

The Landscape Catalogues of Catalonia

Methodology

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1. Landscape

712.2

7	PRESENTATION
9	1. INTRODUCTION
13	2. LANDSCAPE CATALOGUES OF CATALONIA. CONCEPT, CONTENTS AND FUNCTIONS
14	2.1. European background
15	2.2. The concept of landscape in the catalogues
15	2.3. What the landscape catalogues are and what they are not
16	2.4. Area and scale of application
17	2.5. Contents and structure
22	2.6. Functions of the catalogues
23	2.7. Preparation phases
24	2.8. Work teams that have prepared the catalogues
25	2.9. Approval of the landscape catalogues
25	2.10. Preparation and approval of the landscape directives
28	2.11. Consultation process and public and social participation
42	2.12. The numbers of the seven catalogues
44	2.13. Access to the information of the landscape catalogues
47	3. LANDSCAPE UNITS
49	3.1. Concept of a landscape unit
50	3.2. General criteria for delimiting landscape units
52	3.3. Variables used for delimiting landscape units
54	3.4. Procedure for delimiting landscape units
54	3.5. Name of the landscape units
55	3.6. Public participation in the delimiting and naming of landscape units
57	3.7. 134 landscapes
58	3.8. Cartographical representation of the landscape units
61	4. CHARACTERISATION AND EVALUATION OF THE LANDSCAPE
62	4.1. Values in the landscape
95	4.2. Artistic expression of the landscape
98	4.3. Dynamics in the landscape
104	4.4. Viewpoints and itineraries
111	4.5. Landscape evaluation
113	4.6. Special attention landscapes
119	5. FROM CHARACTERISATION TO ACTION: LANDSCAPE QUALITY OBJECTIVES, CRITERIA AND ACTIONS
120	5.1. What the landscape quality objectives are
124	5.2. Criteria and actions
130	5.3. Public participation in defining the landscape quality objectives, criteria and actions
133	6. CHALLENGES AND PERSPECTIVES
137	7. GLOSSARY
141	8. BIBLIOGRAPHY

Joan Nogué

Director of the Landscape Observatory of Catalonia

At the Landscape Observatory of Catalonia we have always been keen on explaining what we do and how we do it. This is why we have placed such emphasis on communication, in explaining, willy-nilly, and in more than one language, the results of our work. This has given rise to our two collections of books, the co-publications, the websites, the portals, the digital dossiers, the e-newsletters, our active presence in the social networks, and so on. This is also given rise to the seminars, the conferences, the congresses and the workshops all over the territory. We are a public consortium, with the occasional participation of private companies, but we are public in essence, not just by law, but through conviction. We owe society and we work for society, we are a public service. This is why transparency and the full dissemination of the knowledge we generate are two of our priority maxims and this publication is another example of this.

The Landscape Catalogues of Catalonia. Methodology aims to explain to any reader, to any interested party, the methodology used when drawing up what is probably the most successful instrument that was envisaged by Law 8/2005, of 8th of June, on the protection, management and planning of the landscape. In fact, it tries to explain in great detail how the landscape catalogues were drawn up, which criteria were used, based on which suppositions, at what scale, what their functions are, what steps were followed, who prepared them, how the general public has been involved, and how and where one can get all the information generated. In short, it tries to explain everything, and not in an academic way, but in the hope of being useful. Because we are convinced that a well-informed society—also in landscape matters—is a more mature and more democratic society. And because *landscape governance* corresponds to all of us, and no governance—in other words the protection, management and planning of the landscape in the case in question—is possible if we have not first identified its diversity and complex nature and we have

not collectively agreed which objectives need to be met in order to improve this common asset: our landscape. The methodology presented here explains how the necessary steps to do this were planned and guided.

As indicated in the Introduction that follows, the landscape catalogues, inspired by the European Landscape Convention, are a fundamental tool for getting to know the territory and have become the main knowledge-creation project on the landscape in Catalonia. The catalogues represent a great effort in terms of innovation and imagination in identifying, interpreting and representing—from a cartographic point of view—elements, values and dynamics of the landscapes, in defining and expressing landscape quality objectives on a map or in making the huge variety of landscape realities in Catalonia comprehensible. Obviously, we could have achieved a higher degree of excellence, but we modestly believe that we have amply met the challenges we proposed when the government, following the precepts of the above-mentioned law, commissioned us, some years ago, to draw up the catalogues, starting from scratch. Yes, literally starting from scratch: there were no precedents in Catalonia and the few that existed internationally had been created and designed for geographical areas and landscape realities that were very different from ours and could therefore not be mechanically imported. We needed to be up to date with everything that had been done all over the world that could inspire us or offer clues, yet we needed to construct a unique methodology of our own, inspired at all times by the European Landscape Convention (ELC). Innovating is not easy. Therefore, looking back and remembering where we came from and where we are now, the assessment of the route we have covered could not be more positive. The fact that we have done something right can be also seen in the continuous adaptations of our model to other realities, both in Spain, as well as all over Europe and the world. This does not upset us, in fact quite the contrary: we are particularly satisfied

about having contributed to the exportation of knowledge, of know-how, all over the world from Catalonia.

This is a joint piece of work in which all the members of the Landscape Observatory of Catalonia participated. However, there are two people who took on the responsibility of seeing the work through, of designing it and writing it up. These are, in fact, the two people who have been most involved overall these years in the everyday running of the passionate (but at times arduous) task of preparing the seven Landscape Catalogues of Catalonia. I am referring to our coordinator, Pere Sala, and his closest collaborator, Jordi Grau. Without their enormous capacity for work, their excitement and passion for a job well done, none of this would have been possible. I am extremely grateful to them. Nor would I wish to forget two key players in this long, motivating process of drawing up the Landscape Catalogues of Catalonia: the university teams of all the Catalan state universities which, coordinated and directed by us, actively participated in it and, obviously, the thousands of members of the general public who became involved, either by actively and decisively collaborating in the corresponding participation and citizen consultation sessions, or by sending us suggestions of all kinds, even once the catalogues had been finished.

1. **Introduction**

Over the last decade, the landscape has aroused growing interest among institutions, social and cultural stakeholders and the Catalan and European society in general. There are diverse reasons: from the deterioration that has occurred to many landscapes, with the consequent loss of their values and their idiosyncrasy, to a growing awareness about this matter that has been generated by an opinion that is increasingly being heard by the institutions. However, if there is one factor that has had a decisive contribution—and it has also been partly a consequence—it was the approval of the European Landscape Convention (ELC) on 20th of October 2000, promoted by the Council of Europe and ratified today by some 40 member states. The European Landscape Convention was the first international treaty to deal with the landscape itself and its objective is to promote conservation and to improve the extraordinary diversity of European landscapes.

One of the most innovative aspects of the European Landscape Convention is that, for the first time, it places the landscape as a central element of development, and not as a defensive or reactive factor. Thanks to the Convention, the traditional confrontation between landscape value and economic development became a development that specifically uses the economic value of the landscape, of the history, the culture and the identity of places to propose a new form of development. Today, when we talk about the landscape, we talk in a proactive, innovative way about the quality of life of citizens and about territorial and local development. The time when talking about the landscape was almost synonymous to talking about its protection is now in the past.

In December 2000, just two months after the approval of the European Landscape Convention, the Parliament of Catalonia adhered to it.¹ The first steps were taken in 2004, with the creation, at the end of the year, of the

1. Through Resolution 364/VI of the Parliament of Catalonia, of 14th of December 2000, on adhesion to the European Landscape Convention.

Landscape Observatory of Catalonia and, the following year, with the approval of Law 8/2005, of 8th of June, on the protection, management and planning of the landscape,² and the later Decree 343/2006, which develops it in the form of a regulation. The law is an authentic reflection of the principles of the European Landscape Convention, from its overall, transversal, integrating and strategic nature.

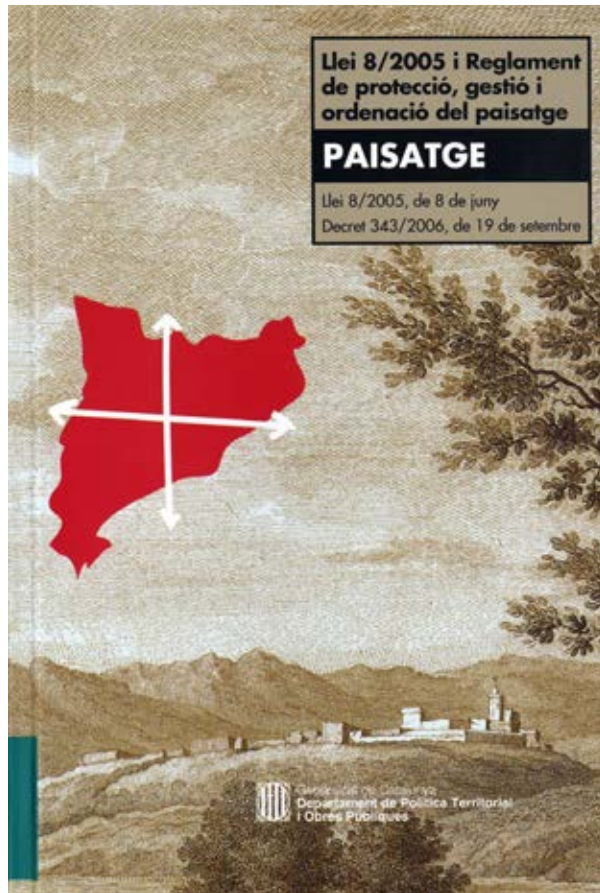
With the Law and the Regulation that came from it, the landscape started to become, above all, a fundamental piece of many territorial planning policies and started to emerge in sectorial policies of a social, cultural and economic nature. One of its qualities is the fact that it is a pragmatic, tangible law that seeks objectives through the creation of instruments (landscape catalogues, landscape directives, landscape charters, impact and landscape integration studies and reports, and the Fund for the protection, management and planning of the landscape), thereby securing highly visible results by all the stakeholders involved in the matter.

Some months before the approval of the law, the Landscape Observatory of Catalonia was created. Operational since 1st of March 2005, it was conceived as an assessment body for the Catalan administration and to create awareness among society in general in landscape matters. Over these years, it has become the meeting place par excellence of the Government of Catalonia,

2. Published in the DOGC (Official Gazette of the Government of Catalonia) no. 4407, of 16.6.2005 and developed through Decree 343/2006, of 19th of September, developing Law 8/2005, of 8th of June, on the protection, management and planning of the landscape and regulating impact and landscape integration studies and reports (DOGC no. 4723, of 21.9.2006). The Government of Catalonia's actions in landscape matters are found in the context of the new territorial policy that is aimed at promoting an economic and social development of Catalonia that is compatible with territorial balance and with the improvement of the quality of our landscapes. The new territorial policy is based on the recognition of the potentials and the landscape diversity of the Catalan territory, in the face of some of the processes that the territory has undergone during the last decades and which deteriorate its landscape values and the quality of life of the population and the promotion of the integrated character of the activities in the territory, so that the landscape becomes a key element in design and development.

Landscape catalogues	Descriptive and prospective documents, applicable at the territorial level, which determine the various types of landscapes in Catalonia, identify their values and state of preservation and propose the quality objectives which need to be met.
Landscape directives	Directives which, based on the landscape catalogues, set out the proposed landscape quality objectives and incorporate them into the regulation of territorial zoning plans.
Landscape impact and integration study	Technical document which takes into account the consequences on the landscape of carrying out public works projects and other actions, and sets out the criteria adopted for their integration into the landscape.
Landscape impact and integration report	Written statement aimed at evaluating the suitability and adequacy of the criteria or measures adopted in the landscape impact and integration studies in order to integrate the actions, applications, works or activities carried out on the landscape.
Landscape charters	Instrument for harmonising strategies between public and private agents, applicable at local, supra-municipal or district level, in order to carry out actions for the protection, management and planning of the landscape, with the objective of sustaining its values.
Fund for the protection, management and planning of the landscape	Financial instrument of the Government of Catalonia aimed at allocating funds to activities which improve and preserve the landscape, directed at public bodies, private entities, individuals and juristic persons acting with these objectives.

Table 1. Tools envisaged in the Catalan Law 8/2005, of 8th of June, on the protection, management and planning of the landscape and Decree 343/2006, of 19th of September which develops it.



Picture 1. Cover of the Landscape Act.

the local administration, universities, professional collectives and, in general, Catalan society in everything regarding the landscape.

The Observatory has a significant ability to generate knowledge and to create synergies, complicities and interdependences from proximity and from everyday experience. Therefore, it is a centre that seeks to influence the definition and design of future tendencies, and that

acts as a large umbrella under which anyone interested in the landscape can take refuge.

Knowledge is the basis for making decisions about the landscape. Therefore, the landscape catalogues that the Observatory has prepared, inspired by the articles of the European Landscape Convention and created by the Landscape Act, are a fundamental tool for getting to know the territory and have become the main project for generating knowledge about the landscape in Catalonia, which was non-existent before the creation of the Observatory. The catalogues represent a great effort in innovation and imagination when identifying, interpreting and representing—from a cartographic point of view—elements, values and dynamics of the landscapes, when defining and expressing on a map landscape quality objectives or when making the huge variety of landscape realities in Catalonia comprehensible, without having many previous references, and being fully aware that it has not reached the final phase.

Because they were conceived as highly suitable tools for planning and managing the landscape from the territorial planning perspective, their scope corresponded, right from the start, to each of areas of application of the partial territorial plans of Catalonia, in other words Alt Pirineu i Aran; Camp de Tarragona; Comarques Centrals; Comarques Gironines; Terres de Lleida; Regió Metropolitana de Barcelona and Terres de l'Ebre. However, the preparation of the landscape catalogues was a huge challenge right from the start, with very few precedents in Europe. How could the new philosophy that emanated from the European Landscape Convention be translated into a specific territorial planning instrument? It should also be taken into account that this was a complex, polyhedral concept with a huge cultural load. The landscape is the carrier of tangible and intangible values and, at the same time, it is an objective reality and a social construction therefore, for all these reasons, when talking about the landscape, it is not easy to come to consensus.

