministry of Culture, Language and Youth
Xunta de Galicia (Regional Government of Galicia)

↓

PARTICIPATORY MANAGEMENT BODY

Interdepartmental Commission of Ribeira Sacra

↑ ↑

Public administrations and public entities	Social and private entities
– Town Councils – Provincial Councils – Miño Sil Hydrographic Confederation – Ministry of Culture, as a State Party – Other relevant regional ministries of the Xunta de Galicia	– Council of Parishes (neighbourhood representation) – Ribeira Sacra Rural Association – Ribeira Sacra Tourism Consortium – Regulatory Board of the Denomination of Origin of Ribeira Sacra – Bishoprics of Lugo and Orense – Local NGOs

Table 5.e.1

The Management Plan

The Management Plan for the Ribeira Sacra Cultural Waterscape is the instrument with which the Directorate General of Cultural Heritage of the Xunta de Galicia is equipped to exercise its responsibility in relation to the nominated property, guaranteeing its appropriate management in the coming years. The Management Plan is developed in detail in Annex II of this nomination dossier.

The fundamental aim of the Management Plan is to establish the necessary mechanisms to ensure the maintenance and enhancement of the Outstanding Universal Value of the nominated property as a whole, its conditions of authenticity and integrity and its state of conservation, as well as to strengthen the relationship of this heritage with the community. The plan is based on the principle of understanding that the management of the values and attributes of the cultural landscape must be conducted in a comprehensive, sustainable, effective and socially relevant manner.

Strategic goals

- To conserve, maintain and increase the Outstanding Universal Value of the Ribeira Sacra Waterscape related to the richness of its heritage and landscape values, so that it is the basis for the well-being and sustainable development of the various communities it affects.
- To ensure the effective protection and safeguarding of the attributes and values of the cultural landscape.
- To provide a comprehensive management system for the cultural landscape and its associated heritage that enables the unification of policies and actions, the rationalisation of financial resources and increases the effectiveness and efficiency of the human and financial resources available.
- To coordinate the activities of management and promotion of the territory among the different agents involved: public administrations, private entities and local population.
- To establish common guidelines and criteria for action in the conservation, restoration and maintenance of heritage and landscape, prioritising prevention and ensuring the Outstanding Universal Value of the property.
- To consolidate and improve participation and social awareness, especially of its inhabitants, to preserve the cultural values and landscapes of the Ribeira Sacra.
- To promote the socio-economic revitalisation of the Ribeira Sacra while balancing the conservation of the activities that have shaped the cultural landscape throughout history, with a focus on sustainability.
- To promote sustainable tourism based on the existing heritage, as well as the development of responsible tourism products anchored in the uniqueness of the attributes and values present in this water cultural landscape, enhancing the Outstanding Universal Value of the property and the sustainable use of resources.
- To keep alive the traditions, techniques and useful knowledge that have contributed to forging the identity of this territory, as an expression of a harmonious model based on the culture of water that inspires present and future generations.
- To promote research, dissemination and knowledge of the nominated property.

These goals transversally contribute to the UN's Sustainable Development Goals (SDG).

Programmes and actions

The Ribeira Sacra Waterscape Management Plan is divided into seven programmes that include different actions of vital importance for the management, development and protection of the territory, the landscape and its cultural heritage, which enable the nominated strategic goals to be achieved in a cross-cutting manner.

The set of programmes includes a battery of actions of vital importance for the management and interpretation of the cultural landscape in accordance with the nominated strategic goals and which complement the protection measures already established in the declaration of the area as a Heritage of Cultural Interest (BIC), in the category of cultural landscape, by the Xunta de Galicia.

Each of the data sheets describes the territorial scope of development of the action, the description justifying the action, the entity responsible for the management and corresponding investment, the measures for the implementation of the action, as well as the forecast of the annual periods in which it will be implemented, together with the monitoring indicators. Each of the actions is classified according to its state of development.

The Management Plan and the different programmes will be subject to a review every two years. The specific actions taken into account in the different programmes are initially established for a four-year horizon, without prejudice to any reorientations or additions that may occur in the revisions and updates of the Management Plan.

The programmes included in the Management Plan are as follows:



CULTURAL LANDSCAPE AND TERRITORY PROGRAMME

This addresses the complete set of actions aimed at the improvement and maintenance of all the elements and processes, including the unique built elements and traditional river farming systems that shape the cultural landscape. It also deals with the improvement of the instruments of territorial planning and the management of the physical environment in accordance with the requirements and values of the cultural landscape, and in accordance with the Strategic Action Plan for the Ribeira Sacra, of the Regional Ministry of the Environment and Territory.



PROGRAMME FOR THE PRESERVATION OF WATER HERITAGE

This focuses on the restoration and conservation of the historical hydraulic end water heritage, both natural and cultural, which includes mills, water mills and fulling mills, as well as the extensive catalogue of heritage elements associated with water management.



PROGRAMME FOR THE PRESERVATION OF THE INTANGIBLE HERITAGE OF WATER

Aimed at reinforcing the identity and preservation of the elements that define a living waterscape, including traditions, knowledge, festivals, crafts and other aspects such as toponymy.



PROGRAMME FOR THE CONSERVATION OF NATURAL VALUES AND THE ENVIRONMENT

This focuses on issues associated with the conservation of biodiversity, especially in riverbeds and escarpments, and on issues associated with the environmental quality of the territory, including the environmental and vegetation cover restoration actions of the Landscape Action Plan of Ribeira Sacra.



SUSTAINABLE ECONOMIC DEVELOPMENT PROGRAMME

This addresses the promotion of local productions and quality economies associated with the values and identity of the cultural landscape, as well as support for its image and marketing.



SUSTAINABLE TOURISM MANAGEMENT PROGRAMME

Focused on the attributes and values of the nominated property, it addresses the qualification and diversification of the responsible tourism offer and the public use of the space, and includes actions oriented towards sustainable land and water mobility, as well as the improvement and integration of visitor infrastructures to get to know the property, including viewpoints, museums and interpretation centres, both public and private.



AWARENESS, COMMUNICATION AND PARTICIPATION PROGRAMME

This focuses on the promotion of scientific research on the different values of the property, the development of educational projects centred on the cultural landscape, as well as the training and education of local agents. It also addresses the maintenance of the Interdepartmental Commission, awareness-raising campaigns aimed at the population, and communication and dissemination campaigns on the outstanding universal value of the nominated property.

5.f. Sources and levels of finance

The available sources of finance for the nominated property are diverse, with the Regional Administration being the main promoter of the declaration and responsible for the direct funding of multiple actions promoted from different areas.

It should be recalled that a substantial part of the nominated property's surface area is privately owned. Most of these are active farms, so maintaining the good conditions for the landscape environment is the responsibility of the owners or managers of the properties. This includes aspects such as the maintenance of crop terraces or of many elements associated with the cultural heritage of water.

The different sources of public funding received by the nominated property, from European, national and regional funds, are detailed below.

European funding

Given the rural nature of Ribeira Sacra, the European Agricultural Fund for Rural Development (EAFRD) is a major source of funding, linked above all to the rural development measures of the CAP Strategic Plan (PEPAC in Spanish), which funds a large part of the actions related to the Sustainable Economic Development Programme.

On the other hand, reference should be made to the Galicia ERDF Operational Programme 2024-27, which will finance part of the interventions for the restoration and enhancement of cultural properties included in PPC-04 Action, the responsibility of the Directorate General for Cultural Heritage.

National funding

The actions, for which the Ribeira Sacra Tourism Consortium is responsible, will be funded by the Extraordinary Programme of Tourism Sustainability Plans in Destinations of the State Secretariat for Tourism of the Ministry of Industry and Tourism, within the framework of the Recovery, Transformation and Resilience Plan (RTRP). This Plan has a total budget of 3 million euros and is to be developed between 2024 and 2026.

The action to improve mobility, mainly river zero-emission mobility, in the territory is co-financed, in part, with funds from the Ministry for Ecological Transition and the Demographic Challenge, through grants for the implementation of incentive programmes linked to electric mobility (MOVES III) within the framework of the RTRP.

On the other hand, some of the grants included in MAN-04 Action on efficiency and ecological energy self-consumption developed by INEGA is, to a large extent, funded by the RTRP.

Regional funding

All the departments of the Xunta de Galicia contribute financially to development actions in the Ribeira Sacra territory within the framework of their competences:

From the perspective of the conservation and management of the cultural landscape, the main source of funding comes from the Regional Ministry for Culture, Language and Youth, through the Directorate General of Cultural Heritage as the main party responsible for the site and the development of its management plan.

Also noteworthy is the funding provided by the Presidency of the Xunta de Galicia, through the Galician Tourism Agency amounting to €4,600,000; and the Regional Ministry of Housing and Infrastructure Planning amounting to €3,986,121.

Another notable source of funding is the Miño-Sil Hydrographic Confederation, which is responsible for actions in the public water domain.

In total, funding for the maintenance of the nominated property and the development of the Ribeira Sacra Waterscape Management Plan amounts to €34,832,821, from European, national and regional funds that will guarantee the adequate execution of the measures and actions foreseen in the plan, with the aim of preserving the exceptional universal value of the Ribeira Sacra territory.

5.g. Sources of expertise and training in conservation and management techniques

In these matters, the Ribeira Sacra cultural waterscape has the support of the various government bodies involved in its conservation and management, both at regional and supra-municipal level and through the different town councils that manage the municipal services. In terms of training, the staff of the institutions and entities that take on these roles are well or very well trained. The parishes in the area are also very active in promoting initiatives that facilitate the necessary knowledge for the preservation of the site.

The sources of specialisation and training available to the nominated property at national, regional and local levels are described below.