The catalogues have enabled the foundations to be laid for an European region that is starting to be normal, modern, in the area of landscape policies (on an equal footing with countries such as France, United Kingdom or the Netherlands, which have had similar instruments for years). It has involved methodological consensus (not without having to overcome numerous conceptual, scale and disciplinary challenges), participation (an increasingly more relevant matter), and it has been the result of extensive work on design and coordination by the Landscape Observatory, in collaboration with the public Catalan universities and the Ministry of the Territory and Sustainability of the Government of Catalonia, promoting interdisciplinary work. Suffice to say that the fact that the catalogues have been approved by ministers belonging to various political formations is an excellent display of continuity and institutional maturity.

The catalogues are an innovative instrument both with regard to their methodological conception as well as to their application to public policies. The identification of the values in the landscape and establishing landscape quality objectives, for example, make the catalogues the basic tool for defining landscape directives, a tool of the Landscape Act that binds and facilitates the transfer from the landscape catalogues to the planning instruments, to the sectorial policies and, in short, to the action on the territory. Therefore, they establish what would be convenient to deal with in the future from all the areas and define a landscape “model” at the relevant scale. This is a highly relevant aspect, and one of the few references that exists in Europe.

For all these reasons, the landscape catalogues have become a reference tool that has also enabled us to obtain, for the first time, the map of the landscape units of Catalonia (134 in all), based on the landscape character which verifies that Catalonia has a great diversity and richness of landscapes and that it is one of the regions with greatest diversity on the European continent.

The map serves as a reference for the spatial planning, urban, tourist, cultural, educational or awareness creating policies. To this end, the catalogues have been designed to combine technically rigorous information with language that is easy to understand and apply, an ambitious, complex task. This means that the catalogues contribute to the planning, have been included in secondary school textbooks and are being used as a basis for local stakeholders when promoting landscape initiatives of any kind.

The landscape catalogues appeared at a time of change of paradigms in relation to the new way of understanding political action and new ways of governing the territory as demanded by society. Citizens no longer wish to be passive spectators of the transformations carried out on their immediate surroundings and want to become a protagonist stakeholder in the decision-making. In other words, the general public wish to be co-responsible for the future of the territory in which they live. This gave rise to the interest awoken by the reading of the territory in terms of landscape, as well as the division into 134 landscape units which are not viewed as political-administrative entities, but as spaces with life, meeting places, areas that contain collective memories and even areas ideal for redesigning landscape governance. New forms of landscape governance are being born, understood to be an essential feature of quality of life, as a common asset, as well as the expression of the territorial and collective diversity, which take the catalogues as their basis.

The landscape catalogues represent one of the most notable milestones of the Landscape Act and have set a *before* and an *after* in the knowledge and management of the landscape in Catalonia. When talking about landscape, Catalonia—and a large part of Europe—has entered into a new stage in which to face the challenges of quality, identity, internationalisation, competitiveness, being transversal, creativity, cooperation, local development and entrepreneurship, the importance of

values, research, training or communication. As well as the challenge of inserting landscape into the territorial policies and above all, in the policies in which they have a greater social interest, such as health and well-being, education, renewable energies and the fight against the climate change, or the transition towards a more sustainable economy. The Landscape Observatory, in its document *Catpaisatge 2020. Country, Landscape, Future*, establishes its roadmap specifically based on these challenges, aware that the results of the catalogues are helping to pass the general approaches that have characterised the latest years of the landscape policies on to more specific actions.

The landscape catalogues were created at a time in which it was essential to introduce a new culture of territorial planning based on prudent management, on a new, imaginative treatment of open space and of the landscape as a whole and on a new way of governing and of managing the territory based on dialogue and social consensus. Today, we can hold our heads up high and say that this has culminated in the first generation of catalogues which, inevitably, someday will need to be reviewed and updated, with an open vision and with a clear desire to polish them and improve them, adapting them to the needs and opportunities of the moment, based on a discussion that should be as plural as possible.

Now, with all the landscape catalogues completed and approved by the Catalan Ministry of the Territory and Sustainability, it is the best time to explain their preparation methodology. Therefore, this publication places emphasis on the methodological aspects that have functioned, those that have been improved during the preparation process and those that continue to offer a challenge. In short, it explains and records the methodology used for preparing the seven landscape catalogues and is, at the same time, a basis and a precedent for future methodological tools.

2. Landscape catalogues of Catalonia. Concept, contents and functions

The landscape catalogues were conceived by Law 8/2005, of 8th of June, on the protection, management and planning of the landscape as an instrument for protecting, managing and planning the landscape in Catalonia, and as support tools to the introduction of landscape policies in territorial and urban planning. They were also designed as highly useful tools in the development of other policies and strategies of a sectorial nature linked to the landscape (nature conservation, agriculture, industry, transport infrastructures, culture and tourism), as well as creating awareness among Catalan society in matters of landscape and of environmental, cultural and aesthetic values. The catalogues also promote a form of landscape governance based on the participation and consensus of the social stakeholders that intervene or live on the territory. This final aspect is significant because it involves Catalan society in the management and planning of their own landscape.

The landscape catalogues are inspired by parts c) and d) of Article 6 of the European Landscape Convention

C. Identification and assessment. With the active participation of the interested parties, as stipulated in Article 5.c, and with a view to improving knowledge of its landscapes, each party undertakes:

- a to identify its own landscapes throughout its territory;
- to analyse their characteristics and the forces and pressures transforming them;
- to take note of the changes;
- to assess the landscapes thus identified, taking into account the particular values assigned to them by the interested parties and the population concerned.

D. Landscape quality objectives. Each party undertakes to define landscape quality objectives for the landscapes identified and assessed, after public consultation in accordance with Article 5.c.

The methodology used, which will be developed in the following pages and chapters, was the result of a complex sharing of perspectives of more than 70 institutions, research groups and experts to obtain the greatest consensus in its contents. When writing it up, there was the collaboration of several work teams made up of specialists from the public Catalan universities under the coordination of the Landscape Observatory (see part 2.8). However, they are not works for a merely academic purpose, but designed and prepared to be useful for territorial, urban and sectorial planning. They are rigorous from a scientific point of view but use language that is not very technical and is easily understood by most of the population. They are methodologically clear, extrapolatable to other territories and can be compared with other experiences that are prepared in several European states and regions.

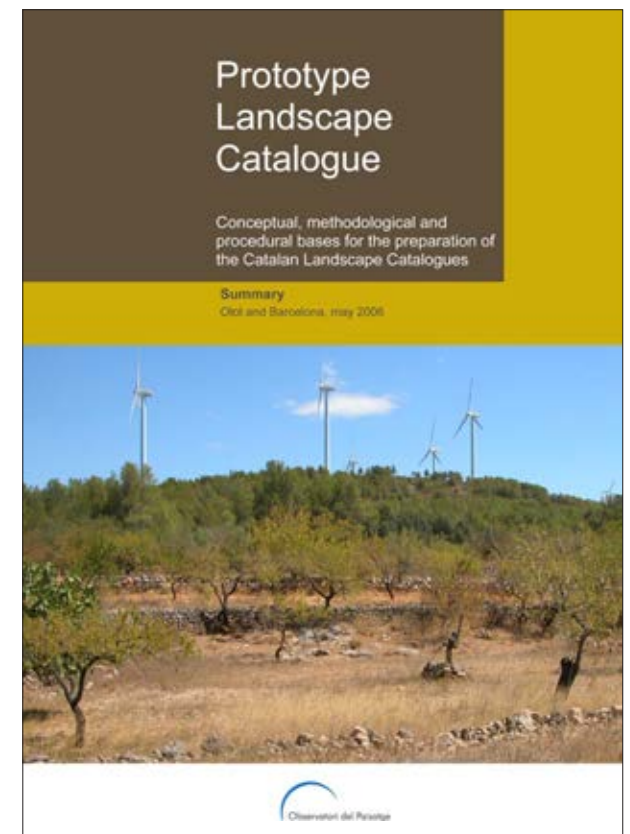
This chapter describes in detail the scope, content, preparation procedure, structure and functions of the landscape catalogues. Due to their importance throughout the preparation process, a specific part is also given over to describing and highlighting the most notable aspects of the citizen participation mechanisms.

2.1. European background

The landscape catalogues were a completely new tool with few precedents on an international scale, although in Europe there was a significant knowledge base in this area. In this respect, we should point out the accumulated experience in European countries such as the United Kingdom (specifically the governmental office, Countryside Agency, currently Natural England) and Ireland, with the Landscape Character Assessments, and Belgium, France, Portugal and Spain with their respective landscape atlases, which identify and evaluate, the landscapes at a state level. The main difference between the above-mentioned experiences

and the landscape catalogues lies in their final objective and their integration in the approval process of the partial territorial plans.

Once the Landscape Observatory had been given the commission to prepare the landscape catalogues by the Government of Catalonia, some questions arose: What should the landscape catalogues be like? At what work scale should they be done? What content should be included beyond that established by the Landscape Act? What values should be identified? How are they to be assessed? What are the landscape quality objectives?



Picture 2. Cover of the *Prototype Landscape Catalogue* (Nogué i Sala, 2006) prepared by the Observatory in 2006.

The first question was how the landscape quality objectives could be translated into useful guidelines for territorial and urban planning. There was no universally recognised method for studying, identifying and assessing the landscapes and their diversity and even less so for applying the resulting directives to the territorial planning.

Therefore, it was a genuine challenge. These doubts, along with the innovative character of the tool and its importance in the territorial planning of Catalonia, led the Landscape Observatory to prepare a prototype of landscape catalogue (Nogué and Sala, 2006) that established a common framework for preparing the seven landscape catalogues in a coherent, coordinated way. This document, organised in a way similar to the guidelines of British origin, were offered for consideration to more than 70 institutions, research groups and landscape experts in Catalonia and outside Catalonia to be able to get the greatest consensus about the contents.

2.2. The concept of landscape in the catalogues

The landscape catalogues started with an integrated vision of landscape that takes the natural and cultural components jointly, never separately. Based on the definition of the European Landscape Convention, landscape is understood in the catalogues as an area, as perceived by people, whose character is the result of the action and interaction of natural (such as the relief, the hydrology, the flora and the fauna) and/or human (such as economic activities or historic heritage) factors. At the same time, the landscape is conceived as a physical reality and according to the representation that we make of it. It is the physiognomy of a territory with all its natural and anthropic elements as well as the feelings and emotions that are awakened on contemplating them. The landscape is conceived in the

catalogues as a social product, the cultural projection of a society in a given space from a material, spiritual and symbolic dimension (see Chapter 3 on the identification of landscape units).

Definition of the landscape, according to Article 1 of the European Landscape Convention

“Landscape” refers to an area, as perceived by people, whose character is the result of the interaction of natural and/or human factors.



This multidimensional approach to the landscape is translated into the multiple nature of values which characterise it. The catalogues are based on the existence of diverse values or types of landscape values (natural, historical, social use, aesthetic, productive, symbolic), attributed by the stakeholders who intervened and by the population who live and enjoy it. This is one of the reasons that explains why the methodology used to prepare the landscape catalogues is qualitative. Not all landscapes have the same meaning for everyone and each landscape can be attributed diverse values to differing degrees, depending on the perception of the stakeholder or individual. Therefore, we need to accept the existence of methodological difficulties and of perspective differences with respect to the landscape

that make it difficult to define a quantitative method of valuation of the quality of a landscape that is valid and accepted by everyone.

2.3. What the landscape catalogues are and what they are not

Article 10 of the Law on the protection, management and planning of the landscape of Catalonia defines the landscape catalogues of Catalonia as “the documents of a descriptive and forward-looking nature that determine the type of landscapes of Catalonia, identify their values and state of conservation and propose the landscape quality objectives of quality they should meet.” In other words, the landscape catalogues are the tools that enable us to get to know what our landscape is like and what values it has, which factors explain why we have one certain type of landscape and not another one, how our landscape evolves in keeping with current economic, social and environmental dynamics and, finally, will define what type of landscape we wish to have and how we can achieve it.

It is important to make it clear that the landscape catalogues are not just an inventory of elements, spaces or values, as the term catalogue might suggest. The catalogues are much more than this. The landscape catalogues provide information of great interest about all the Catalan landscapes, their existing values and those that we could enhance, and thereby contribute towards defining and applying landscape policies that must have the cooperation and active participation of all the social stakeholders that intervene in the territory. The analysis of the landscape that is done in the catalogues is qualitative, it highlights the elements of each of the landscapes identified but avoids trying to alter the landscapes according to which have more or less value.

The results of the catalogues are applied to the Catalan territory as a whole and not just to unique or exceptional spaces. They do not exclude any part of the territory; quite the contrary, they analyse marginal, degraded spaces, the everyday ones—such as commercial areas or industrial spaces— or the formats for infrastructures and facilities (airports, large communication infrastructures, industrial areas, petrol stations). Therefore, their scope is global and goes from natural spaces to urban ones, including rural and periurban ones.

Another significant characteristic of the landscape catalogues is that they integrate public participation as a tool for involving and giving shared responsibility to society in the management and planning of their landscape. The catalogues tried to surpass the classical sectorial logic and organised participative and transversal ways of working and of generating knowledge. The absence of a unanimously recognised participative methodology in the landscape area favoured the process having a pioneering, experimental character under permanent construction as the landscape catalogues were being prepared and lessons were being learnt from any possible errors. With the aim of affecting all the preparation phases of the catalogue and seeking the greatest representation, diverse participation techniques were combined at different levels, such as telephone interviews, opinion studies, consultations via Internet, interviews with stakeholders and experts, workshops and informative sessions which are explained in part 2.11 of this chapter.