The involvement of public administrations

The preservation and management of the Ribeira Sacra cultural landscape is based on the involvement of all the competent territorial governments, both at local and regional level. This work is ensured by the work of technicians whose specialisation and training is guaranteed by the method of access of staff to regional and local government posts, determined by the principles of equality, merit and ability.

The high degree of specialisation that the existence of the Ribeira Sacra Interdepartmental Commission represents is also worth mentioning. In addition to coordinating the implementation of the Management Plan, this body provides a highly qualified multidisciplinary network, aware of the need for specialisation and training in all issues that affect the management and preservation of the nominated property, both at landscape level and in terms of water heritage.

By way of example, the existence of various best practice guides should be mentioned, drawn up by some of the departments represented on the Ribeira Sacra Interdepartmental Commission, whose implementation, although referring to Galicia as a whole, have a significant impact on the nominated property, as it is linked to issues strongly related to the values of the site. This is the case of the Best Practice Guide for the Identification and Development of Viewpoints, the Best Practice Guide for Intervention in Rural Areas (EIT, 2013), the Guide for the Characterisation and Landscape Integration of Enclosures (EIT, 2017) or the Best Practice Guide for Actions on the Pilgrims' Routes to Santiago de Compostela (EIT, 2016).

Mention should also be made of the town councils in the area of the nominated property and, in particular, of the "obradoiros" (employment workshops) that regularly organise activities associated with the topics and needs of the cultural waterscape.

The " Route of the Romanesque", organised by the Town Council of Pantón for the last 35 years, also deserve a special mention. This initiative was created from the social fabric of contributing to the enhancement of the Pantón and Ribeira Sacra heritage and has been reoriented towards the landscape.

In turn, the three Local Development Groups operating within the scope of the candidacy have a line of action specifically aimed at training. Its contents are mainly oriented towards rural development in relation to the agricultural sector and, to a lesser extent, to the hotel and catering industry. In addition to these central issues, they regularly organise courses related to the natural environment and culture, highlighting the work of the Ribeira Sacra-Courel rural development group.

Advisory and consultative bodies

The Directorate General for Cultural Heritage has advisory and consultative bodies with specific functions in the protection of cultural heritage. These bodies, included in article 7 of Law 5/2016, are the Galician Culture Council, the Royal Galician Academy of Fine Arts of Our Lady of the Rosary and the Padre Sarmiento Institute of Galician Studies, among others.

A report was requested from the Galician Culture Council and the Royal Galician Academy of Fine Arts for the approval of declaring the area as a Heritage of Cultural Interest (BIC). The report from the Galician Culture Council, in addition to being in favour of the BIC, included a series of recommendations on the current candidacy. It pointed to the need for a socio-economic revitalisation plan for the Ribeira Sacra and for unitary management under the term of parish. All these recommendations have been fully integrated into the management plan, with measures aimed at sustainable development, and with the creation of a parish-based participatory body.

In addition, the aims of these bodies include issues related to the promotion of culture, research, the organisation of congresses, the design of exhibitions and the promotion of publications. Consequently, all of them constitute an important source of specialisation and training, generating highly qualified knowledge about the nominated property and bringing it closer to the local population and, especially, to the technicians and professionals who conduct their activity on the cultural landscape.

To cite some recent examples, the Galician Culture Council has promoted monographic meetings specifically linked to archaeology in Ribeira Sacra *(Adegas da memoria: arqueoloxía emocional na Ribeira Sacra*), as well as conferences related to the historical construction of the *socalcos (Socalcos, campesiñado e cristianismo: A construción da paisaxe galega entre a Tardoantigüidade e a Idade Media*).

Other elements of technical training in conservation and management

The Ribeira Sacra Tourism Consortium, created in 2005, has the planning and management of tourism in the Ribeira Sacra area as its mission, with the aim of promoting a coordinated activity and training human resources in the sector.

Numerous training actions have been carried out for the training of the sector in new technologies or languages, as well as in matters more specifically linked to the destination. One example is the *Baños de Bosque* (Forest Baths) course, organised in 2019 and aimed at tourism entrepreneurs who want to learn how to design tourism experiences in nature from a Mindfulness perspective.

In addition, the Ribeira Sacra Tourism Consortium has also carried out restoration work on sgraffito paintings and has published a book on their heritage value and impact on the landscape.

Efforts are being made in 2024 to improve the structuring of capacity building actions, with the implementation of a training and best practices plan, support for innovative projects and recognition of sustainable tourism actions associated with waterscapes and heritage. The aim is to identify training needs in the field, advise on training, design training and best practice actions, promote awareness-raising conferences and implement a specific training plan for the cultural landscape. A support line for innovative projects is also planned together with laying the foundations for a call for awards in sustainable tourism projects.

The Xosé Soto de Fión Foundation leads the initiative of the Pazo de Arxeriz Museum as a reference for the recovery of the historical-artistic, ethnographic and natural heritage, which since 2004 has led the idea of protecting, rescuing, defending, restoring, exhibiting, studying, researching and disseminating the Ribeira Sacra heritage. The ethnographic materials and first-class interpretative resources are a reference point for understanding the values of the cultural waterscape of Ribeira Sacra. Its exhibition of traditional river boats, as well as equipment related to fishing and water-related trades *(muiñeiros, ferreiros, pelamios and tanners, oleiros*, etc.) is particularly noteworthy.

The Foundation also publishes didactic units on river culture for schoolchildren at different levels and produces publications on various subjects, such as the Guide to the Romanesque churches of Ribeira Sacra, published in 2017.

All these materials contribute to increasing the knowledge available on the values of the nominated property and to bring it closer to the people who are in direct contact with the territory, from the earliest ages.

A group of interpretation centres and museums undertake heritage enhancement programmes in the surroundings of the nominated property and in the nearby villages, in addition to the work of the Pazo de Arxeriz EcoMuseum. The case of the Museum of Lugo is worth highlighting, it has a sub-site in Pazo de Tor, in the vicinity of the nominated property, where conferences and workshops on the construction techniques of traditional architecture have been organised.

Research and knowledge transfer

The Galician universities have actively collaborated in the preparation of the studies and work necessary for the declaration of the Ribeira Sacra cultural landscape as Heritage of Cultural Interest (BIC). This shows the involvement of academia in the whole process from its very beginning.

The University of Santiago de Compostela (USC) has carried out most of the necessary work. Through its various research groups, it has carried out thematic studies on historical-artistic, socio-economic and landscape issues, as well as on soil, natural heritage, cultural heritage, water heritage and plant heritage. The Territorial Information System of the Laborate research group was responsible for preparing the cartographic base and conducting the geographical analysis.

Another relevant Galician university in this nomination is the University of A Coruña (UDC), which, together with the Miño Hydrographic Confederation, led a study on the industrial heritage and hydraulic works in the area. They also have the EMALCSA-UDC Chair, which aims at research and transfer on water systems to develop a sustainable management strategy.

Both universities, together with the University of Vigo, which completes the framework of the Galician university system, frequently dedicate monographic courses to delve into issues of interest for the conservation of the nominated property. This is the case of the course entitled “Ribeira Sacra: other views on wine”, organised in 2023 by the Lugo UNED (National University of Distance Education) (Monforte de Lemos Lecture Hall) or the courses on cultural landscape, historical heritage and gastronomy of Ribeira Sacra, organised by the University of Santiago de Compostela (USC) in collaboration with other agents.

Finally, in the field of cultural heritage, the Institute of Heritage Sciences, which is part of the Spanish National Research Council (CSIC) and is based in Santiago de Compostela, should be highlighted. This institute maintains an interdisciplinary line of research on landscape archaeology and cultural landscapes. In the case of Ribeira Sacra, one of the actions carried out was the dating of the agricultural terraces located on the slopes of Vilachá de Salvadur (A Pobra de Brollón), concluding that their origin dates back to the 10th century.

A Capela Viewpoint © CTRS





Socalcos in Belesar / © A. Rodicio

Other sources of training and dissemination

The universities of Galicia have an extensive training programme that contributes to the training and education of new professionals. In addition to the degree and master's degree courses offered by these universities, work is being carried out to develop a range of training courses closely linked to the conservation and management of the nominated property.

The Belarmino Fernández Iglesias Foundation is located in the area of the Ribeira Sacra, in the town council of Sober, and whose main activity is vocational training focused on the hotel and catering industry and tourism. The Foundation's school operates as a private-subsidised centre, although the teaching is completely free of charge, and offers qualifications approved by the Regional Ministry of Education, Science, Universities and Vocational Training. It also hosts informative activities in the fields of gastronomy, viticulture and tourism.

Another relevant training centre, located in the Autonomous Community of Galicia, is the Galician Viticulture and Oenology Station (Estación de Viticultura y Enología de Galicia) (Evega), based in the municipality of Leiro (Ourense), inaugurated in 1985 and complemented by an Experimental Station located in the province of Pontevedra. Its aim is to give a boost to the Galician wine sector, focusing on research (germplasm bank, official Galician selection nursery, study and genetic characterisation of species and vines), training (courses, studies, vocational and university training) and technology transfer (analysis laboratory).

Reference should also be made to the Galician Centre for University Extension and Environmental Dissemination (Centro de Extensión Universitaria y Divulgación Ambiental de Galicia) (CEIDA), which promotes environmental education in all social sectors, together with cultural exchange, working on the search for solutions to environmental problems and encouraging good citizen practices in this field. This centre has worked intensively on the subject of Biosphere Reserves, spaces recognised by the UNESCO MaB Programme and, specifically, in the process of designating Ribeira Sacra as a Biosphere Reserve, which occupies a much larger territory.

The work of the Juana de Vega Foundation, which organises courses on key subjects for the conservation of the site, should also be mentioned. In addition to training experiences related to landscape, cultivation techniques or agri-food entrepreneurship, in 2018 it organised an International Workshop in Ribeira Sacra, focused on the applications of Geographic Information Systems for the care, conservation and management of cultural landscapes, which was attended by international and local experts and where several success stories were presented.

Other training centres of interest located in different parts of Galicia, due to the specialisation they offer for the conservation and management of the cultural landscape, are the Galician School of Conservation and Restoration of Cultural Heritage, the School of Stonemasonry of Pontevedra, the Construction Labour Foundation or the National Reference Centre for Training in Rehabilitation. They all play a crucial role in training the professionals responsible for carrying out the rehabilitation of the water and ethnographic heritage of Ribeira Sacra. To these must be added the Hotel Management School of Galicia, a key centre for the training of hotel and catering executives and kitchen managers.

In 2000, the Galician Association of Architects launched ProxectoTERRA, a cooperation project with the educational sector aimed at the different stages of Compulsory Education with the aim of improving Galician schoolchildren's education with regards the people, spaces and places they inhabit. This initiative offers the educational community a variety of teaching and support materials for each educational stage. For secondary education, areas of reflection were established around popular architecture, contemporary architecture and territorial identity, and a unique educational resource was created aimed at understanding the landscape: "Pagus. Galicia, a place of landscapes". This publication focuses on the Ribeira Sacra landscape, highlighting it as one of the most unique in Galicia.

As part of the National Plan for Education and Heritage, the Proxecta Plan is an initiative from the Regional Ministry of Education, Science, Universities and Vocational Training aimed at promoting educational innovation in schools. This plan seeks to generate heritage awareness by establishing links with heritage assets. One of its four modalities is focused on the ethnological heritage of Ribeira Sacra, with the aim of promoting among the educational community the work with this heritage of the region, identifying elements of traditional architecture, as well as work tools, legends and oral tradition.

Another recent initiative related to the dynamisation aimed at the school audience is a flashmob developed by the students of the Multicampus AXSC 2024 to promote the candidacy of Ribeira Sacra as a cultural waterscape.

The Regional Ministry of the Environment and Climate Change has developed the Somos Paisaxe (We are Landscape) outreach initiative, which aims to bring landscapes and people closer together by recognising the elements that make them up, understanding their dynamics and processes and acting to enhance the value of Galician landscapes.

In addition, within the nominated property, there is a whole range of local or neighbourhood initiatives linked to memory and safe-keeping, in some cases



Ecomuseum of Arxeriz / © E. de la Iglesia

with literary or artistic orientations that contribute to the enhancement of the landscape and the formation of local communities. The work of associations such as the Hermandad Ribeira Sacra or the "O Colado do Vento" Association should be highlighted. The latter organises debates on local culture, visits, routes, thematic conferences and publishes publications related to the Ribeira Sacra territory and its cultural values.

In addition, the Galician Association for Bio-construction "Espiga", which has carried out different training activities, such as those related to vernacular architecture and its trades or those focused on bio-construction and the use of plant materials in construction, organised in Pazo de Tor.

Another line of training, based on communication, participation and debate with the local population, which has gained strength in recent times, is that of events, in the form of annual events such as the 17th Ribeira Sacra Festival, the Territorios Forum or Raizames.

Likewise, under the auspices of the nomination and the interest in the heritage vision of the cultural waterscape, various publishing initiatives have arisen, such as the Mesopotamia Library and its re-publication of the "Libro da Ribeira Sacra" by Emilio Araúxo.

Through the "Consello de Parroquias" (Council of Parishes), as well as through specific meetings and participation in meetings on different subjects, work has been done to disseminate the values of the candidacy, with references to other World Heritage sites and their singularities. Some recent examples are the presentation of the candidacy in the Advanced Course for Urban Planning Technicians organised by the Galician Association of Architects in collaboration with the Galician School of Public Administration or the participation in the Applied Course on Cultural Landscapes organised by the Santa María de Albarracín Foundation.

5.h. Visitor facilities and infrastructure

Visitor facilities and infrastructures are specified in the offer of areas that can be visited, the network of footpaths, the network of viewpoints, the river routes, accommodation and other inclusive visitor centres and services. They are all adapted to the protection and management requirements and are closely related to the main attributes and values of the nominated property.

The visitor infrastructure is aimed at providing a better understanding and reading of the values of the cultural landscape and its intimate relationship with water. Water dominates the whole perception of the nominated property, where the history of its link with mankind and the sequence of the different uses that have made this element the driving force and vector of its activities are clearly illustrated. These relationships are evident throughout the cultural landscape and are central themes of the visitor facilities and visitor areas on offer.

Pazo de Arxeriz Ecomuseum. © E. de la Iglesia
Santa María de Nogueira de Miño Church. © CTRS





Areas that can be visited

The exceptional ethnographic group of the Xábrega mills stands out among the different areas that can be visited, which are associated with the hydraulic heritage. This complex was restored and made available for visits in the section between the village of A Boca and the mouth of the stream in the Sil, in the Os Chancís area. Its elements are signposted and equipped with interpretative means that make the visit, orientation and understanding of its history and evolution easier and are a representation of the great profusion of old water mills that are displayed and can be observed throughout the area.

The visitor areas associated with the water heritage have been diversifying in order to bring the different events of the cultural landscape closer to the public. A remarkable case was the launch of a pilot project that focused on the Santo Estevo hydroelectric power plant, at the end of 2023 and within the framework of the Tourism Sustainability Plan. This first experience materialised in the organisation of eight days of visits, which sold out in just a few hours and will be continued in 2024.

The Ethnographic Museum of Arxeriz is of particular mention, as a museum space to understand and interpret the history of the cultural landscape of Ribeira Sacra in relation to the rivers, located in a 17th century manor house, within a 35 ha estate. Located in the buffer zone, on the edge of the nominated property, this facility opened its doors in 2004, since then becoming a reference area for the recovery, exhibition, study, research and dissemination of the ethnographic and historical-artistic heritage of Ribeira Sacra, with special attention to the elements associated with the ancient uses of the river. It has two rooms dedicated to river culture, where the most important aspects of life along the rivers Miño and Sil are shown, with one of the most important collections of traditional river boats on the Iberian Peninsula, and a wide repertoire of the fishing gear once used on these rivers. There is also a *castro* (fortified prehistoric settlement) in the surrounding area, which can be visited.

The cultural heritage assets that are available for visits are worth mentioning, which determine the monastic imprint of the cultural waterscape, such as the Monastery of Santo Estevo de Ribas de Sil and the Monastery of Santa Cristina de Ribas de Sil. Both are open all year round, with regular opening hours, except for a period of closure usually during the winter months. While the visit to Santo Estevo is free of charge, in recent years Santa Cristina has introduced a system of entry bookings, which are free of charge for certain groups, including residents of Parada de Sil. A shuttle service is also offered at Easter and in summer, but access to the monastery by private motor vehicle is restricted. The latest figures available,



A Cubela route. © CTRS

corresponding to 2022, show that in that year more than 25,000 people visited the Monastery of Santa Cristina. The Necropolis of San Vítor de Barxacova is also open for visits, a strategic observation point over the river Mao that houses the remains of a medieval chapel and a necropolis with anthropomorphic tombs excavated in stone. In addition, guided tours are offered to small temples, churches and chapels that do not have regular visiting hours.

Since 2011 there has been a guided tour service, originally offered by the Ribeira Sacra Consortium and currently organised by a private company, allowing visits to Santa María de Pesqueiras, Santo Estevo de Ribas de Miño, San Paio de Diomondi and Santa María de Nogueira de Miño.

In addition, there are many spaces that allow the visitor to explore the various values of the nominated property in greater depth. Special mention should be made of those related to the agricultural activity carried out in the terraced slopes, such as the wineries that can be visited, which in the area of the nominated property number a total of 16 and which, according to data provided by their managers, received around 40,000 visitors in 2022. Its offer revolves around wine tastings, the pairing of Galician wines and gastronomic products, visits to the river environment, the organisation of workshops and the design of tailor-made experiences. Two of these wineries, Bodega Finca Millara (Pantón) and Bodega Regina Viarium (Sober) are certified with the Q mark for quality tourism in the category of guided and/or self-guided tours, which recognises the management and provision of industrial tourism services.

Footpath network

A total of 20 hiking trails run through the area of the nominated property, either in its entirety or partially within the buffer zone, totalling more than 365 km of routes. There are two Nature Trails, Santa Cristina and Santo Estevo, integrated in the Network of Nature Trails of Spain, as well as 13 PR-G routes, which certify that they comply with international regulations and that they meet the conditions of approval required by the Galician Mountaineering Federation or, where appropriate, by the Spanish Federation of Mountain and Climbing Sports.

In the Ribeira Sacra Mountain Bike Centre there are also 8 circular routes totalling more than 150

km for mountain biking in the area of the nominated property and its buffer zone, in the municipalities of A Teixeira, Castro Caldelas, Nogueira de Ramuín and Parada de Sil.

What all the routes usually have in common is that they run through streams and native forests, sometimes giving way to the presence of vineyards and other local crops, as well as the connection of their routes with viewpoints over the water landscape, wineries and unique elements of cultural heritage, ranging from water mills, to old *fábricas de la luz* (hydropower pants), anthropomorphic tombs, *cruceiros* (stone crosses) and *hórreos* (granaries).

Special mention should be made of the *Camino de Invierno* (Winter Way), a variant of the French Way of Saint James which, after following the course of the river Sil from Ponferrada, crosses O Saviñao and Chantada and which is subject to the specific protection regime of the Pilgrims' Routes to Santiago de Compostela. Interest in this route has increased significantly, going from receiving just over a hundred pilgrims a decade ago to over 2,000 pilgrims a year in 2023. Likewise, the user support and reception facilities have been improved, with the opening in 2022 of the first public hostel on the *Camino de Invierno*, with 34 beds and located in the former Episcopal palace of Diomondi. In recent years, more than 30 benches with QR codes have also been installed along the route of the Camino as it passes through Ribeira Sacra.