The catalogues involve society in the identification and valuation of the landscape, capture the perception of the landscape by the population and, at the same time, remind the general public that they have the right to a landscape of quality. This cooperation between the diverse stakeholders, such as people in elected positions, the scientific area, technicians and the general public, when preparing the catalogues led to catalogues that

The landscape catalogues:

- provide information of great interest on all the Catalan landscapes and create awareness in matters of landscape.
- are support tools to the introduction of landscape in territorial and urban planning, and to sectorial policies.
- are based on an integrated vision of the landscape that takes the natural and cultural components jointly, never separately.
- are based on the existence of diverse landscape values attributed by the stakeholders who intervene and by the population who enjoy them.
- are applied to the Catalan territory as a whole and not just to unique or exceptional spaces.
- integrate public participation as a tool for involving and giving shared responsibility to society in the management and planning of their landscape.
- are rigorous from a scientific point of view but use language that is not over technocratic.

The landscape catalogues are not:

- a mere inventory of elements, areas, spaces or values, as the term catalogue might suggest, but are a tool of knowledge and planning.
- documents that exclude any part of the territory; quite the contrary, they analyse marginal, degraded spaces, the everyday ones or the formats for infrastructures and facilities.
- works for a merely academic purpose, but useful documents for territorial, urban and sectorial planning.
- the result of a mere compilation and accumulation of data and information, but of the organisation of knowledge generation processes and joint reflection with the stakeholders of the territory.
- works that classify landscapes by those which have a greater or lesser value than others. Quite the contrary, they identify the values that each of the landscapes has.

combine scientific rigour with the understanding of their content and of the results by the population at large.

Finally, we should point out that the catalogues are not the result of a mere compilation and accumulation of data and information, but are the organisation of knowledge generation processes and joint reflection with the stakeholders of the territory. This focus contributed to overcoming the fragmentation of the discourse on the landscape and promoted the shared responsibility of all society, trying to transmit passion and awareness for the preservation of the landscape values.

2.4. Area and scale of application

As previously mentioned, the landscape catalogues are conceived from a regulatory point of view to be useful tools for planning and managing the landscape from the territorial planning perspective. This is why their territorial scope—on which their work scale depends— corresponds to partial territorial plans (in keeping with the territorial planning areas for Catalonia current in 2005):

- Alt Pirineu i Aran
- Camp de Tarragona
- Comarques Centrals
- Comarques Gironines
- Regió Metropolitana de Barcelona
- Terres de Lleida
- Terres de l'Ebre

The territorial areas have an average approximate surface area of 4,586 km². The area, without doubt, marks the work scale of the catalogues. The landscape catalogues were prepared at an optimum scale for territorial planning instruments, as established in the Landscape Act. This scale of analysis is 1:50,000, although in



Map 1. Territorial areas of application of the landscape catalogues of Catalonia (current in 2005).

some places it goes into greater detail. This means, for example and for practical purposes, that the catalogues do not identify every single dry stone wall in Catalonia, which would be a huge task and more typical of analysis at a more detailed scale, such as local, but that the cartography shows the areas of landscape that have been modelled by dry stone walls. Therefore, the cartographic representation is also another, more generic, polygonal one in this case, leaving the uniqueness and the interest of the zones in question very clear.

Another example derived from the use of a determined scale is that the catalogues have not identified and analysed all the farmhouses (*masies*) in Catalonia and their architectural characteristics, but the maps show where these farmhouses configure specific, unique landscapes that are different from one place to another, normally characterised by agroforestry spaces. The effort re-

quired to lower the territorial scale to the local scale is an essential step for developing local landscape policies, as well as for introducing the landscape into municipal planning.

2.5. Contents and structure

In article 11 of the law on the protection, management and planning of the landscape the minimum contents that the seven landscape catalogues incorporate are established:

- a) The inventory of the landscape values found in their area.
- b) The enumeration of the activities and the processes that influence or have influenced most notably the current configuration of the landscape.
- c) The marking of the main routes and spaces from which the landscape is perceived.
- d) The delimitation of the landscape units, understood as areas that are structurally, functionally and/or visually coherent on which a differentiated regime of protection, management or planning could fall.
- e) The definition of the landscape quality objectives for each landscape unit. These objectives must express

the aspirations of the public with regard to the landscape features of their surroundings.

- f) The proposal of measures and actions necessary to obtain the landscape quality objectives.

In the same way, Article 6 of Decree 343/2006, of 19th of September, developing Catalan Law 8/2005, of 8th of June, on the protection, management and planning of the landscape and regulating impact and landscape integration studies and reports defines the documents that each catalogue should contain:

- a) Report of the diagnosis and assessment
- b) Landscape quality objectives
- c) Cartography
- d) Photographic archive, which should include documentation about the current state of the landscape and, if possible, its historic background.
- e) Other studies that are considered appropriate depending on the specificities of each territorial area.
- f) Database and links to elements likely to intervene as landscape elements.

These contents and documents defined by the Law and the Decree are developed through the : report, cartography, inventory of landscape stakeholders and photographic archive.



Picture 3. Sample of diverse contents and formats of the landscape catalogues.

2.5.1. Report

This document consists of two volumes. Volume I analyses the landscape of the entire territorial area of the catalogue and volume II contains a specific file for each of the landscape units.

Volume I: Territorial area

- Introduction
- Methodology
- Natural factors that condition the landscape
- Historic evolution of the landscape
- The current landscape and its dynamics (current and future)
- Artistic expression of the landscape
- Values in the landscape
- Routes and points for observing and enjoying the landscape
- Landscape evaluation
- Special attention landscapes
- Landscape quality objectives
- Criteria and actions
- Conclusions
- Reference documentation



Figure 1. Format of Volume I of the report. DIN A3 size document, Arial 12 font and double column.

Volume II: Landscape units

Content of each landscape unit:

- General data
- Representative photograph of the landscape
- Distinctive features
- Main values
- Composition of four photographs of values and distinctive features
- Location map
- Natural elements that make up the landscape
- Historic evolution
- The current landscape and its dynamics
- Artistic expression of the landscape
- Values in the landscape
- Main routes and points for observing the landscape
- Landscape evaluation
- Landscape quality objectives
- Criteria and actions
- Maps of observation points, itineraries and landscape values



Figure 2. Format of Volume II of the report. DIN A3 size document, Arial 11 font and tripe column (on the inner pages). In the composition, you can see the first page of the file, with the general data, the distinctive features and the main values, the second page with a photographic composition, the third with the map of the situation, two inner pages and one of the landscape value maps.

2.5.2. Cartography

After centuries of history, maps continue to have an enormous power of fascination, suggestion and even intrigue. What is found on a map is usually interpreted and read as being something truthful, unappealable, immovable and objective. In the same way that a plan, whether printed or digital, helps to trace the itinerary of a trip, the public administrations do not make decisions about the territory without the backing of cartography. This is why cartography is so important in the landscape catalogues.

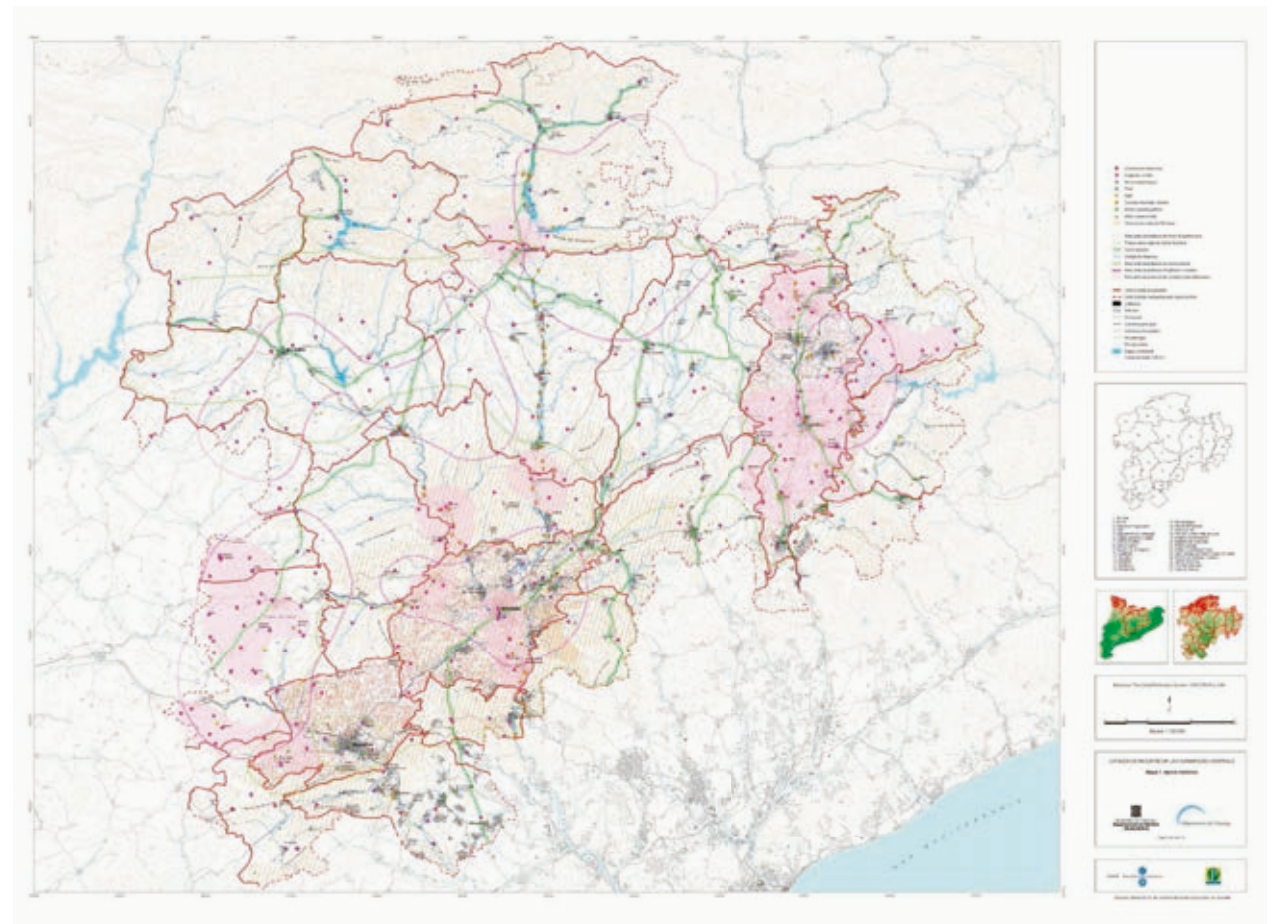
Thus, the written report is complemented with 14 maps of the entire territorial area, in DIN A0 format and with the maps of situation and of specific values, observation points and itineraries of each landscape unit that are found in the files of volume II of the report.

The DIN A0 maps that are prepared are:

- Map of landscape units
- Map of landscape units and administrative limits
- Map of special attention landscapes
- Map of visibility (degree of visual exposure)
- Map of viewpoints
- Map of natural and ecological values
- Map of itineraries
- Maps of aesthetic values
- Map of historic values
- Map of productive values
- Map of social use values
- Map of symbolic values
- Map of dynamics in the landscape
- Map of landscape quality objectives

The experience highlighted the fact that when expressing the proposals in landscape directives (see part 2.10), the cartographic representation of structures, patterns or landscape elements such as the combination of scenic backgrounds and landscape milestones, trees in rows and as windbreaks, unique plot struc-

tures, or nuclei in elevated positions, among many others, made possible a definition and a territorialisation of these landscape directives and, therefore, a closer link with the territorial and urban planning, as well as an adaptation of their use to different sectorial policies.



Map 2. Format of the general maps of the entire area. Average scale of 1:400,000 printed on DIN A0.

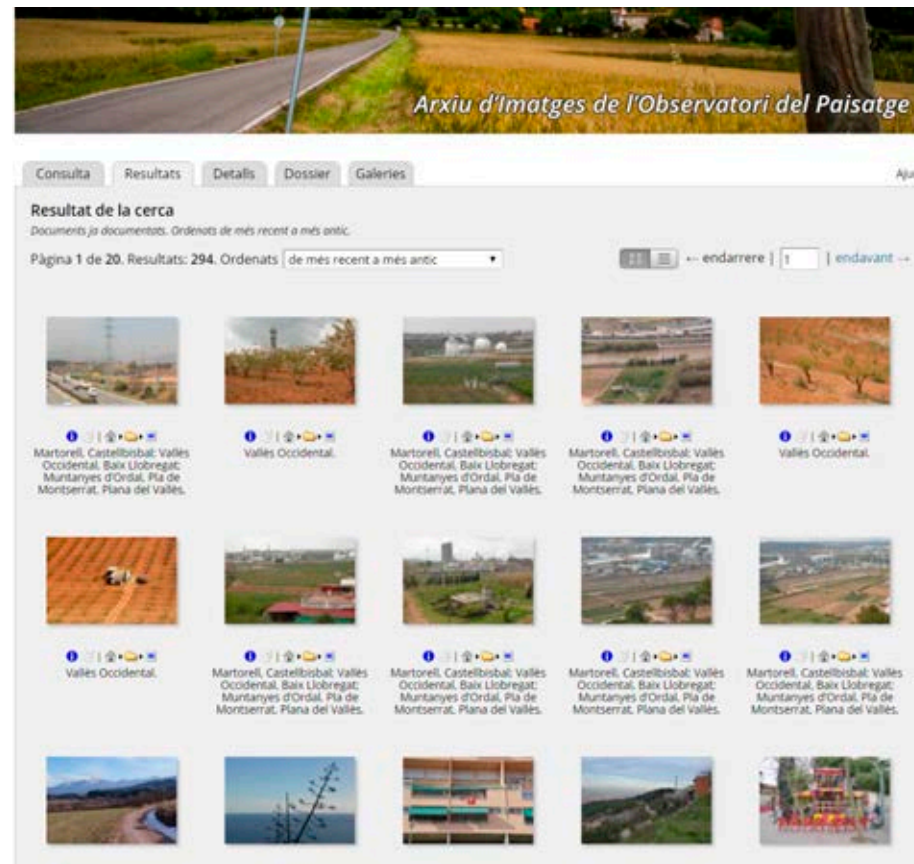
2.5.3. Inventory of landscape stakeholders

Taking into account the effort made when gathering the opinion of the general public through the participation processes (see part 2.11), a database was also generated with the stakeholders interviewed (administrations, public bodies, professional associations, universities, etc.) who, in one way or another, are involved in the protection, management and planning of the landscapes of Catalonia. This inventory has been very useful for informing the stakeholders about the state of preparation and approval of the catalogues.