The improvement, diversification and connection of the trails with elements of the cultural heritage and the offer of complementary services is one of the lines on which work is being carried out under the two Tourism Sustainability Plans implemented in the territory, which are integrated in the Sustainable Tourism Management Programme of the Management Plan for the nominated property. This approach stems from a firm commitment to sustainable mobility, as a strategy to make tourist use compatible with the efficient protection of the nominated property, ensuring safe and adequate access for visitors to the attractions of the destination and its resources of interest.

Network of river viewpoints

A complete network of viewpoints is deployed at strategic points in the landscape, and generally oriented to look out over the waterscape and the impressive riverbanks. A total of 92 such infrastructures have been identified, of which 88% are located within the nominated property and 12% are located in the buffer zone, offering panoramic views of the valleys and canyons that make up the cultural waterscape.

Of all the viewpoints, it is worth highlighting the 10 that make up the Sober Viewpoint Network, certified with the Q mark for tourist quality in the "Singular Public Spaces" sector, and which is one of only four areas in Spain with this distinction, with no other viewpoint having been identified on the list.

The high landscape interest of Ribeira Sacra means that the viewpoints have been one of the areas on which the Ribeira Sacra Landscape Action Plan and the Ribeira Sacra Tourism Sustainability Plan have acted. Both instruments, mentioned in the Management Plan, have enabled improvements to be made to these facilities and the provision of interpretative resources.

Likewise, with the implementation of the "Tourism Sustainability Plan in Ribeira Sacra, Commitment to sustainable mobility and continuous improvement" includes actions aimed at laying the foundations for the development of night sky observation experiences. A preliminary study is planned to determine which points are suitable for astro-tourist activity and, subsequently, to adapt the necessary infrastructures, assessing the possibility of adapting part of the current viewpoints for this purpose.

River routes

The implementation of routes along the Sil and Miño reservoirs dates back to the 1990s, when the Diputación de Lugo (Provincial Council of Lugo) and the Diputación de Ourense (Provincial Council of Ourense) launched river routes in catamaran-type boats. These have been joined by other smaller boats, offered by private companies, such as Siltrip, Quinta Sacra, Sacra Activa, Sacra Activa, Vista Sacra or Adega Algueira, which complements its wine tourism offer with tailor-made river tours from A Abeleda (A Teixeira).

The different operators operate 532 seats and offer non-stop, circular routes with a duration of between 60 and 90 minutes. Today, they are the most popular activity in the destination, receiving a total of 175,392 users in 2022.

As part of the implementation of the MOVES Singular Projects II Programme, it is planned to replace the current boats with electric boats, which will contribute to the decarbonisation of the Miño and Sil rivers, together with the other initiatives undertaken in the field of sustainable mobility.

Accommodation

An analysis of the data on tourist accommodation registered in the Register of Tourist Businesses and Activities of the Autonomous Community of Galicia as of May 2024, reveals that there are 11 tourist accommodations within the nominated property, with a total of 464 beds:

- 7 Rural tourism houses: 6 belonging to the "Group B "Village house" category, due to their age and characteristics, and 1 belonging to the Group C "Farmhouse" category, due to the fact it carries

out agricultural activities in which their guests can participate. The capacity of all of them ranges from 6 to 12 beds.
- 2 hostels: 1 located on the Winter Way and integrated in the Xacobeo Public Hostel Network, as explained in the network of footpaths section.
- 1 campsite which, with 183 pitches, is the largest capacity facility within the nominated property.
- 1 four-star hotel integrated in the prestigious Parador Network. This is the Parador de Santo Estevo, certified with the Q mark for tourist quality and an example of good practice in heritage rehabilitation.

In the buffer zone, 24 other accommodations offer their services, with a total of 407 beds. The predominant typology continues to be rural tourism establishments (11 accommodations), followed by guesthouses (7), hotels (4) and tourist flats (2).

Other visitor services

In relation to the agricultural activity, specially to wine tourism, the Viñobús vendimia, organised by the Ribeira Sacra Tourism Consortium, is of special relevance. It consists of moving small groups (no more than 15 people) by minibus from Monforte de Lemos to a winery. There they learn what a grape harvesting day is like and actively participate in it, ending the experience with a meal and a tasting of wines and musts. Although the number of places on offer is limited, as the activity can only be carried out during the weeks of the grape harvest, public interest is very high. As a result, in recent seasons only 30% of the requests received could be met.

Another way of getting to know the territory, especially related to the landscape and the agricultural tourism, is the Aba Sacra Train, which began operating in 2011. It is a train on wheels that travels through the Doade-Amand vineyards, with the history of the cultural waterscape and the viticulture as its guiding thread. The average number of users in recent years is 8,500 people per year.

Among the singular initiatives present in the area of the nominated property, reference should also be made to the Os Peares Language Immersion Centre (Carballedo, Lugo), which offers programmes with accommodation for schoolchildren with English language learning and knowledge of the environment as central themes. Since 2014, they have already trained more than 8,000 students aged between 9 and 17, also offering specific services for groups of managers and professionals.

Another activity that has been very popular is hot air ballooning. It lasts 2.5-3 hours in total, of which the flight time is approximately one hour, depending on wind conditions and the terrain overflown.

There are also numerous cultural events, such as the “Santa Cristina in musica” concerts, which allow you to enjoy live music in the Monastery of Santa Cristina, and the 17th Ribeira Sacra Festival, which offers concerts in unique spaces, including viewpoints, boats and wine cellars.

Finally, among the complementary offer, reference should be made to the companies that organise routes and guided tours, as well as to the tourist information offices. Along with entities that operate in different destinations in Galicia and include activities in Ribeira Sacra in their offer, here are a number of entrepreneurs established in the destination, who have a marked specialisation in the area. This is the case of Máis Que Románico, Novas Rutas, Verdant Experiences, Arribeirados or Galsentur.

In turn, within the scope of the nominated property there is one tourist information office, in Os Peares, which is complemented by 13 others that provide their services in the vast surrounding territory of the Ribeira Sacra geodestination and which, as a whole, served nearly 40,000 users in 2022.

River routes on the river Miño. © R. Vilanova



5.i. Policies and programmes related to the presentation and promotion of the nominated property

Aware that the degree of knowledge and appreciation of the heritage is proportional to its conservation, the entities involved in the Ribera Sacra Interdepartmental Commission have launched an intense policy to promote and enhance the nominated property in the last years of the declaration process. The common link is to consolidate and integrate in all actions to promote and disseminate the exceptional values that make this cultural waterscape and its associated heritage. It is a policy that has been complemented by the initiatives of different economic, cultural and social entities.

In principle, it should be noted that the Ribeira Sacra Cultural Waterscape Management Plan gives priority to issues related to the presentation and promotion of the nominated property and its components in the programme entitled "Awareness, communication and social participation" (6.7), which includes specific actions such as the organisation of conferences, seminars and training activities, as well as communication and awareness campaigns on the values and attributes of the nominated property. In addition, the "Preservation of the intangible heritage of water" programme (6.3) includes actions for the dissemination and diffusion of this heritage dimension.

Since the approval of the Ribeira Sacra Cultural Landscape as a Heritage of Cultural Interest (BIC), and in line with the development of the nomination, a new creative approach has taken hold when presenting and communicating the property, incorporating the perspective of the cultural waterscape into the traditional concepts.

Meetings, conferences, lectures and public presentations have been a constant in recent years. One of the first actions conducted at this stage has been the event entitled "*A future for the land: cultural landscapes, rural management and geographical information systems*", which took place in November 2018, with local experts, World Heritage site managers, representatives of the World Heritage Centre, ICOMOS, and university professors, whose publication was presented in Paris, both at UNESCO and at the Spanish embassy on 27 November 2019.

The local population was also involved in two participatory workshops under the title "*In the footsteps of the Winter Pilgrims' Road in the landscapes of the Ribeira Sacra*", which took place alternatively in the Municipality of Sober in September 2019 on the banks of the river Sil, and in the Municipality of Chantada in March 2020 on the banks of the river Miño.

In November 2023, the international meeting "*Waterscapes - : linking the past with the future*", organised by the Regional Ministry of Culture, Education, Vocational Training and Universities (Consejería de Cultura, Educación, Formación Profesional y Universidades) of the Xunta de Galicia, was held with the participation of representatives from UNESCO, ICOMOS and IUCN, as well as experts from the academic world, World Heritage site managers and members of various initiatives on the values of waterscapes. Waterscapes meant the international presentation of the vision of Ribeira Sacra as one of the examples of cultural waterscapes. At this important meeting, the "*Ribeira Sacra Declaration on Cultural Waterscapes*" was adopted, with wide international repercussions.

These actions in turn promoted other courses, workshops and conferences on a local scale in which the Universities of Santiago de Compostela with its campus in Lugo, or the University of Vigo with its campus in Ourense, presented the new perspectives on the territory and components of these landscapes, mainly in summer courses.

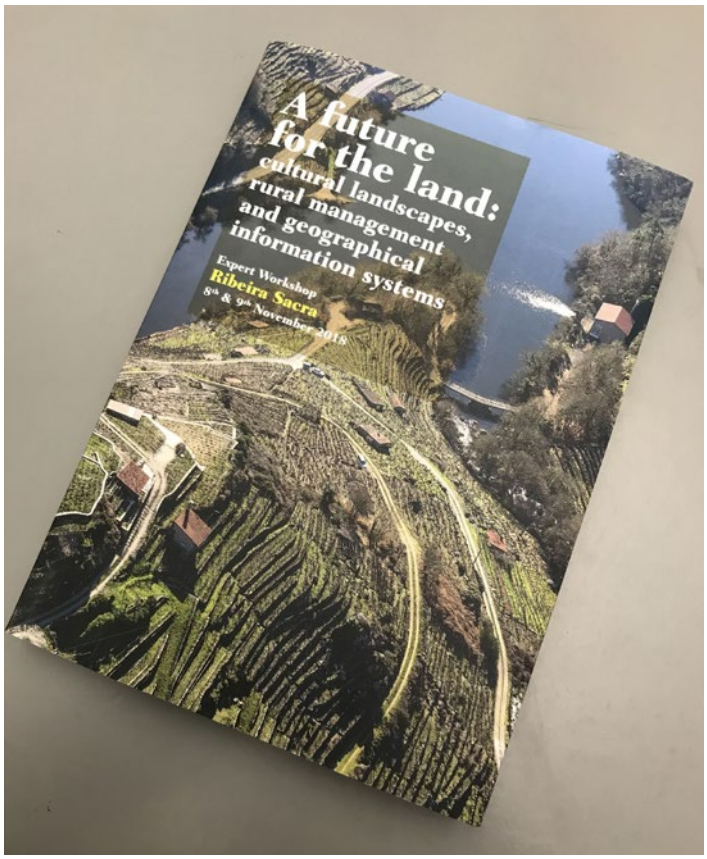
Likewise, local entities and organisations: athenaeums, casinos, circles and cultural and associative collectives echo this new perspective, which they incorporate into their activities, conferences, excursions and guided visits. Of special importance, due to their persistence and impact, are the Romanesque Days of Pantón, now in their 35th edition in 2024.

In recent years, traditional festivals, concerts and musical events have incorporated the perspective of valuing the cultural landscape, not only in the selection of venues and presentation spaces, but also through the creation of new formats, among which we can highlight the Heritage Territories Forum, now in its fifth edition.

The business community, and especially the accommodation facilities committed to local heritage and culture, have also organised activities to present and promote the Ribeira Sacra property. Because of its transcendence on a national and international scale, the role played by the network of national Paradors of Spain should be mentioned, with one establishment in the area of the nominated property, Santo Estevo de Ribas de Sil, and another in the vicinity, that of Monforte de Lemos. In small companies, there are two examples of great interest, one in the Miño basin, the Casa do Romualdo, which organises experiential visits guided by a blind person, and the Casa Grande de Rosende in Sober, which, in collaboration with La Plantación bookshop, organises reading and landscape workshops, such as this year's workshop with the writer Julio Llamazares.

And literature has also in recent years become a way of presenting and promoting this territory, especially since the national and international impact of the novel "*Todo esto te daré*" Planeta Award 2016, translated into more than 20 languages, or more recently of "*El bosque de los cuatro vientos*" by María Orduña. In addition, publishing work has focused on the Ribeira Sacra, not only as the subject of new tourist guides, but also with encyclopaedic works, re-edi-

A Future for the land publication, expert workshop organized by Fundación Juana de Vega, 2018. © M. Crecente





Approval of the declaration of Ribeira Sacra on Cultural Waterscapes during Waterscapes. © E. de la Iglesia

Fontes, World Heritage: knowledge to maintain 2024. © E. de la Iglesia





Heritage Territories Forum 2023. © M. Crecente

"Literature and Landscape" workshop, with the writer Julio Llamazares, in 2024. © M. Crecente



tions of classic books on the area, and the founding of new local publishing houses, which are committed to giving a voice to the territory, as well as cultural collectives with their own publishing lines.

Among the publications associated with the nomination process is the book entitled "*Gente que pinta el paisaje*" (People who paint the landscape), published in 2019 by the Directorate General of Cultural Heritage of the Xunta de Galicia. The publication in three languages (Galician, Spanish and English) provides a vision of this space from the point of view of the very protagonists of a living cultural landscape.

As far as the promotion of tourism is concerned, it should be noted that the area of the nominated property constitutes the heart and main attraction of the so-called Ribera Sacra *geodestination* , from which it takes its name. Tourist geodestinations are geographical areas designated by the Autonomous Community of Galicia that share a territorial uniformity based on their tourist, natural, heritage and cultural resources, which attract visitors for these reasons and for their differentiating and unique character. In the case of the Ribeira Sacra geodestination, its geographical scope covers a significantly larger area than the nominated property, and should therefore be understood as the tourist area in which tourist activities and initiatives that directly or indirectly affect the enhancement, promotion and presentation of the nominated property take place. So much so that the geodestination's promotional page highlights the sentence that tells visitors that "in the Ribeira Sacra, water was the first path", establishing the clear relationship of this area with the nominated cultural waterscape.

The geodestination is managed by the Ribeira Sacra Tourism Consortium and receives promotional investment from Turespaña and the regional government to develop innovative tourism products under criteria of sustainability and quality standards in the nominated property, having over time become the benchmark inland tourist destination of regional policies. Its consolidation has been built up over the years, especially thanks to an ambitious tourism development plan with an investment of three million euros, which laid the foundations for an adequate presentation and promotion of the nominated property. Aspects such as signposting, the creation of entrance gates as visitor reception centres, the official approval of hiking routes, the installation of new jetties for river activities, the Viñobús, participation in tourism fairs, the publication of maps and tourist guides, among others, were improved. These are all aspects that have also underpinned the visitor facilities and infrastructure described in section 5h, and which help to ensure that the nominated property is properly presented to visitors.

In recent years, the Consortium has reoriented its actions by incorporating the perspective of the cultural waterscape in all its processes, from the programmes it conducts, the agents it involves, to its renewed image based on this idea. Perhaps the most visible sign of this reorientation is the murals and sgraffito programme, the landscape routes or the promotion of the sites or the promotion of visits associated with water heritage.

Museums, handicrafts, gastronomy and festivals are also essential resources for presenting the material and immaterial values that make up the cultural landscape, and different routes and activities are proposed around them. Moreover, in a territory where the world of wine plays an extraordinary role, where the understanding of wine from this perspective is present in dozens of experiences, workshops and visits that present and promote it, with multiple examples on the banks of the rivers Miño and Sil, in the different seasons that accompany the waterscape and with the different local agents involved. Oenology has thus become one of the vectors to promote this area and an open window to its knowledge, in a similar way to the role played by the different Pilgrims' Roads to Santiago that cross this area.

At a regional level, the action of the Rural Development groups that promote and finance tourist projects for their group of town councils is worth mentioning, such as the special appreciation of the mining heritage of A Pobra do Brollón and the geo-viewpoints of Ribas de Sil, among others.

Finally, the Galician Tourism Cluster also conducts promotional campaigns in collaboration with the Ribeira Sacra geodestination and the Association of the Ribeira Sacra Wine Routes. A highlight of this is the celebration of the "Open Doors Spring Season" through the Galicia Wine Tourism brand, with a programme of activities that includes wine buses, guided tastings, visits to museums, monumental routes and boat trips.

All the above-mentioned milestones have been marking the path that is eventually traced to the set of policies and programmes related to the presentation and promotion of the nominated property that are explained in the Management Plan for the Ribeira Sacra Waterscape.



Mural in Parada de Sil. © CTRS



Mural in Os Peares. © CTRS



Finca Cortezada. © R. Vilanova



Aguacaída Waterfall. © R. Vilanova

5.j. Staffing levels and expertise (professional, technical, maintenance)

Interdepartmental Commission of Ribeira Sacra

The management organisation chart set out in section 5.e of this dossier, as we have seen, encompasses a series of administrations and public bodies, as well as local associations, grouped together in the Interdepartmental Commission of Ribeira Sacra and led by the Directorate General for Cultural Heritage of the Xunta de Galicia. Together, they provide the human resources with sufficient qualifications to guarantee the good management of the nominated property, both at a general level and in the different areas of intervention.

Approved by Decree 105/2020 of 9 July, the Interdepartmental Commission of Ribeira Sacra is the collegiate body for the management and coordination of the sectoral actions of the different departments of the Xunta de Galicia in the territory of the nominated property and its buffer zone, as well as being the channel for the participation of local communities.

Based on their composition, the staffing and technical capabilities of the main administrations and entities involved in the management of the nominated property are described below.



Constitution of the Ribeira Sacra Interdepartmental permanent Commission in Decvember 2020. © M. Crecente

Directorate General for Cultural Heritage

Decree 146/2024 of 20 May defines the structure of this Directorate-General. It is made up of employees organised in two sub-directorates and three departments (Planning Department, Protection and Promotion Department, Surveillance and Inspection Department) dedicated to specific matters such as architecture, archaeology, documentation of cultural heritage, its protection and promotion and, finally, surveillance and inspection as preventive and control measures. There are four territorial headquarters, whose purpose is to process cases in their provincial area, those of Lugo and Orense being directly related to the nominated property.

This is an administrative unit with a significant stable body and a large number of staff, including 3 managers, 57 technicians specialised in different disciplines and 118 administrative staff. The dedication to the protection and conservation of the Ribeira Sacra cultural landscape is supported by the technical and administrative staff appointed to undertake the various tasks associated with the management, protection and maintenance of the nominated property, either on a part-time or full-time basis depending on requirements. Coordination of matters relating to the nominated property is the responsibility of the Directorate General.

Among its functions, the Directorate General for Cultural Heritage has the supervision, reporting and authorisation of all activities, whether projects or territorial or urban planning with effects on the cultural heritage of the Ribera Sacra, as part of the properties of cultural interest of Galicia, both as a cultural landscape with BIC status as a whole, as well as in each of the related elements. The presence of graduates in architecture, archaeology, history and restoration of artistic properties is noteworthy.

The Directorate General for Cultural Heritage also promotes and supports the organisation of courses and awareness-raising or training activities that focus on the cultural landscape of Ribeira Sacra, routinely collaborating with initiatives from universities, local associations or the cultural sector.