2.5.4. Photographic archive

Photographs play a leading role in the structure of the landscape catalogues, they complement the report and actively help to explain the character of the landscapes of Catalonia. The photographic archive became the database with all the photographs taken during the preparation process of the Landscape catalogues, duly classified by landscape units as well as other criteria. The photographs have now become the property of the Landscape Observatory to make up its image archive. The selection of photographs for the file was carried out taking into account that they must be:

- Representative and classified for each landscape unit or special attention landscape.
- Representative of the main routes and points from which the landscape is perceived.
- Wide panoramic views that allow the characteristics (elements, shapes, structures, colours) that define each landscape unit and differentiate it from the neighbouring units to be seen.
- Sample of main features and values.
- Illustrative of seasonal changes that affect certain landscape elements.
- Reflective of the processes that intervene in recent landscape changes.
- Historic photographs that illustrate the transformations that have occurred on the landscape.



Picture 4. Page of results of the Landscape Observatory's Image Archive.

2.6. Functions of the catalogues

The Decree 343/2006 which develops Catalan Landscape Law gives the following functions to the landscape catalogues:

- a) To prepare a diagnosis of the state of the landscape, identifying its current and potential values from the heritage, cultural, aesthetic, environmental and economic points of view.
- b) To set up proposals and measures aimed at integrating the landscape into territorial and urban planning, and in particular, to define by means of landscape quality objectives the guidelines for establishing the landscape directives that will form part of the partial territorial plans and the territorial master plans.
- c) To guide the content of the Landscape Charters.³
- d) To provide guidelines and criteria for defining the sectorial plans and strategies.
- e) To provide the landscape quality objectives and the necessary landscape information to the environmental assessment processes of plans and programmes, to the environmental impact studies and to the landscape impact and integration studies and any other of a similar nature.
- f) To serve as a basis for carrying out awareness creation and education campaigns in landscape matters.
- g) To guide initiatives and projects of economic and social stakeholders.
- h) To provide guidelines and criteria for undertaking an analysis of the needs, of the context itself and of the repercussions for men and women in all matters related to the landscape, with the aim of contributing

3. The Landscape Act, in article 14, defines the landscape charters as “the tools for agreeing on strategies between public and private stakeholders to carry out actions to protect, manage and plan the landscape, the aim of which is to uphold its values.” Unlike the catalogues, which have an application area that coincides with the partial territorial plans, the charters are for municipal, supramunicipal or regional application.

to obtaining the individual and social well-being of people.

These functions described in the Decree can be grouped into territorial functions and sectorial functions.

2.6.1. Territorial functions of the catalogues

As already mentioned, the landscape catalogues are instruments that facilitate a clear overlap between territorial and urban planning with respect to the introduction of landscape policies. In other words, they guide the integration of the landscape into the territorial planning instruments in Catalonia at different scales. This is why the main territorial functions of the catalogues are the following:

Usefulness for the partial territorial plans

According to the Law on the protection, management and planning of the landscape, the classification characterisation of the landscapes, as well as the quality objectives associated to each of them, will be incorporated, with a regulatory nature, through the landscape directives, as rules, directives and recommendations for the landscape in the seven partial territorial plans prepared by the Ministry of the Territory and Sustainability and in the territorial master plans which the Ministry considers appropriate, after public consultation.

Usefulness for urban planning

The Landscape Act states that it will be the partial territorial plans and, depending on each case, also the territorial master plans that determine in which cases the landscape directives will be directly applicable, compulsorily incorporated in the modification and review of the urban planning, or when they simply constitute recommendations for urban planning and for other plans or programmes of a sectorial nature that affect

the landscape. From the urban planning point of view, the landscape catalogues are also conceived as tools of great use to urban planning technicians.

Usefulness for the territorial committees of urban planning

The territorial urban planning committees of the Ministry of the Territory and Sustainability of the Government of Catalonia issue reports on the environmental assessment procedure, decide on planning files, grant building authorisations on open spaces, inform studies with details, urban planning projects and management tools and reports on the authorisation of provisional uses and works. For the representatives of the territorial urban planning committees, the landscape catalogues are a highly useful tool as they provide directives and recommendations in terms of landscape that can help to determine the suitability or not of some of the projects they must inform.

2.6.2. Sectorial functions

Beyond their use for territorial planning, landscape catalogues also have the following functions:

- To constitute a solid base for the definition of specific landscape strategies for certain territories of Catalonia. To this end, they become a point of reference when preparing landscape charters, that must take into account what was established in the landscape catalogues that affect their area.
- To act as base documents for awareness creation campaigns on the landscape diversity of Catalonia and its environmental, cultural and aesthetic values, and for the integration of the landscape at different levels of teaching in Catalonia.
- To be useful in the process for defining sectorial plans and strategies, such as nature conservation

policies (policies affecting natural spaces, ecologic connectors, biodiversity, etc.), agricultural policies in terms of sustainability, rural development policies or tourist promotion policies associated to the landscape.

- To act as a starting point for the defining of regional and local strategies aimed at a sustainable development of the territory.
- To provide the landscape quality objectives and the necessary landscape information for the environmental assessment processes of plans and programmes, and for environmental impact studies that affect the territory, such as the landscape impact studies established in the Urban Planning Act.
- To act as reference documents to develop and apply the Fund for the protection, management and planning of the landscape, the Government of Catalonia's financial tool created by the Landscape Act with the aim of giving it to actions to improve the landscape.

2.7. Preparation phases

The preparation methodology of the landscape catalogues follows the principles of the European Landscape Convention, and consists of four phases:

Phase 1. Identification and characterisation. In the first phase of the preparation process of the catalogues, in which the areas of the territory that have a similar character are identified (taking the study of the natural, cultural and visual elements that make up the landscape as the basis, as well as the more perceptual and symbolic ones which also define it), the areas identified—which are known as landscape units (see Chapter 3)—are classified, mapped and their character is described, making the most exhaustive possible inventory the landscape values of each landscape unit—compiling the values attributed by the general pub-

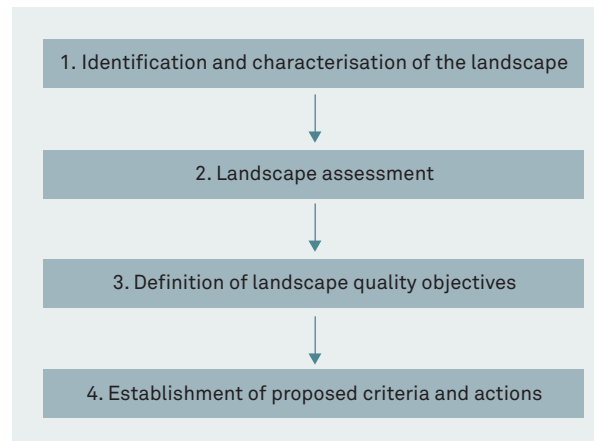


Figure 3. Developmental stages of the landscape catalogues.

lic—and describing the general dynamics of the landscape and the natural and socio-economic factors that have intervened and that still intervene on its evolution and transformation. This phase also analyses the current landscape, its dynamics and the possible future evolution of the landscape while considering the natural dynamics of the environment, as well as the socio economic trends, current legislation or the introduction of current territorial, urban and sectorial policies (see part 4.3). In this phase, the main routes and observation points from which the landscape is perceived are also shown. These viewpoints and itineraries also play an important educational role on the evolution and the values of the landscape (see part 4.4). However, of the entire landscape characterisation process, the most significant part is that of identifying the values, attributed by the stakeholders that intervene and by the general public that enjoy it (natural values, aesthetic values, productive values, historic values, values of social use, and symbolic values) (see part 4.1).

During the landscape characterisation process, special attention landscape is also identified, the sectors of the

territory with unique features or those that are the object of great transformations with significant landscape repercussions (see part 4.6).

Phase 2. Landscape assessment. The second step in the assessment consists of studying the strengths, weaknesses, opportunities and threats to protect, manage and plan the landscape, in terms of sustainability (see part 4.5).

Phase 3. Definition of the landscape quality objectives. This is the formulation by the public administrations of the aspirations of the public with regard to the landscape characteristics of their surroundings, after getting to know its state, values and risks, for the territorial area as well as for each landscape unit. In the definition of the quality objectives, the participation of the stakeholders involved in the transformations that take place to the landscape and in its use play a significant role (see part 5.1).

Phase 4. Setting criteria and actions. Once the landscape quality objectives have been set, each objective must have all the criteria and specific actions specified that must be taken on by the competent administrations to be able to meet it. The above-mentioned criteria and actions are mainly addressed at territorial, urban and sectorial policies. Neither of the cases are an exhaustive list of criteria and actions, given that meeting the landscape quality objectives depends in many cases on dynamics that are not within the area of action of the landscape catalogues (see part 5.2).

2.8. Work teams that have prepared the catalogues

The Landscape Act gives the Landscape Observatory of Catalonia, the body that supports the Government of Catalonia in matters regarding the landscape, the task of preparing the landscape catalogues. Another of the characteristics of the catalogues is their ability to organise participative, transversal ways of working and generating knowledge. For example, for the preparation of the seven catalogues, the Observatory signed agreements with diverse research groups from Catalan universities, which created interdisciplinary work teams with specialists in the areas of landscape analysis, management and intervention; territorial and urban planning; citizen participation and communication.

Preparing the catalogue in a multidisciplinary, transversal way, together with those responsible for institutions, specialists from the academic area, professionals such as urban planners, geographers, environmentalists, architects, sociologists, and even artists, and the general public, greatly diversifies and enriches the



Picture 5. Fieldwork during the preparation of the Landscape Catalogue of the Comarques Centrals.

Landscape catalogue	Work team		Participatory team
	University	Director team	
Comarques Gironines	University of Girona. Landscape Analysis and Management Laboratory of the Department of Geography	Josep Pintó. Doctor in Geography	Directorate General of Citizen Participation of the Government of Catalonia
	Polytechnic University of Catalonia. Landscape Research and Projects Centre	Jordi Bellmunt. Architect	Espai TReS · Territori i Responsabilitat Social
Terres de l'Ebre	Consortium of Agricultural and Environmental Services of the Baix Ebre and Montsià regions (CODE)	Josep Aragonès. Biologist	Espai TReS · Territori i Responsabilitat Social
	Rovira i Virgili University. Department of Geography	Sergi Saladié. Doctor in Geography	CODE
Camp de Tarragona	University of Girona. Landscape Analysis and Management Laboratory of the Department of Geography	Josep Pintó. Doctor in Geography	Directorate General of Citizen Participation of the Government of Catalonia
	Rovira i Virgili University. Department of Geography	Josep Oliveras. Professor of Analysis and Regional Geography	Espai TReS · Territori i Responsabilitat Social
Terres de Lleida	University of Lleida. Department of Agroforestry Engineering	Cristina Vega. Forest Engineer and Doctor in GIS and Remote Sensing and Cartography	
	Polytechnic University of Catalonia. Landscape Research and Projects Centre	Jordi Bellmunt. Architect	Espai TReS · Territori i Responsabilitat Social
Alt Pirineu i Aran	Autonomous University of Barcelona. Department of Geography	David Molina. Doctor in Geography	Directorate General of Citizen Participation of the Government of Catalonia
		Albert Pèlachs. Doctor in Geography	Espai TReS · Territori i Responsabilitat Social
Regió Metropolitana de Barcelona	Polytechnic University of Catalonia. Department of Urban and Territorial Planning	Joaquim Sabaté. Professor in the Department of Urban and Territorial Planning	Espai TReS · Territori i Responsabilitat Social Institute of Regional and Metropolitan Studies of Barcelona Cooperativa ETCS (strategies of sustainable community transformation) Directorate General of Citizen Participation of the Government of Catalonia
Comarques Centrals	University of Barcelona. Department of Physical Geography and Regional Geographical Analysis	Antonio Gómez. Doctor in Geography	Espai TReS · Territori i Responsabilitat Social Directorate General of Citizen Participation of the Government of Catalonia

Table 2. Teams that prepared the landscape catalogues.

visions of the landscapes, even though this is not an easy task (see Chapter 6). There are diverse difficulties that are hard to overcome: disciplinary traditions with closed methodologies, difficulties in team working due to not much tradition and experience, or corporate interests that often excessively interfere in the interdisciplinary dialogue. In short, this has been a key point since the beginning, and one of the most difficult ones to overcome.

The Landscape Observatory directed, coordinated and supervised the development of all the landscape catalogues and also wrote some chapters.