This technical body is fully responsible for supervising, reporting, advising and, if necessary, authorising or proposing the necessary modifications or corrections to guarantee the integrity and authenticity in the conservation of cultural properties.

Town Council	Technical staff	Dedication	Planning in force	Rehabilitation Office
Carballedo	Architecture	Part-time	1991	No
Castro Caldelas	Architecture	Part-time	1999	Yes
Chantada	Technical architecture	Full-time	1985	Yes
Monforte de Lemos	Technical architecture	Full-time	1985	Yes
Nogueira de Ramuín	Technical architecture	Part-time	2001	No
Pantón	Architecture	Part-time	-	No
Parada de Sil	Technical architecture	Part-time	1985	No
A Peroxa	Architecture	Part-time	1999	No
A Pobra do Brollón	Architecture	Part-time	-	No
Ribas de Sil	Technical architecture	Part-time	2009	No
O Saviñao	Architecture	Part-time	1983	No
Sober	Technical architecture	Part-time	2013	No
A Teixeira	Technical architecture	Part-time	2019	No

Municipal technical services

The town councils (called *concellos* in the Autonomous Community of Galicia) and the Provincial Councils exercise their powers mainly in urban planning matters in the area of the Ribeira Sacra property. They collaborate in providing local advice and in the processing of files, in particular by collecting the measures established by the Directorate General for Cultural Heritage in terms of protection and conservation, or according to the instructions and guidelines established in the framework of urban planning.

All interventions on the territory requested by private individuals are subject to a prior planning permission procedure. Only those of activity or simple repair may be subject to prior notification procedures together with a responsible declaration that they do not affect, among other aspects, cultural heritage or its established protection regime. This is established in Law 2/2016, of 10 February, on Galician land.

That is why the activity of municipal technicians and their expert collaboration is so relevant, since they are the first to study interventions or activities and those who must request authorisation from the Directorate General for Cultural Heritage if the protection or conservation of their values is affected.

Town councils without current planning are governed by the provisions of the Autonomous Community Basic Plan (PBA in Spanish) approved by Decree 83/2018, of 26 July. The Historical Complex Rehabilitation Areas (ARCH in Spanish) or Integrated Rehabilitation Areas (ARI in Spanish) are areas of special attention and collaboration in the restoration and rehabilitation of buildings, which are managed with public funds and specialist technical advice



Meeting of local experts promoted by the General Directorate for Cultural Heritage in 2018. © M. Crecente

Miño Sil Hydrographic Confederation

The Hydrographic Confederation was created by the Water Law as the body responsible for the hydraulic administration of the Miño and Sil basins in which the nominated property is located. This body is attached to the Spanish Ministry for Ecological Transition and the Demographic Challenge. Among other functions, it is responsible for the administration and control of the Public Water Domain and the preparation of the River Basin Hydrological Plan.

Its organisational structure includes a General Secretariat, a Planning Office, a Technical Directorate and the Water Commissioner's Office. The latter includes the Environmental Management, Water Quality and Discharges Area, with its corresponding departments, as well as other important departments such as Hydroelectric and Dams. All these functions are covered by highly qualified staff in their respective areas of intervention.

Ribeira Sacra Tourism Consortium

All the local administrations of the Ribeira Sacra territory, as well as the Regulatory Council of the Ribeira Sacra Designation of Origin and the Ribeira Sacra Rural Association are represented in the Ribeira Sacra Tourism Consortium, with the support of the Provincial Councils and the Galician Tourism Agency. The Consortium jointly promotes the lines of action in terms of sustainable tourism in the Ribeira Sacra cultural landscape, with annual funding and a programme assisted by professionals to encourage activities related to the territory, culture, landscape and wine tourism.

For its ordinary operation, it has a manager specialised in tourism with extensive experience in management, assistance and collaboration with public administrations and direct contact with the public. It also has two full-time tourism technicians linked to the implementation of the current Tourism Sustainability Plan. In addition, they ensure the organisation of the geodestination's tourist offices, implementing a unified image and collaborating in the exchange of information.

The Ribeira Sacra Tourism Consortium also organises various training activities aimed at the tourism sector, with actions oriented towards the implementation of environmental labels, quality certifications and improvement of skills. Currently, as part of the development of the Tourism Sustainability Plan, a training, entrepreneurship, innovation and consultancy service is being contracted for the management and recruitment of all the lines of training available at different levels, as well as to organise tailor-made courses identified as necessary.

The Ribeira Sacra Tourism Consortium also manages a specific website which disseminates both the cultural values of the Ribeira Sacra cultural landscape and information of interest for planning visits and activities in the area.

At present the administrative offices are located in the municipal dependencies of Nogueira de Ramuín Town Council.



Participation session with winemakers from Ribeira Sacra, Monforte 2024. © X. Gago

Regulatory Board of the Denomination of Origin of Ribeira Sacra

In the winemaking area, there is a Regulating Council of the Ribeira Sacra which, through its technical means, seeks to control the main agricultural activity in this area of the cultural landscape, which is wine. The Regulatory Board employs three administrative staff and five technicians.

The Ribeira Sacra Designation of Origin was created in 1996 and since then its regulations have undergone several modifications to adapt to the development of viticulture and wine production structures in the area. The cultural procedures of cultivation and harvesting, among the technical issues of the process, are regulated by it.

At present, there are 1,322 productive hectares, 2,212 winegrowers and 99 wineries, which shows the maintenance of a fragmented ownership structure, as each winegrower manages an average of 0.6 hectares and each winery approximately 13 hectares.



Manual of good practices for visitors, included in the Green Book for the sustainable management of cultural heritage published by the Ministry of Culture, 2023.



Meeting of the tourism sector to draw up the proposal for the Tourism Sustainability Plan, promoted by the Ribeira Sacra Tourism Consortium. © M.Crecente





Ribeira Sacra
Waterscape

6. Monitoring

6.a. Key indicators for measuring the state of conservation

6.b. Administrative arrangements for monitoring property

6.c. Results of previous reporting exercises

© A. Rodicio

6.a. Key indicators for measuring the state of conservation

The main aim of monitoring is to identify threats to the Outstanding Universal Value of the nominated property and the attributes that express it, as well as to track the state of conservation of the different components of the cultural waterscape over time. Monitoring is a crucial aspect in preserving the Outstanding Universal Value, authenticity and integrity of the nominated property, its elements and attributes over time.

The baseline for monitoring the state of conservation of the property and its constituent elements is as described in this nomination form, which sets out the conditions at the time of possible nomination (See Section 4.a).

Monitoring and its underlying set of indicators are essential tools to inform and guide all stakeholders and those responsible to potential and actual problems, as well as improvements detected in the management of the property in relation to its conservation. In addition, it allows the possible revisions of the Ribeira Sacra Waterscape Management Plan in its different dimensions to be adapted at any given moment, helping to strengthen cooperation between the different actors involved in its management. They will also form the basis for periodic reports to be transmitted to the World Heritage Centre and the World Heritage Committee through the State Party's usual channels.

In view of the complexity of the property and the various factors involved in its preservation, the system of indicators developed is grouped into seven groups.

Table of key indicators to measure the state of conservation of the nominated property

CLIMATE, TERRITORY, RESOURCES AND ENVIRONMENT			
Purpose	**Indicator / units**	**Frequency**	**Source / Register**
Climate change	Changes in average temperature: Air temperature variation [°C]	Annual	AEMET
Natural disasters - Fires	Forest fires [No.]	Biennial	Xunta de Galicia PLADIGA
	Surface area affected by forest fires [ha]	Biennial	Xunta de Galicia PLADIGA
Occupation of the land	Land surface area in agricultural use [ha]	Biennial	Xunta de Galicia SIOSE
Production of hydroelectric power	Energy production [MGh/year]	Annual	Miño Sil Hydrographic Confederation
	tCO_2eq avoided [t]	Annual	Direct calculation
Urban pressure	New building permits [No.]	Biennial	Towns

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CULTURAL HERITAGE OF THE PROPERTY, PRESERVATION			
Purpose	**Indicator / units**	**Frequency**	**Source / Register**
Socalcos - terrace crops	Cultivated area [ha]	Quadrennial	Interdepartmental Commission
Hydraulic heritage - historic watermills	Identified watermills (inventory) [No.]	Biennial	Directorate General for Cultural Heritage
	Restored mills and elements of the associated hydraulic system [No.]	Annual	Directorate General for Cultural Heritage
Ethnological hydraulic heritage - pontoons, fountains, *sequeiros, hórreos*, etc.	Restored elements [No.]	Annual	Directorate General for Cultural Heritage
Religious heritage and unique rural buildings.	Conservation, maintenance and restoration actions [No.]	Annual	Directorate General for Cultural Heritage
Investment in conservation, restoration and maintenance.	Total investment in maintenance, restoration and conservation of heritage [€]	Annual	Directorate General for Cultural Heritage
Signage, environmental and landscape restoration.	Actions [No.] Investment [€]	Biennial	Directorate General for Environmental Quality and Sustainability

POPULATION AND SOCIO-ECONOMIC FACTORS			
Purpose	**Indicator / units**	**Frequency**	**Source / Register**
Evolution of the resident population	Population by right [No. of inhabitants]	Annual	INE - IGE
Registered unemployment	Unemployed [No.]	Annual / According to available series (only at municipal level)	INE - IGE
Dependency ratio	Existing ratio of dependent population to active population [%]	Annual / According to available series (only at municipal level)	INE - IGE
Ageing index	Percentage of people over 64 years of age as a proportion of the total population [%]	Annual / According to available series (only at municipal level)	INE - IGE