The Observatory's tasks focused on:

- A constant follow-up on the work.
- Checking the landscape units and the other contents *in situ*.
- Watching over the application of the landscape catalogue prototype and the agreement signed with the work teams.
- Facilitating the contacts and the sources of information necessary to carry out the work.
- Organising meetings between the work teams and those responsible for writing the partial territorial plans of the Ministry of the Territory and Sustainability.
- Coordinating methodological aspects and the continuity of content with respect to the other catalogues.
- Coordinating the public participation linked to the preparation process of each catalogue.
- Support to the writing of some chapters and the preparation of the cartography, particularly with relation to the landscape values, the landscape quality objectives and the criteria and actions.
- Watching over the use of a common language by all the stakeholders involved (administration, university, professionals, etc.), which is not always easy to achieve, but which is essential to be able to reach an agreement.

2.9. Approval of the landscape catalogues

Decree 343/2006, of 19th of September, which develops Law 8/2005, of 8th of June, on the protection, management and planning of the landscape, states that the landscape catalogues must be previously approved by the Ministry of the Territory and Sustainability and must be submitted to a public information period of at least one month, through an announcement published in the Official Gazette of the Government of Catalonia and in a newspaper that is widely published in the territory which is the object of the landscape catalogues. At the same time as processing the public information, a consultation period is opened in the local bodies and the economic and social organisations. The documents submitted for the processing of public information and consultation must be the object of valuation by the Ministry of the Territory and Sustainability and, if relevant, introduced in the document of corresponding suggestions, proposals and observations. Later, an approval proposal for the landscape catalogues must be formulated. The approval agreement of the catalogue corresponds to the Minister of the Territory and Sustainability (MoTS) and must be published in the Official Gazette of the Government of Catalonia.

2.10. Preparation and approval of the landscape directives

The Law also establishes that, once the landscape catalogues, classification and characterisation have been approved, as well as the quality objectives and the criteria and actions associated to each of them, they will be incorporated in a regulatory way as landscape directives in the seven partial territorial plans and in the territorial master plans that the Ministry of the Territory and Sustainability considers appropriate, after public consultation. Therefore, the landscape directives are a tool that connects the landscape quality objectives and the criteria and actions with the planning instruments, so that, from a regulatory point of view, they require and incorporate the landscape quality objectives proposals that come from the catalogues in the partial territorial plans or in the territorial master plans. This connection is one of the main existing challenges at present.

The same Decree also states that the landscape directives are aimed at the planning, management and protection of all the landscapes, and affect valued landscapes as well as those that could be considered to be at risk, in the sense of improving them or preventing further worsening of their quality.

Table 3. Dates that the landscape catalogues were approved.

Catalogues	Started	Delivery to the MoTS	Public information by the MoTS	Approval by the MoTS
Camp de Tarragona	2005	31 st of October 2006	30 th of July 2008	19 th of May 2010
Terres de Lleida	2005	31 st of October 2006	27 th of November 2007	5 th of August 2008
Alt Pirineu i Aran	2006	29 th of July 2011	15 th of May 2012	3 rd of April 2013
Comarques Gironines	2006	26 th of February 2010	6 th of September 2010	23 rd of November 2010
Terres de l'Ebre	2006	23 rd of July 2009	9 th of November 2009	16 th of July 2010
Barcelona Metropolitan Region	2007	29 th of December 2011	10 th of April 2014	11 th of December 2014
Comarques Centrals	2008	1 st of September 2015	19 th of January 2016	29 th of July 2016

MoTS: Ministry of the Territory and Sustainability

Currently, the partial territorial plans that include the landscape directives are the Partial Territorial Plan of the Terres de l'Ebre, approved on 27th of July 2010, and the Partial Territorial Plan of the Comarques Gironines, of 14th of September 2010.

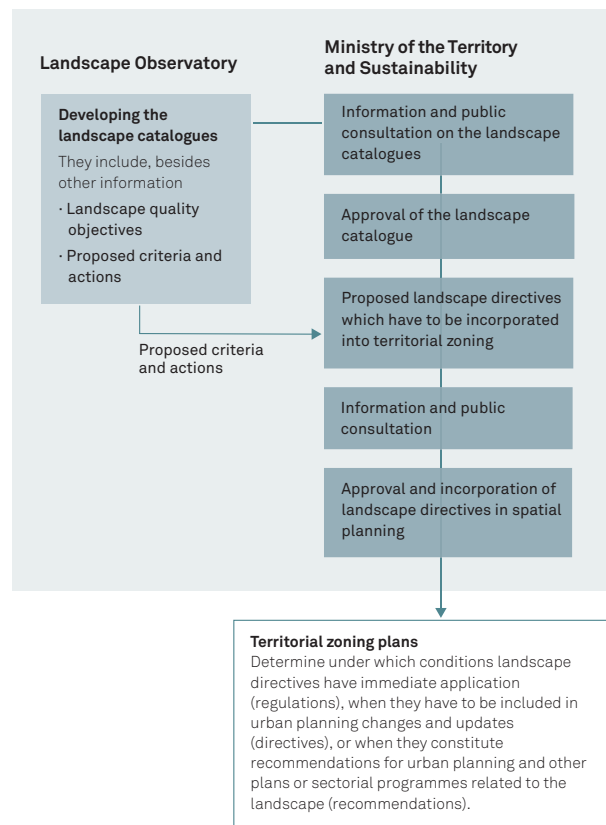


Figure 4. Integration process of landscape directives in the planning (pursuant to Law 8/2005, on the landscape). Once the landscape catalogues have been approved by the Minister, the Government uses the landscape quality objectives and the proposals to define the landscape directives.

EXAMPLE

Two landscape directives of the Partial Territorial Plan of the Comarques Gironines (2010)

Article 3.6

Directives of the landscape quality objective 4

Specialist fields of industrial, logistical, commercial, leisure time and other tertiary uses, located in non-preferential or little-known visual zones and designed (or redesigned) taking their integration into the environment, the treatment of façades and building typologies into account, as well as respecting the identity-giving and heritage spaces of the towns in which they are located.

1. To locate the new implantations of economic activity estates in areas of growth with continuity with the existing urban stretches or estates and minimise forming façades with direct visual exposure to the communicating roads so as to avoid the “shop-window” effect.
2. To guarantee that possible future actions in three territorial nodes that will be the object of territorial transformations take particular care with respect to the integration in the existing territorial matrix, as well as the unique landscape elements found in it. To this end, the following conditioners are shown:

- Area around Girona Airport: agroforestry landscape area organised around farmhouses (*masies*), of historic value.
- Area around the Intermodal Logistics Centre of El Far d'Empordà: an area of irrigated crops of historic origin with agricultural value and the pro-

Picture 6. One of the directives recommends avoiding the construction of new specialist areas in the agricultural spaces with a high productive value, such as the En Bas Valley.



ximities of the raised centre of El Far d'Empordà, which is also part of the pattern of historic settlements on the Plana de l'Empordà. Any actions in this area should be carried out preserving the visibility of the centre of El Far d'Empordà from the nearby roads (mainly the A-2 and the C-31).

- Area around the link between the AP-7 and the C-35 dual carriageway in the Maçanet de la Selva-Vidreteres-Sils triangle: area of agroforestry landscapes organised around farmhouses (*masies*), of historic value, and also with great natural and ecological value. In these areas, there are also formations of deciduous forests (oak) and of forests of poplars and plane trees of the river area, characteristic of the landscape matrix of the Plana de la Selva.
3. To avoid the construction of new specialist areas in agricultural areas with high productive value (Baix Empordà, Alt Empordà, En Bas Valley), in unique agricultural areas (Martís Plain, Santa Coloma Stream, Pals rice fields, Fortià and Sant Pere Pescador rice fields, Bellcaire d'Empordà rice fields, En Bas and Bianya valleys) or unique agroforestry areas (Els Aspres mosaic, Terrades mosaic, Terraprimis mosaic, Les Gavarres mosaic and Brunyola mosaic, the Canet d'Adri plains), referred to in the objective of landscape quality 14 (article 3.16).
 4. The development of new industrial, services or logistical estates in the following economic activity nodes (Girona Airport Area, Intermodal Logistic Centre of El Far d'Empordà Area and the linking area between the AP-7 and the C-35 dual motorway in the Maçanet de la Selva- Vidreteres-Sils triangle) will be accompanied by impact and landscape integration studies.
 5. To promote the recovery of landscape values in the areas in which they have been lost due to processes of degradation, often caused by certain activities, such as mining (stone quarries and sand quarries) and/or obsolete installations. In these areas, actions

need to be carried out to promote their management and/or transformation. These spaces are the Girona stone quarry; Els Comuns stone quarry (Tortellà); chalk quarries (Beuda); Gualta stone quarry; Ullà stone quarry, calcareous stone quarries between Llers, Figueres and Avinyonet de Puigventós; the area of Puig Gorners in Albons; the stone quarry in the area of Les Trescases as far as Corella (Figueres); aggregate mining zone and the processing plant associated to the banks of the River Fluvià, between Torroella de Fluvià and Arbre Sec; mining activities in Setcases; La Ramona, Els Gorgs and Els Mallats in Oix mining activity; the Subridell (Beget, Camprodon), Tolosa gravel quarry (Vallfogona de Ripollès), Cavorques sand quarry (Port de la Selva), aggregate extraction area in the north east extreme of the municipality of Cruïlles, Monells and Sant Sadurní de l'Heura, aggregate extraction area between Sant Sadurní de l'Heura and Calonge, coarse sand and granite extraction activities on the slopes near the Santa Coloma de Farners stream.

Article 3.8

Directives of the landscape quality objective 6

Windbreaks of cypress trees and cared for, protected tree fences as structural and characteristic elements of the rural heritage of Plana de l'Empordà and Empordanet - Baix Ter.

1. The windbreak of cypress trees and the tree fences are considered to be a landscape value in themselves, characterised by the seasonal nature (less so in the case of the cypress tree) and the vertical nature of the formation, defined by the linear plot structure perpendicular to river courses and the linearity of the stretch, in contrast to the crops, the areas of water and the scenic backdrops.
2. The preservation of these elements is recommended, or, if there have to be transformations to these lan-

dsapes derived from necessary changes in the exploitation systems, the actions should be carried out following the guidelines of the pre-existing agricultural landscapes. Along the same lines, public works that affect or go through the fences of trees should be integrated from the landscape point of view. Relations should be established between these linear landscapes and the scenic backgrounds that surround them.

3. Due to their landscape value, urban development will be given a specific treatment in the towns with the presence of tree fences that are in the municipal areas of Figueres, Vilabertran, El Far d'Empordà, Santa Llogaia d'Àlguema, Cabanes, Fortià, Peralada, Vila-Sacra, Vilanova de la Muga, Castelló d'Empúries, Siurana, Riumors, Vilamacolum, Torroella de Fluvià, Sant Pere Pescador, Torroella de Fluvià, L'Armentera, Viladamat, Albons, La Tallada d'Empordà, Bellcaire d'Empordà, Torroella de Montgrí, Ullà, Ullastret, Gualta and Serra de Daró. In these cases, possible new extensions will integrate harmoniously with pre-existing structures and will respect their singularity. The municipal urban plans of the above-mentioned nuclei should protect and organise the heritage of the cypress windbreaks and the tree fences of greatest landscape interest and the planning, management and recovery of the others.

Picture 7. Article 3.8 addresses the preservation and recovery of the windbreaks of cypress trees and the tree-lined enclosures in places in which their presence is —or was— well known.



2.11. Consultation process and public and social participation

The analysis of the landscape is a task that has been traditionally reserved for experts and specialists in diverse disciplines such as geography, ecology, architecture and environmental sciences. The European Landscape Convention offers an innovative vision when it insists on the importance that the general public and social and economic stakeholders should intervene and participate in the decisions concerning the protection, management and planning of the landscapes. It is essential that everyone should be able to recognise their own landscape and that the general public and the Administration should jointly participate in the decisions that affect the protection, management and planning of the landscape. The Convention also states that it is the Administration's responsibility, through public policies, to watch over the suitable protection, management and planning of the landscape, but that the general public, either individually or as a collective, should also be involved in the definition of these policies and claim their right to a quality landscape.

Article 12 of Decree 343/2006 states that once the landscape catalogue has been previously approved by the Ministry of the Territory and Sustainability, it must be submitted to a public information period for local bodies and the interested economic and social organisations. However, the public participation processes that have been integrated into the landscape catalogues go beyond this regulated procedure. Although in many cases, public participation is understood more as a purpose than an instrument, the Landscape Observatory considers it to be a tool to improve and legitimise the landscape catalogues, to create awareness among the population about the landscape and to guarantee the democratic quality of the processes.

For example, the participation of the public in the catalogues is basic for finding out about the landscape preferences of the public and also for identifying the landscape values that are more intangible, imperceptible from the analysis of existing cartography or from fieldwork, but essential for analysing the landscape in an integrated way and to be able to perceive all its nuances. To this end, the Landscape Observatory directed a public and social participation and consultation process for each of the seven landscape catalogues with the

main objective that the stakeholders involved and the public, on an individual basis, who so wished should express their perception of the landscape, debate on the transformations taking place in it and be able to contribute towards defining objectives for improving it.

All the preparation phases of the landscape catalogues were accompanied by public participation, in such a way that it was able to have an influence from the landscape characterisation phase at the beginning of the preparation of the catalogues. In no way was the participation proposed as a supplementary tool to the technical work of the teams, but as a complement to help to obtain objective results or to agree on landscape policies between the participants.

Below, the methodology used in the public and social participation and consultation process of the landscape catalogues is summarised. More specific information about the entire participation process of the landscape catalogues can be found in the book *Landscape and Public Participation* (Nogué et al., 2010), prepared by the Landscape Observatory and also available in digital format in Catalan and English on its website www.cat-paisatge.net.

2.11.1. Participants

The participants are the genuine protagonists of any participation process. The type of participant, the diversity of profiles and of discourses they represent,

Picture 8. Cover of the book *Landscape and Public Participation* (Nogué et al., 2010).