TOURISM, VISITS AND MOBILITY			
Purpose	**Indicator / units**	**Frequency**	**Source / Register**
Visitor flow	Estimated visits to the cultural landscape [No.]	Annual	Ribeira Sacra Tourism Consortium
Hiking routes open and signposted	Length of open and signposted hiking routes [km]	Biennial	Ribeira Sacra Tourism Consortium
Accommodation capacity	Accommodation places offered [No. of places]	Biennial	Ribeira Sacra Tourism Consortium
Tourist pressure	Ratio of tourist and resident beds [No. of beds / inhabitant]	Biennial	Ribeira Sacra Tourism Consortium
Recreational and camping areas	Capacity [No. of places]	Biennial	Ribeira Sacra Tourism Consortium
Tourism companies	Tourism companies operating in the area [No.]	Biennial	Ribeira Sacra Tourism Consortium
River routes	Visitors using the river routes [No.]	Annual	Ribeira Sacra Tourism Consortium
Increases in the road network	Opening of new tracks and routes [km]	Biennial	Interdepartmental Commission

KNOWLEDGE TRANSFER, DISSEMINATION AND MANAGEMENT			
Purpose	**Indicator / units**	**Frequency**	**Source / Register**
Scientific research and production	Agreements with scientific institutions and research centres [No.]	Biennial	Directorate General for Cultural Heritage
	Research projects associated with the attributes of the property [No.]	Biennial	Directorate General for Cultural Heritage
	Citations in indexed publications [No.]	Biennial	Directorate General for Cultural Heritage
Dissemination	Participation in and promotion of seminars, conferences and meetings related to the nominated property [No.]	Annual	Directorate General for Cultural Heritage
	Publications associated with the nominated property [No.]	Annual	Directorate General for Cultural Heritage
	Visits to the official website [No.]	Annual	Directorate General for Cultural Heritage
Training	Training and capacity building activities [No.]	Annual	Directorate General for Cultural Heritage)
Management plan - Investment	Total investment implemented in actions, initiatives and projects for the Cultural Landscape [€]	Annual	Directorate General for Cultural Heritage

6.b. Administrative arrangements for monitoring property

The monitoring work, including the preparation of the periodic assessment reports to be submitted to the World Heritage Committee, will be carried out by the Directorate General of Cultural Heritage of the Xunta de Galicia, as the direct manager of the nominated property.

In accordance with Chapter V of the Operational Guidelines for the Implementation of the World Heritage Convention, information on the monitoring of the state of the property according to the parameters set out in Section 6.a will be collected and regularly updated in order to ensure adequate monitoring of the state of the property, as well as to properly support the required assessment reports.

The Directorate General of Cultural Heritage is the entity in charge of the custody and compilation of all information related to the monitoring of the property based on the indicators established in Section 6.a. It shall also be the institution responsible for the safeguarding, processing and collection of information relating to such monitoring, as well as for the preparation of the mandatory periodic reports.

The monitoring work involves coordination with the interested parties, including the *concellos* (town councils) and parishes, the owners and managers of the properties in the territory, the departments of the Xunta de Galicia involved and the centres dependent on the Spanish State that carry out permanent or periodic monitoring of the different heritage, environmental and social issues that affect the nominated property.

The name and contact details of the body responsible for maintaining the monitoring measures and updating the established indicator system is:

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(DIRECTORATE GENERAL FOR
CULTURAL HERITAGE)
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+34 981 544 877

patrimonio.cutura@xunta.gal

6.c. Results of previous reporting exercises

Firstly, it should be noted that the summary of the report on the state of conservation of the property and its components is presented in Section 4.a of this nomination dossier, having been prepared as part of the nomination process and updated in 2024. In addition, the general characterisation work of the cultural waterscape is based on specific thematic reports. These include the following.

2018.
Inventory of immovable assets of the Cultural Landscape of the Ribeira Sacra.
Annexes I and II of Decree 166/2018, of 27 December, declaring the cultural landscape of the Ribeira Sacra a property of cultural interest.

2019.
Report on archaeological heritage,
by Celso Rodríguez Cao

2019.
Report on Geomorphology and Landscape,
by Augusto Pérez Alberti, Environmental Technology Laboratory, Institute of Technological Research, University of Santiago de Compostela.

1993-To present day.
Inventory and distribution of traditional chestnut cultivars.
Ribeira Sacra Towns.

2015.
Report on "The soils of the Ribeira Sacra: expression of an anthropic landscape".
Provincial Council of Ourense, GEMAP GI-1243 (USC) Research Group, GI-AG1 (Uvi) Research Group.

2015.
Report on "Delimitation. Geomorphology Landscape".
Environmental Technology Laboratory. Institute of Technological Research, Augusto Pérez Alberti.

2015.
Report on "The structure and socio-economic evolution of the territory that makes up the Ribeira Sacra".
Provincial Council of Lugo. Innovation, Structural Change and Development Group (Icede) (USC).

2015.
Report on "Historical-artistic heritage of the Ribeira Sacra from the perspective of monastic establishment and control".
2014-CP89. Provincial Council of Lugo. Main Researcher: Fernández Castiñeras, Enrique; and report on **"Heritage resources of an archaeological nature and on the intangible heritage of the Ribeira Sacra".**
2014-CP090. Provincial Council of Lugo. Main Researcher: Monterroso Montero, Juan M.

2015.
Report on "Plant heritage".
Evolutionary Plant Biology Research Group (USC). IP Javier Guitián, Pablo Guitián, Asier Rodríguez Larrinaga, Paula Domínguez.

2015.
Report on "Industrial and public works heritage in the Ribeira Sacra".
Miño-Sil Hydrographic Confederation. Galician Civil Engineering Foundation. Those responsible for the papers are: Carlos Nárdiz Ortiz (University of A Coruña) and Jorge Gutiérrez González (Miño-Sil River Hydrographic Confederation)

2018.
Report on "The toponymy of the Ribeira Sacra".
Authors: Ana Boullón and Luz Méndez.

2018.
Report on "Ethnographic Heritage".
Authors: Francisco Xabier Almuíña Chorén

2018.
Report on the fluvial heritage of the Miño and Sil,
by Xosé Manuel Vázquez Rodríguez.

2019.
Report on "Ethnography of the territory of A Ribeira Sacra".
Author: Manuel Vilar Álvarez

2019. Report on "State of conservation of towns of special interest". Author: Sara Prieto Hortas.

2019.
Report on "Agricultural terraces as cultural and temporary archives of the traditional Galician landscape. Case studies and proposal for action in the Ribeira Sacra".
Authors: Paula Ballesteros-Arias, Felipe Criado-Boado, Cruz Ferro-Vázquez

2024.
Report on "Santo Estevo de Ribas de Sil preserve. Cultural, Tangible and Intangible Heritage. Tracking, tracing and identification".
Authors: Manuel José López Guitar (gAU Architecture and Urban Planning SLP) and Celso Rodríguez Cao.

2024.
Report on "Intangible and ethnographic heritage linked to water in the Ribeira Sacra".
Author: Alfonso Campos.

2024.
Popular heritage report: Sober electricity mill (Transition from water mills to electricity mills).
Author: Belén Guerrero Maylio

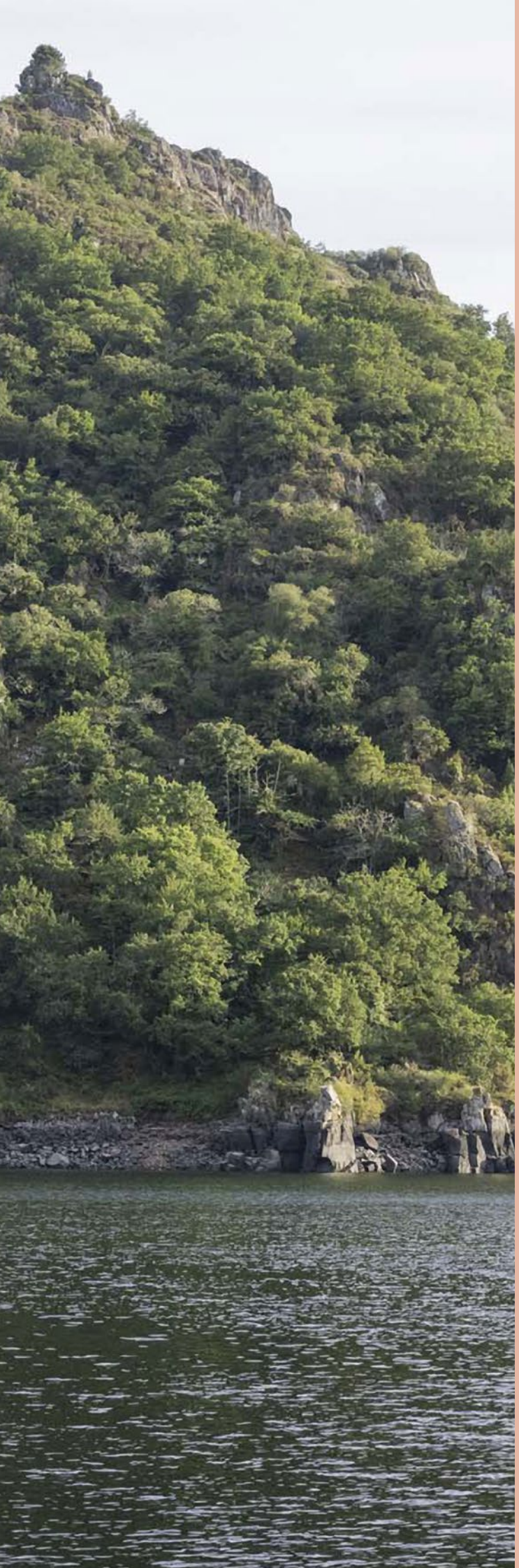
2024.
Report on hydrotoponymy in the Ribeira Sacra.
Authors: Ana Boullón and Luz Méndez.

2024.
"La Ribeira Sacra. Cultural landscape, sacredness and water".
Author: Manuel Castiñeiras.