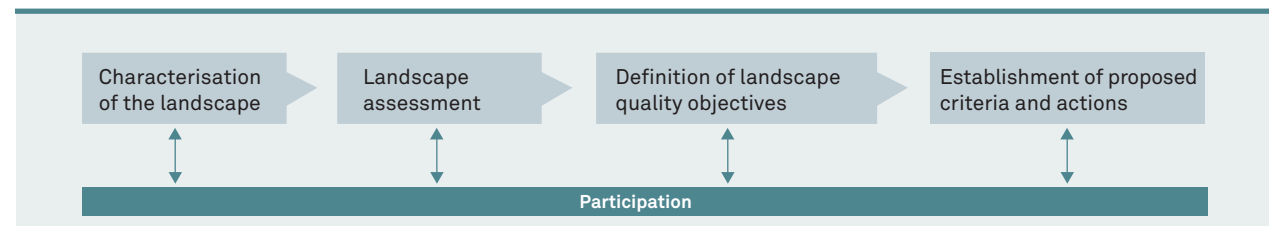


Figure 5. The relevance of participation at each stage of developing the landscape catalogues.



Picture 9. Fieldwork during the preparation of the Landscape Catalogue of the Comarques Centrals.

their name and their culture are all factors that significantly condition any participation process. The participatory mechanisms of the catalogues were mainly directed at two kinds of interlocutors: the landscape stakeholders and society as a whole.

Landscape stakeholders are individuals or public or private entities interested in the landscape, that make use of or have responsibilities for its management. Two kinds of stakeholders were contemplated: the stakeholders in the study area and external ones. The stakeholders in the study area are representatives of the local administrations, of other institutions in the territory (professional associations with a delegation, universities, research centres) or of economic sectors linked to the landscape (farmers, livestock breeders, builders, tourist companies), and social collectives that focus their main activity on that territory (associations organising excursions, associations to conserve the cultural heritage, groups of owners, users of the environment, ecologist groups, hunters). The stakeholders that are external to the area of the study are representatives of the ministries of the catalan Government

(above all the Ministries of the Territory and Sustainability; Agriculture, Livestock, Fisheries and Food; Culture and Communication, including the agencies and other public organisations), and representatives of other public and private entities external to the territorial area (collectives in the primary sector, non-governmental organisations and institutes and research groups, among others).

Individual people: as it is considered necessary that the catalogues should include the opinion of society as a whole, individuals were invited to participate, particularly residents in the areas that were the object of the study and visitors. These people provide experiential knowledge about the landscape, based on the experience of the landscape in their everyday lives.

2.11.2. Type of participation techniques

To make the very most of obtaining the information, participative tools were combined with qualitative, quantitative and deliberative components:

Quantitative techniques: also known as distributive ones, look for objective knowledge about certain events, opinions, attitudes, motivations and feelings on which inferences on the reality of the study object can be made. For the landscape catalogues, it was decided to use some instruments with the question-answer format (semi structured questionnaire) typical of quantitative techniques.

Qualitative techniques: the perception of the landscape is highly diverse and depends on so many factors

Table 4. Positive aspects and disadvantages of the types of technique used in the catalogues.

Type of technique	Advantages	Disadvantages
Quantitative	<ul style="list-style-type: none"> • Can reach a large number of people. • Can generate a large amount of information. • Provides a high level of control over answers. • Depending on the sample, conclusions can be drawn about a larger population. 	<ul style="list-style-type: none"> • It hardly reaches the emotional dimension of the landscape. • Does not allow for exchange of ideas and debate. • Does not encourage in-depth reflections or analysis. • Does not give the possibility of recording facts beyond what is presented in the questionnaires.
Qualitative	<ul style="list-style-type: none"> • Enables the main discourses on the landscape to be identified. • Achieves in-depth contributions. • Enables the emotional dimension of the landscape to be dealt with. • Enables a wide range of realities to be recorded. 	<ul style="list-style-type: none"> • Does not permit exchange of ideas and debate. • Does not reach a large number of people.
Dialogue-based	<ul style="list-style-type: none"> • Groups get to know each other. • Enables exchange of ideas and debate. • Enables consensus elements and disagreements to be detected. 	<ul style="list-style-type: none"> • It is difficult to bring together people with all the necessary profiles and discourses. • Participants have to be willing to try out specific group dynamics. • Does not reach a large number of people. • It is difficult for it to cover the whole territory of the landscape catalogue

that it is difficult to limit oneself to one interpretation of the points of view of the public and the stakeholders of the landscape in strictly quantitative terms. Qualitative techniques, also known as structural, are based on conversation and the analysis of the discourse to obtain subjective knowledge (opinions, feelings or beliefs), to give way to ideas, reflections, values or areas of the phenomenon that would otherwise be excluded. In this kind of technique, it is not the representative nature of the sample of the participants that is relevant, but their discourse.

Deliberative techniques: deliberative or dialectic techniques consist of obtaining information and knowledge through the interaction between participants. The idea is, through dialogue, to obtain knowledge from the group, to compare points of view, to explore lines of agreement and to highlight areas of dissent. The idea is to work and debate to reach an agreement through discussing and reasoning and, when this is not possible, to compile the diversity of opinions.

2.11.3. Instruments used

The participation mechanisms in the landscape catalogues have been transversal and, therefore, present throughout the entire process of their preparation. The public participation in each phase of preparation of the Landscape catalogue had to offer a response to different challenges. In the first phase (identification and characterisation), it is essential that the population should recognise and identify themselves with their landscape. In this phase of the process, the values that the citizens of each territory give to their landscape and the dynamics and the processes that transform it are captured. In the second phase (landscape assessment), the stakeholders of each territory are key in identifying the threats and the potentials of the landscape and to assess their corresponding degree. In the third phase (definition of the landscape quality objectives), participation takes on a relevant role with the aim of incorporating the main stakeholders into the public decision-making on the landscape. In the fourth phase (setting criteria

Tool	Typology of participants	Stages of the catalogue where most relevant	Catalogues
Telephone survey	Individuals	Characterisation and assessment	Terres de l'Ebre
Opinion poll	Individuals	Characterisation and assessment	Regió Metropolitana de Barcelona (RMB)
Public consultation via the web	Individuals	Characterisation, assessment and definition of landscape quality objectives (LQOs)	All catalogues
Interviews with agents	Landscape agents and individuals	Characterisation and assessment	All except RMB
Discussion groups	Landscape agents	Assessment and definition of LQOs	Terres de l'Ebre
Workshops with agents	Landscape agents	Definition of LQOs and establishment of criteria and actions	RMB, C. Centrals and Terres de l'Ebre
Workshops with individuals	Individuals	Assessment and definition of LQOs and establishment of criteria and actions	C. Gironines and Alt Pirineu i Aran
Open workshops	Individuals and landscape agents	Characterisation and assessment	RMB, C. Centrals and Terres de l'Ebre

Table 5. List of the participation instruments, phases, type of participation and the catalogues in which they were applied.

Catalogue and tools	Participants
Alt Pirineu i Aran	
Interviews with agents	21
Workshops with individuals	9
Public consultation via the web	152 (243 contributions)
TOTAL	182 participants
Camp de Tarragona	
Interviews with agents	24
Public consultation via the web	566 (849 contributions)
TOTAL	590 participants
Comarques Centrals	
Open workshops	32
Interviews with agents	38
Workshops with agents	52
Public consultation via the web	176 (211 contributions)
TOTAL	375 participants
Comarques Gironines	
Interviews with agents	32
Workshops with individuals	7
Public consultation via the web	551 (827 contributions)
TOTAL	590 participants
Regió Metropolitana de Barcelona	
Open workshops	32
Opinion poll	1,050
Workshops with agents	62
Public consultation via the web	577 (737 contributions)
TOTAL	1,721 participants
Terres de l'Ebre	
Telephone survey	811
Public consultation via the web	251 (376 contributions)
Interviews with agents	22
Discussion groups	33
Workshops with agents	45
Open workshops	21
TOTAL	1,183 participants
Terres de Lleida	
Interviews with agents	22
Public consultation via the web	313 (470 contributions)
TOTAL	335 participants

Table 6. Participatory tools used in each catalogue and total number of participants.

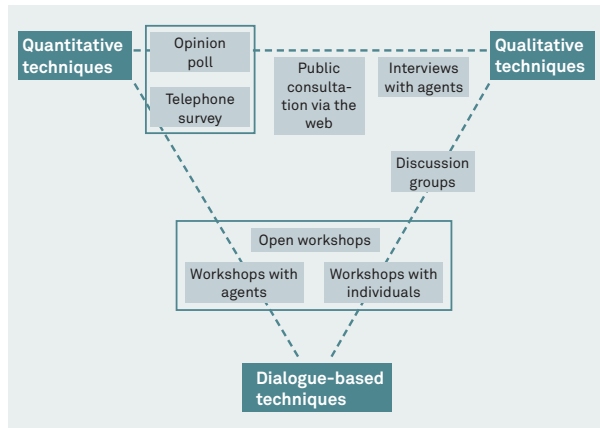


Figure 6. Classification of the participatory tools used in the catalogues according to the typology of techniques.

and actions), that represents the specification in measures of the general preferences defined in the previous phase, the participation of the stakeholders is once again a key factor.

As already mentioned, the participative methodology, like the rest of the preparation methodology of the catalogues, was constructed and profiled as the catalogues were being prepared. This, along with the characteristics of each territory and the condition of the available resources, meant that the processes and, therefore, the participative instruments were not the same in all the catalogues. In all, eight different instruments were used but, while some instruments were used only in one catalogue, there are others that were used in all the catalogues, with slight modifications. Therefore, the different combinations of instruments generated participatory processes of their own for each catalogue (see tables 5 and 6).

Telephone survey

The instrument consisted of a telephone survey given to a representative sample of population of the social

Aims	<ul style="list-style-type: none"> · To bring together a representative sample of society. · To describe the type of relationship the population has with its environment. · To get an idea of the perception and experience of the landscape. · To ascertain the citizens' perception of how the landscape is changing (past, present and immediate future) as well as the factors which are influencing these changes. · To ascertain the level of social involvement in landscape issues. · To identify the main aspirations, attitudes and standpoints towards the landscape. 		
Relevance for each stage of development of the catalogue	<p>Characterisation of the landscape → Landscape assessment → Definition of landscape quality objectives → Establishment of proposed criteria and actions</p>		
Typology of participants	Population over 18 years of age who live in the area	Number of participants	Around 800 people
Approximate duration	About 2 months	Commitment required of participants	Answer questionnaire by telephone (15 minutes)
Tool requirements	To already have a well-developed proposal of landscape units, of their distinctive features and of landscape analysis.		
Catalogues	Landscape Catalogue of the Terres de l'Ebre		
Telephone survey: key points	<ul style="list-style-type: none"> · Carry out the survey during the first stage of developing the catalogue. · The budget for the interviews has to make it possible to reach a percentage of the population that is statistically representative, therefore the size of the population is critical. · Set aside some time at the start of the interview to help the interviewee relax and leave personal questions that may be more sensitive for the end. · Train the team of interviewers in relation to the aims of the study and the main concepts related to landscape. · Carry out a pilot study with a small number of interviews before going ahead with the whole of the population, in order to introduce improvements if necessary. 		
Advantages	<ul style="list-style-type: none"> · Conclusions can be drawn about a larger percentage of the population given the representativity of the sample target of the study. · Enables a high level of control over answers as it guarantees the usefulness and facilitates the analysis of the data obtained from the structured questionnaire. · Generates a significant volume of information. 		
Disadvantages	<ul style="list-style-type: none"> · Does not create the space for debate or interaction between agents. · Does not encourage reflections and in-depth analysis. · Does not allow for any other facts beyond what is confined to the questions in the survey to be reflected. · Makes it difficult to understand the more experiential dimension of the landscape. 		

Table 7. Summary of the characteristics of the telephone survey and key points.

■ Highly relevant ■ Quite relevant ■ Not very relevant ■ Not relevant

reality of the territory of the Terres de l'Ebre (the only catalogue in which this instrument was used). The main objective was to obtain an initial approach to the perception of the landscape by the public and their positioning towards it. This participatory process, which lasted two months, started once there was an initial diagnosis and a first proposal of landscape units of the Terres de l'Ebre. The questionnaire was carefully designed so that the questions would have a marked informational character and the survey would last between 10 and 15 minutes.

The telephone survey made it possible to get to know the values, opinions, perceptions and attitudes about the landscape from a representative sample of the population of the Terres de l'Ebre. A lot of people were contacted in little time, which favoured a greater number of participants than with other mechanisms used. At the same time, the sample also presented greater diversity than other instruments, as people were surveyed individually (selected at random and found at home), many of whom would possibly not have access to other participative instruments due to a lack of specific interest or because the dissemination had not reached them.

Opinion study

It consisted of a set of interviews carried out, door-to-door, by the Institut d'Estudis Regionals i Metropolitans de Barcelona (the Barcelona Institute of Regional and Metropolitan Studies), with the aim of obtaining an initial approach to the perception, experience and values of the landscape as well as the desires of the population of the Regió Metropolitana de Barcelona with respect to the landscape (the only catalogue in which this instrument was used).

This participatory process lasted six months. The questionnaire was designed so that the interviews should last approximately 30 minutes, should be as informative as possible and should make the territorial

Aims	<ul style="list-style-type: none"> · To get a sense of how the population perceive and experience the landscape. · To identify landscape units. · To identify landscape values, especially intangible ones. · To identify the main aspirations, attitudes and approaches related to the landscape. 		
Relevance for each stage of development of the catalogue			
Typology of participants	Population 16 years and above living in the area	Number of participants	1.050 people
Approximate duration	About 6 months	Commitment required of participants	Interviews lasting about 30 minutes
Tool requirements	<ul style="list-style-type: none"> · To have an initial understanding of the landscape of the area · To have access to images and maps of the territory 		
Catalogues	Landscape Catalogue of the Regió Metropolitana de Barcelona		
Opinion poll: key points	<ul style="list-style-type: none"> · Carry out the opinion poll during the first stage of developing the catalogue. · Design a questionnaire in which, wherever possible, the questions have a wide range of possible answers. This ensures that not only the most common landscapes, features or elements are mentioned, and that territorial differences can emerge. · Train teams of interviewers and analysts in relation to the aims of the study and the main concepts related to landscape. · Carry out a pilot study with a reduced number of interviews before proceeding with the whole of the selected population. · Set aside some time at the start of the interview to explain to the interviewee the importance of their opinion and experience regarding their perception of the landscape, and explain the key concepts which appear throughout the questionnaire so as to guarantee that all the answers are comparable. 		
Advantages	<ul style="list-style-type: none"> · Reaches people who would not otherwise have participated using more voluntary methods. · Generates a large amount of information. · Enables a high level of control over answers as it guarantees the usefulness and facilitates the analysis of the data obtained from the structured questionnaire. · Takes into account the emotional dimension of the landscape. · Makes it possible to link social and demographic aspects to the perception of landscape. · The use of a semi-structured questionnaire includes a high percentage of open questions which allows for a richer analysis. 		
Disadvantages	<ul style="list-style-type: none"> · Does not create space for debate or exchange of ideas between interviewees. · Does not encourage reflections or in-depth analysis. · Does not encourage consensus in the perception of landscape. · Does not allow for any facts beyond what is confined to the questions of the survey. 		

Table 8. Summary of the characteristics of the opinion study.

■ Highly relevant ■ Quite relevant ■ Not very relevant ■ Not relevant

differences of the territorial area of the catalogue emerge, avoiding dealing just with the better-known landscapes, aspects and elements. The questionnaire consisted of 33 questions.

Despite the fact that the opinion study reached a significant number of people in the Regió Metropolitana de Barcelona, many of whom probably would not have participated through other channels or mechanisms on their own initiative, the budgetary limitation prevented a statistically representative sample of the set of almost five million people living in this territorial area from being reached. In any case, multiple, different visions of the landscape in this area were compiled.

Public participation via the website

This mechanism consisted of a consultation on the Landscape Observatory's website (www.catpaisatge.net)

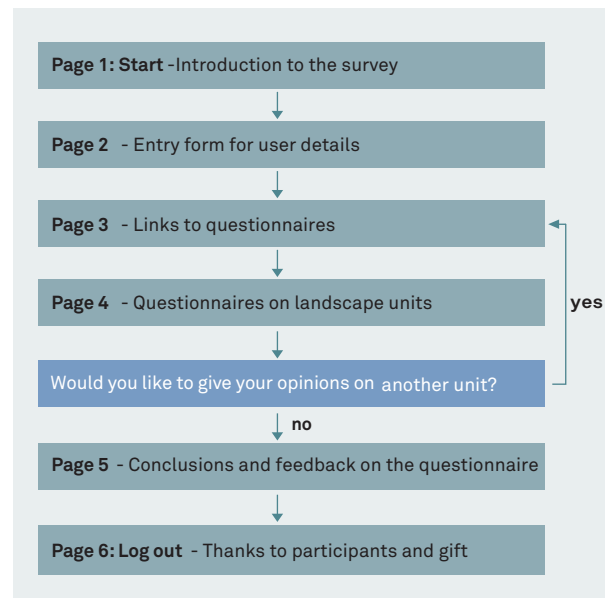


Figure 7. Diagram of the consultation on the website.

Aims	<ul style="list-style-type: none"> · To contribute to personal reflection on the landscape. · To get a sense of how citizens perceive and interpret the landscape, and what the general feelings towards the landscape are in the area covered by each catalogue. · To compare some of the results obtained by the team who developed the catalogues (limits and names of landscape units, landscape assessment, etc.) · To identify landscape values, or to order in terms of priority values previously identified by the teams who developed the catalogues. 		
Relevance for each stage of development of the catalogue			
Typology of participants	Individuals	Number of participants	Between 200 and 800 per catalogue
Approximate duration	Between 2 and 4 months	Commitment required of participants	To fill in questionnaires on-line (10-25 minutes)
Tool requirements	To have a well-developed proposal of landscape units, their distinctive features and landscape analysis		
Catalogues	The seven landscape catalogues of Catalonia		
Public consultation via the web: key points	<ul style="list-style-type: none"> · Make the consultation anonymous so as to encourage public participation. · Design questionnaires that can be answered quickly in order to avoid participants giving up halfway through. · Carry out the consultation in an advanced phase of development of the catalogue in order to introduce specific questions that enable a more in-depth study of particular concepts. · Make use of digital means of communication and other ways of spreading information (electronic email lists, etc.) to increase the scope of the consultation and the number of results obtained. 		
Advantages	<ul style="list-style-type: none"> · It is possible to get a large number of contributions at a relatively low cost. · Photographs and maps can be used, which help to illustrate the landscape catalogue or make answers to the consultation easier. · Information about the consultation can spread by word of mouth, for example by forwarding the web link of the consultation by email. · Access is simple; it only requires a computer with internet connection. · The landscape unit format brings the scale of study closer to citizens in general. · The virtual platform that is created can be used for subsequent consultations, which means that the cost of each new consultation goes down. 		
Disadvantages	<ul style="list-style-type: none"> · Does not allow for dialogue and communication between participants. · Does not give an overview of a representative sample of the population of the area. · It is difficult to reach all age groups, given that the older sector of the population (over 65) cannot easily access the internet and are therefore almost completely excluded. · Does not enable participants to give very in-depth answers. 		

Table 9. Summary of the characteristics of the public participation on the website.

Highly relevant
 Quite relevant
 Not very relevant
 Not relevant

aimed at the general public to find out about their perception of the landscape, identify values and compare some results obtained by the work teams of the catalogues. The web consultation was used for all the landscape catalogues, but its conception and design evolved throughout the preparation process of the catalogues, incorporating improvements whenever they were considered necessary.

The consultation, hosted on the Landscape Observatory's website, was set up once the work teams had finished defining the landscape unit proposal and had started the landscape assessment and the definition of landscape quality objectives phase. The reason for waiting until this degree of development of the catalogue lies in the fact that the consultation was structured on landscape units and that if the catalogue was in an advanced phase of preparation, the questionnaire could look into certain concepts in greater detail.

The process lasted between two and four months, depending on the catalogue. The contents of the consultation were of an informative nature and incorporated photographs and maps to help to illustrate the catalogue and facilitate the understanding of all the users interested in participating in it. To avoid participants abandoning the questionnaire halfway through, forms were prepared that could easily be answered in about 15 or 20 minutes.

Overall, it can be confirmed that the contributions made by the participants helped to compare and validate the work carried out by the work teams of the catalogues and generated new information for the work that had yet to be developed.

Interviews given to the landscape stakeholders

Landscape stakeholders were interviewed in depth to get to know their opinion about the problems, the values, characteristics and challenges of the landscape.

Aims	<ul style="list-style-type: none"> · To find out the opinion of interviewees on key issues, values, characteristics and challenges related to the landscape. · To summarise how landscape agents perceive their environment. · To ascertain which are the most important discourses on the territorial area. · To gain information on values which are difficult to identify through other means. 		
Relevance for each stage of development of the catalogue			
Typology of participants	Landscape agents	Number of participants	Between 20 and 30 per catalogue
Approximate duration	Between 2 and 3 months	Commitment required of participants	Approximately 90 minutes
Tool requirements	<ul style="list-style-type: none"> · Access to an extensive and up-to-date list of agents. · Having a map of landscape units is optional. 		
Catalogues	All the landscape catalogues except the Regió Metropolitana de Barcelona		
Interviews with landscape agents: key points	<ul style="list-style-type: none"> · Adapt the contents of the interviews to each agent. · Adapt the discourse to an appropriate register for each agent to avoid a possible sense of unease in the face of too many technical words. · Carry out the interview in the landscape agent's home ground to make the invitation to the meeting easier and so that the interviewee feels comfortable. · Presenting a proposal for the boundaries of the landscape units can condition the agent's answers. 		
Advantages	<ul style="list-style-type: none"> · Makes it possible to get in-depth information on the landscape. · An open and relaxed conversation encourages certain subjects to come out, such as the more experiential dimension of the landscape, which is difficult to achieve using other tools. · The content of the interview can be modified as it goes along, according to what is of interest in the conversation. 		
Disadvantages	<ul style="list-style-type: none"> · Does not create space for debate. · Reaches a small number of people. 		

Table 10. Summary of the characteristics of the in-depth interviews.

■ Highly relevant
 ■ Quite relevant
 ■ Not very relevant
 ■ Not relevant

The interviews were addressed at the stakeholders on an individual basis. This mechanism was used in all the landscape catalogues except that of the Regió Metropolitana de Barcelona as, due to the characteristics of this territorial area, it was decided to replace it with workshops with landscape stakeholders.

The interviews, which lasted an hour and a half, were carried out in the initial preparation phases of the catalogue and the process lasted between two and three months. In some cases, if the discourses were similar or if several stakeholders shared the same interests, more than one stakeholder was interviewed at a time. In any case, it was intended that the mechanism should not become a discussion group, as this was not its objective. The flexible nature of the instrument favoured the interviews not being identical and meant that not all the stakeholders were asked exactly the same questions, but that the content (and sometimes the register) was adapted depending on the stakeholders. This enriched the results.

Working with the landscape stakeholders in an individual way favoured being able to compile fairly representative opinions of the diverse collectives with interests in the landscape (hunters, ecologists, excursionists, managers of protected spaces, forest engineers, farmers, academics or promoters of cultural heritage) and make up a social perception of the landscape that was fairly reliable. The interviews were also used to get to know the social fabric of the territory and to involve the world of associations and institutions in the preparation process of the catalogues.

A lot of the interview was aimed at identifying landscape units, the characterisation and the valuing of the landscape. In fact, thanks to the interviews, a map of the units identified by the stakeholders and a list of the main landscape values was obtained that helped to profile the initial proposal of the various work teams of the catalogues.

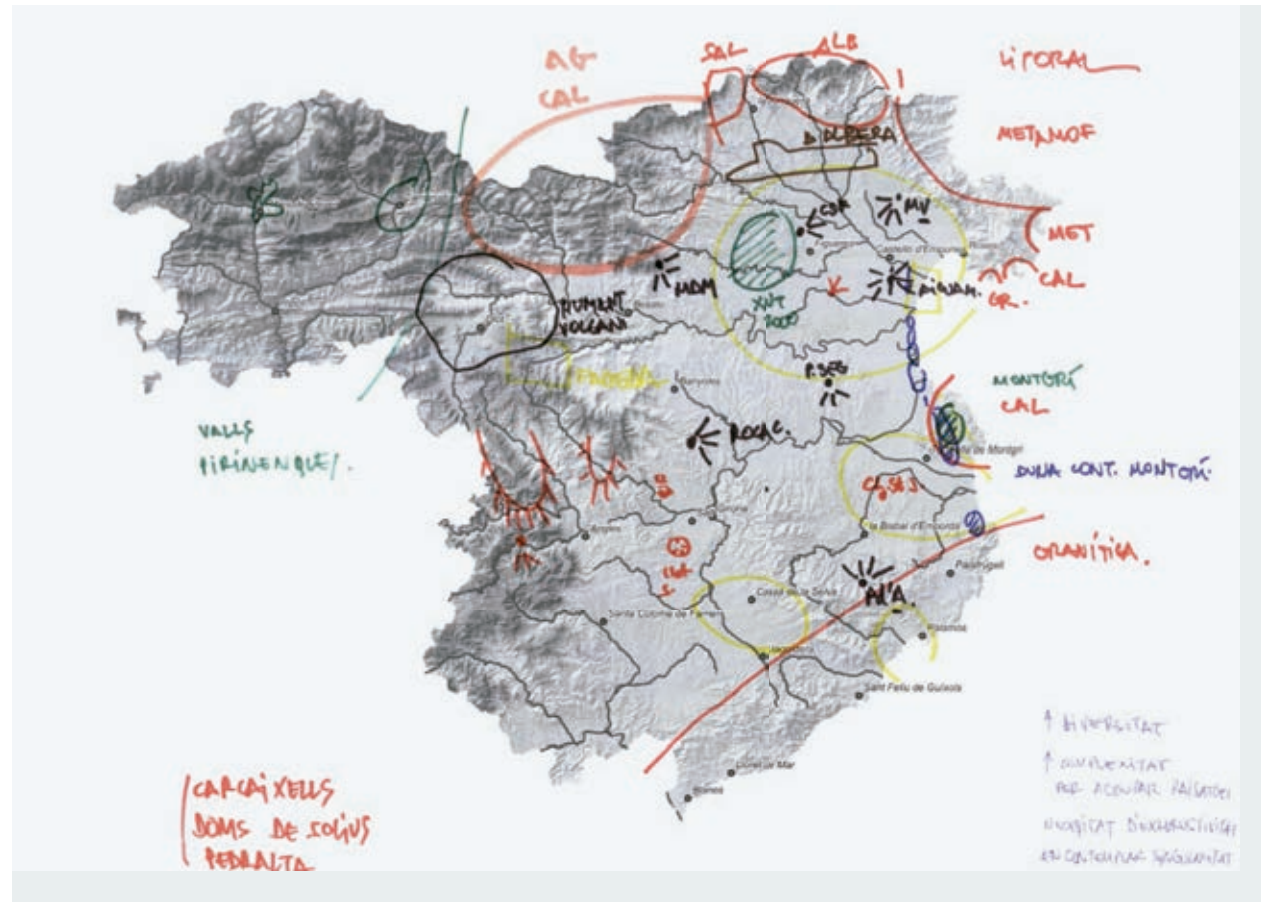


Figure 8. Map resulting from an in-depth interview given to landscape stakeholders in the Comarques Gironines.