In addition to all of these, there are the reports and studies produced by the Miño-Sil River Hydrographic Configuration as an autonomous body, including studies of ecological flows.

Finally, mention should be made of the reports deriving from the fact that some territories of the nominated property belong to other international figures. This is the case of the Periodic Review Report of the Ribeira Sacra e Serras do Oribio e Courel Biosphere Reserve, declared in 2021, which encompasses the nominated property.





Ribeira Sacra
Waterscape

7. Documentation

7.a. Photographs and audiovisual image inventory and authorization form

7.b. Texts relating to protective designation, copies of property management plans or documented management systems and extracts of other plans relevant to the nominated property

7.c. Form and date of most recent records or inventory of the nominated property

7.d. Address where inventory, records and archives are held

© D. Estevez

7.a Photographs and audiovisual image inventory and authorization form

Id. No	Format (slide/ print/ video)	Caption	Date of Photo (mo/yr)
01	Slide	Mill on the river Xabrega	05/24
02	Slide	Meander on the river Sil from Vilouxe viewpoint	04/24
03	Slide	Aerial view of the river Sil	05/24
04	Slide	*Socalcos* on the river Sil	05/24
05	Slide	Santo Estevo de Ribas de Sil Monastery	04/24
06	Slide	Santa Cristina de Ribas de Sil Monastery	07/23
07	Slide	San Xoán da Cova Church	05/24
08	Slide	Brook on the river Asma	05/24
09	Slide	*Socalcos* on the banks of the river Miño	05/24
10	Slide	Settlement in Pincelo, on the banks of the river Miño	12/13
11	Slide	River Sil	05/24
12	Slide	Finca Cortezada	05/24
13	Slide	Mill in Entrambosríos	05/24
14	Slide	Portotide bridge, over the river Miño	11/14
15	Slide	Winter Pilgrims' Road through the Ribeira Sacra	06/24
16	Slide	Meander of A Cubela	05/24
17	Slide	View of the Sil canyon from Souto Chao viewpoint	11/13
18	Slide	Meander of O Cabo do Mundo	05/24
19	Slide	Substation of the Belesar dam	05/24
20	Slide	Augacaida waterfall	06/24
21	Slide	Settlement of A Míllara	12/13
22	Slide	Mill on the river Xabrega	11/23
23	Slide	Santo Estevo Power Station	04/24
24	Slide	Inside the Belesar power station	08/24

***DXPC:**
Director-general for Cultural Heritage of the Xunta de Galicia.
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15781 Santiago de Compostela.
Tel: (+34) 981 544 877
Fax: (+34) 981 541 830
E-mail: patrimonio.cultura@xunta.gal

****Antón Rodicio:**
Contact through the DXPC is possible

Photographer/ Director of the video	Copyright owner (if different than photographer/director of video)	Contact details of copyright owner (Name, address, tel/fax, and e-mail)	Non exclusive cession of rights (Yes/No)
Rubén Vilanova	Directorate General for Cultural Heritage (DXPC)	*	Yes
Rubén Vilanova	DXPC	*	Yes
Rubén Vilanova	DXPC	*	Yes
Rubén Vilanova	DXPC	*	Yes
Rubén Vilanova	DXPC	*	Yes
Rubén Vilanova	DXPC	*	Yes
Rubén Vilanova	DXPC	*	Yes
Rubén Vilanova	DXPC	*	Yes
Rubén Vilanova	DXPC	*	Yes
Antón Rodicio	Antón Rodicio	**	Yes
Rubén Vilanova	DXPC	*	Yes
Rubén Vilanova	DXPC	*	Yes
Rubén Vilanova	DXPC	*	Yes
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Rubén Vilanova	DXPC	*	Yes
Rubén Vilanova	DXPC	*	Yes
Antón Rodicio	Antón Rodicio	**	Yes
Rubén Vilanova	DXPC	*	Yes
Rubén Vilanova	DXPC	*	Yes
Rubén Vilanova	DXPC	*	Yes
Antón Rodicio	Antón Rodicio	**	Yes
Esteban de la Iglesia	DXPC	*	Yes
Rubén Vilanova	DXPC	*	Yes
Denís Estevez	DXPC	*	Yes

7.b. Texts relating to protective designation, copies of property management plans or documented management systems and extracts of other plans relevant to the nominated property

Section 5.b describes and cites highlights of the system for the legal protection of the property and its various components. Section 5.d lists the other strategic plans and documents that have an impact on the management and preservation of the property, and summarises the applicability of each of them.

The main documents related to the legal status of the property and the most relevant plans can be found in the digital annex attached to the dossier and in the original versions (Annex III), except for the Ribeira Sacra Waterscape Management Plan. In this case, the summary is furthered in section 5.e and the full text is provided in digital version.

The following documents are provided in the annexes:

- Decree 166/2018, of 27 December, declaring the entire Ribeira Sacra cultural landscape to be a Heritage of Cultural Interest (BIC). This declaration is the highest legal category that current legislation advocates for recognising and protecting cultural manifestations and properties that form part of the cultural heritage at regional level and in the Spanish State, taking into account the criteria for their protection.

- Decree 105/2020 of 9 July establishing the Interdepartmental Commission of Ribeira Sacra This body is considered a participation platform that coordinates the intervention of the different administrations, entities and actors with competences and interests in the area, facilitating the development of the initiatives taken into account in the Management Plan.

- Law 5/2016, on the cultural heritage of Galicia, which among the categories of cultural heritage incorporates that of cultural landscape, defined in article 10.1.h as “a place identifiable by a set of unique material and immaterial cultural qualities, combined works of nature and human beings, which is the result of the process of interaction and interpretation that a community makes of the natural environment that sustains it and which constitutes the material support of its identity”.

- Law 7/2008, of 7 July, on the protection of the Galician landscape, which constitutes a legal framework that reinforces the protection system for the nominated property based on its declaration as a Heritage of Cultural Interest.

- Consolidated text of the Spanish Water Law, approved by Royal Legislative Decree 1/2001, of 20 July, which determines the areas that constitute the public water domain and the use of water.

- Ribeira Sacra Waterscape Management Plan. The full version is included in Annex II.

7.c. Form and date of most recent records or inventory of the nominated property

Decree 166/2018, of 27 December, on the declaration of the Ribeira Sacra cultural landscape as a Heritage of Cultural Interest, includes in its annexes a detailed list of all the elements classified due to their cultural interest in the Ribeira Sacra territory in its different levels and categories.

The General Directorate for Cultural Heritage is responsible for managing and updating this information.

There are also public inventories that are freely accessible online where information on protected properties can be consulted, as well as geographic information systems that combine the identification and location of properties with other information of interest, which is a powerful tool both for site management by administrations and by stakeholders and individuals.

Information is currently available at the following links:

http://mapas.xunta.gal/visores/pba/

The mapas.xunta.gal application is a powerful geographic information tool managed by the Institute of Territorial Studies (Instituto de Estudios del Territorio - IET), a body of the Xunta de Galicia responsible for the maintenance of geographic information systems, as well as for the development of access and consultation processes.

This viewer allows all the relevant information related to natural or landscape protection, the water regime, infrastructures, planning and land use planning to be linked. It also incorporates specific viewers relating to intervention models in the territory, use of colours, materials, types of enclosures, land use, viewpoints and routes.

With regards to more complex administrative information, the cultural and urban protection determinations of each property can be consulted with free online access through the protection catalogues of each town council at the link planeamentourbanistico.xunta.es/siotuga/

7.d. Address where inventory, records and archives are held

The General Directorate for Cultural Heritage of the Xunta de Galicia is the entity in charge of the custody and compilation of all the information related to the nominated property.

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7.e. Bibliography

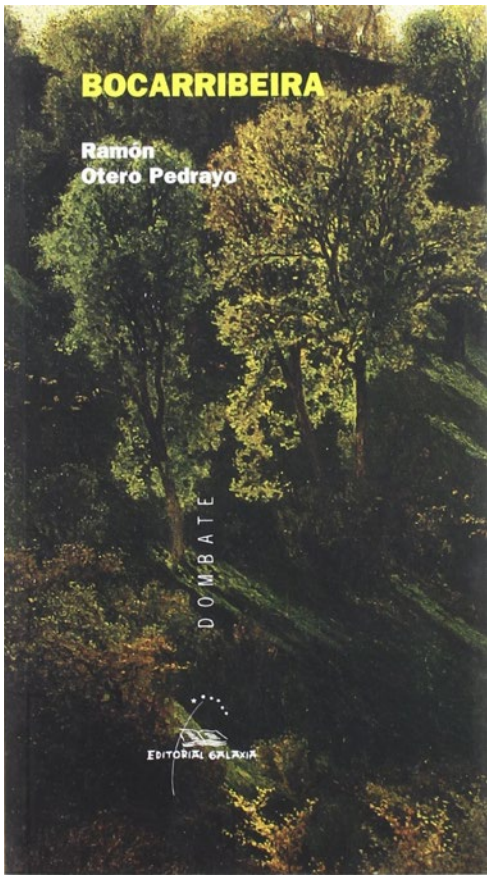
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Socalcos of the Ribeira Sacra, ca. 1950-1960. © Museo do Pobo Galego





Ribeira Sacra
Waterscape

8. Contact Information of responsible authorities

8.a. Preparer

8.b. Official Local Institution/Agency

8.c. Other Local Institutions

8.d. Official Website

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Ribeira Sacra
Waterscape

9. Signature on behalf of the State Party

© R. Vilanova

Signed on behalf of the Government of Spain

RIBEIRA SACRA WATERSCAPE

Nomination to the World Heritage List

Ángeles Albert de León
Director General of Cultural Heritage and Fine Arts.
Ministry of Culture

GOBIERNO DE ESPAÑA
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