Discussion groups

The discussion group consisted of a meeting of landscape stakeholders who interacted and conferred with each other to produce a group discourse qualitatively different to the sum of the individual discourses. This mechanism was only used in the Landscape Catalogue of the Terres de l'Ebre.

This activity, which lasted for some two months, started when the characterisation phase of the Landscape Catalogue of the Terres de l'Ebre was practically closed and therefore there was an advanced proposal of landscape units and of the landscape diagnosis of the area. The debates, which lasted between 90 and 180 minutes, were of an open nature, self-regulated with respect to turn taking, and with very few interruptions by the moderator. The fact that this instrument was implemented in a slightly advanced phase of the catalogue favoured the analysis and validation of the information of the characterisation and assessment phases, as well as the definition of the landscape quality objectives as a starting point for the future setting of criteria and actions.

The main themes dealt with were the most representative elements of the landscape; the dominant change factors in the landscape; the role that the landscape and its values should have on the economic development of the territorial area; how to showcase the landscape of the area, and the role of the socioeconomic stakeholders, public administrations, entities and platforms, and the general public in the preservation and boosting of the landscape and its values.

Aims	<ul style="list-style-type: none"> · To establish a characterisation and assessment of the landscape of the area, either from scratch or by revising the information provided by other means. · To define landscape quality objectives · To set out the range of discourses related to the characterisation, assessment and landscape objectives, so as to work on the criteria and actions in the following participatory workshops. 		
Relevance for each stage of development of the catalogue			
Typology of participants	Landscape agents	Number of participants	33 people
Approximate duration	About 2 months	Commitment required of participants	From 90 to 180 minutes
Tool requirements	<ul style="list-style-type: none"> · To have an advanced proposal of landscape units and of the analysis of the landscape of the area. · To have a list of landscape agents. 		
Catalogues	Landscape Catalogue of the Terres de l'Ebre		
Discussion group: key points	<ul style="list-style-type: none"> · Divide up, or if necessary, duplicate, the areas of influence and the existing points of view between discussion groups and interviews with agents, given that they are two complementary tools. · Make sure the facilitator is well-prepared. 		
Advantages	<ul style="list-style-type: none"> · Forges communication through dialogue and debate between agents. · If it is used in the middle stage of the participatory process, the discussion group helps with the work of subsequent procedures, given that it widens the range of recorded discourses and it engages people in debate so as to build consensus. · Achieves a high degree of in-depth contributions by the groups and it enables people to get to know each other. 		
Disadvantages	<ul style="list-style-type: none"> · Makes it difficult to control certain types of personality (dominant or shy characters, favouritism). · It is difficult to ensure that the conversation gets to a truly effective place, given that it takes a lot of skill to lead the group towards mutual empathy in the minimum time possible. · Requires an extra effort in planning the sessions due to working with a group, given the difficulty of ensuring assistance for each invitation. 		

Table 11. Summary of the characteristics of the discussion groups.

■ Highly relevant
 ■ Quite relevant
 ■ Not very relevant
 ■ Not relevant

Workshops with the landscape stakeholders

The mechanism consisted of meetings with thematic debates with a selection of representatives of institutions, public and private entities, economic and social sectors or experts in the matter, to define and prioritise landscape quality objectives and to propose criteria and actions. Unlike the in-depth interviews and the discussion groups, the workshops aimed to encourage debate between various landscape stakeholders with totally different visions on a single matter. These workshops were carried out for the Landscape catalogues of the Comarques Centrals, the Regió Metropolitana de Barcelona and the Terres de l'Ebre.

The workshops with landscape stakeholders were carried out when the work teams of the catalogues were working on the definition of the landscape quality objectives and the criteria and actions, in other words, when the diagnosis of the catalogues was greatly advanced. Diverse groups were created, on the one hand, the experts and the people with knowledge about the landscape (individual participants) and, on the other hand, the landscape stakeholders (participants representing entities and administrations).



Picture 10. The landscape quality objectives proposed by the participants were hung on a board to be debated among all those present.

Aims	<ul style="list-style-type: none"> · To publicise the analysis of the landscape made by the team who developed the catalogues. · To propose, discuss and prioritise landscape quality objectives. · To propose criteria and actions for the landscape catalogue. · To validate the studies carried out by the teams who developed the catalogues. 		
Relevance for each stage of development of the catalogue			
Typology of participants	Landscape agents and individuals	Number of participants	50 - 100
Approximate duration	About 3 months	Commitment required of participants	5 hours, in 2 days (topic-specific and plenary)
Tool requirements	To have an advanced analysis (characterisation and assessment) of the landscape.		
Catalogues	Landscape Catalogue of the Comarques Centrals; Landscape Catalogue of the Regió Metropolitana de Barcelona; Landscape Catalogue of the Terres de l'Ebre		
Workshops with landscape agents: key points	<ul style="list-style-type: none"> · Make sure the facilitator is well-prepared. · Try to ensure that the workgroups include representatives with varied profiles. · Provide preparatory information to establish a common framework for discussions, and make sure the publicity reaches enough people. · Define clearly the aims of the session and what is expected of participants so as to avoid contributions which have little relevance for the catalogue. · Avoid repeating the debates of previous sessions in the closing session. 		
Advantages	<ul style="list-style-type: none"> · Stimulates debate between agents. · Makes it possible to identify areas of consensus and of disagreement. 		
Disadvantages	<ul style="list-style-type: none"> · Does not guarantee that those who are shy or are not used to speaking in public will contribute. · Makes it difficult to reach people not very knowledgeable in the subject. 		

Table 12. Summary of the characteristics of the workshops with landscape stakeholders. ■ Highly relevant ■ Quite relevant ■ Not very relevant ■ Not relevant

The opposing discourses allowed points of agreement and of dissent to be detected with respect to the landscape desired (landscape quality objectives) by the general public of the territory and enriched the contributions and the final results. Therefore, this mechanism

provided the work teams with a solid base on which to be able to define the quality objectives for the landscape catalogues and some criteria and actions, as well as implicitly contrasting the diagnosis made.

Workshops with individuals

This mechanism consisted of work sessions with people of diverse profiles who, as individuals, met on three occasions to debate on the values, problems and challenges of the landscapes of the territorial area. This technique was used for the landscape catalogues of the Comarques Gironines and of the Alt Pirineu i Aran. Lasting some three months, they were carried out during the landscape assessment phase.

To help the participants identify with the landscapes, it was decided to work with a more reduced territorial scale than in the landscape catalogues. Work on a detailed level enables the population to better identify their everyday points of reference, unlike on a larger scale, when the phenomena become more abstract. Therefore, it can be said that the detailed levels helped the participation of the general public with a non-technical profile.

The workshops consisted of three consecutive meetings of three hours each, during which the participants approached the landscape gradually. The workshops, highly focused on group dynamics, had a person responsible for encouraging the sessions, moderating them, informing and acting as a mediator when necessary.

The workshops enabled an in-depth exploration of some aspects of the landscape catalogue that it would have been difficult to study with other mechanisms. In group work, unlike interviews, the individual contributions are significant up to a certain point. Although it is true that at certain times personal genuineness was being sought (which comes from a cognitive, emotional context different to that of the workgroup), overall, priority was given to collectives.

Aims	<ul style="list-style-type: none"> · To delve into the characterisation of each landscape unit previously defined and check its validity. · To deal with intangible landscape values. · To find criteria for taking action on the landscape. · To spread the word to people who are representative of the discourses on the territory, but who do not represent a public body. 		
Relevance for each stage of development of the catalogue			
Typology of participants	Individuals	Number of participants	Between 6 and 10 per catalogue
Approximate duration	About 3 months	Commitment required of participants	3 sessions lasting about 3 hours each
Tool requirements	<ul style="list-style-type: none"> · Prior knowledge of the characteristics of the area and its social reality is required. · It is preferable to have made headway in writing the landscape catalogue. 		
Catalogues	Landscape Catalogue of the Comarques Gironines; Landscape Catalogue of the Alt Pirineu i Aran		
Workshops with individuals: key points	<ul style="list-style-type: none"> · Have access to local contacts who can provide support when the time comes to choose and invite participants. · Make sure the facilitator is well-prepared, as this person has to take on several roles: facilitating, mediating, leading the session, summarising the information, etc. · Devote time and resources to the phase of contacting potential participants so as to be able to respond in the face of unexpected situations. 		
Advantages	<ul style="list-style-type: none"> · Points of view emerge that do not come out in individual interviews. It shows how attitudes and opinions arise and change. · Opens up the range of approaches and values that emerge when dealing with landscapes. · It blends technical and experiential knowledge in order to reach a richer collective analysis, while generating group-based knowledge. · Encourages social learning about the landscape. 		
Disadvantages	<ul style="list-style-type: none"> · Only reaches a limited amount of people. · It becomes an expensive method if the whole area of the landscape catalogue is to be covered. · Restricting it to a limited territorial area has its risks. · Requires an extra effort for planning group sessions, having to make sure every time that those invited will be able to assist. 		

Table 13. Summary of the characteristics of the workshops with individuals.

■ Highly relevant ■ Quite relevant ■ Not very relevant ■ Not relevant

Open workshops

This mechanism consisted of sessions open to everyone interested in the landscape catalogues, where they were informed about what the catalogue was, the preparation phase in which it was found, and where the opinions of those attending were collected. This mechanism was used for the Landscape catalogues of the Regió Metropolitana de Barcelona, the Comarques Centrals and the Terres de l'Ebre.



Aims	<ul style="list-style-type: none"> · To inform people about the catalogues and the related participatory processes. · To make initial contact with people and groups from the area, and to involve them in the participatory process. · To identify, demarcate and describe the landscape units. · To get an initial sense of how the landscape is valued. 		
Relevance for each stage of development of the catalogue			
Typology of participants	Individuals and landscape agents	Number of participants	Between 20 and 100 people per catalogue
Approximate duration	About 3 months	Commitment required of participants	About 3 hours
Tool requirements	To have a list of landscape agents.		
Catalogues	Landscape Catalogue of the Regió Metropolitana de Barcelona, Landscape Catalogue of the Comarques Centrals; Landscape Catalogue of the Terres de l'Ebre		
Open workshops: key points	<ul style="list-style-type: none"> · To ensure a high level of participation, it is important to focus on publicising the workshops using as many tools as possible (flyers, sending cards, sending emails to electronic distribution lists, etc.) · If the teams who developed the catalogues are present during these sessions, they can take the opportunity to interact with some of the participants. However, it is not appropriate to stimulate discussions between the team and the participants. · Make clear to participants the scale of the study, that is to say, the approximate size which the proposed landscape units should have. Suggest the number of units required for each area to give people an idea of this size. · At the start give an introduction to the concept of landscape so that everyone understands it in the same way. 		
Advantages	<ul style="list-style-type: none"> · Makes it possible to reach a large number of people. · Generates debate among those who participate in the workshops. · Can be linked to the initial stage of giving out information about the participatory processes. 		
Disadvantages	<ul style="list-style-type: none"> · Doesn't make it possible to go into depth on certain subjects given that the workshops take place at the start of developing the landscape catalogues. 		

Table 14. Summary of the characteristics of the open workshops.

■ Highly relevant
 ■ Quite relevant
 ■ Not very relevant
 ■ Not relevant

Figures 9 and 10. Results of the exercises to identify the landscape units of Osona (above) and of Solsonès (below).

The open workshops took place in the very initial preparation phase of the landscape catalogues and were used to inform about the catalogues and the linked participating processes. To facilitate participation, different workshops of about three hours were given for practically each of the regions of the area of the catalogues.

As they were carried out at the beginning of the preparation work of the catalogues, the information generated was very welcome to develop the first phase of the landscape catalogue and contributed towards the identification and delimitation of the landscape units and the identification of highlighted features, viewpoints and itineraries. They were also used to obtain an initial impression of the territorial relevance of the landscape matters, the main discourses around the subject matter, and the fundamental pillars of agreement and dissent in each territory. A great volume of information was generated in just a few sessions.

2.11.4. The information, communication and feedback

Right from the start, it was clear that any participatory process had to be accompanied by a good communication and awareness creation plan to obtain the maximum participation and involvement of the institutional, economic and social stakeholders and of individuals, as well as to transmit the information and the knowledge necessary to guarantee a good participatory experience to the participants.

The Landscape Observatory's website the main communication tool the organisation has, structured the majority of the information and communication tasks linked to the catalogues, as well as hosting the participation mechanism of the web consultation. In fact, the website has sections specifically dedicated to the landscape catalogues and to the associated participation processes. Other communication instruments were

Tema dels termes de participar hi:
Sessions informatives i tallers participatius
 S'han organitzat quatre sessions informatives i quatre tallers participatius perquè pugueu conèixer una mica més el paisatge de la Regió Metropolitana de Barcelona i participar en l'elaboració del seu catàleg de paisatges.

L'objectiu de les sessions informatives és introduir la ciutadania en la temàtica del paisatge i oferir la possibilitat a qui estigui interessat de prendre part en el taller participatiu posterior.

Terrassa
 Sessió informativa: Dimecres, 18 de novembre de 2007 - De 19 a 20.30 h.
 Lloc: Sala Auditori del Parc de Vallcarlos interior del parc, zona Montserrat, avda. per 194, Sant Fost de.
 Taller participatiu: Dimecres, 18 de novembre de 2007 - De 9 a 14 h.
 Lloc: CFM UPC s/n, Igualada, 55.

Sabadell
 Sessió informativa: Dimecres, 27 de novembre de 2007 - De 19 a 20.30 h.
 Lloc: Plaça Marçal 10, Ravassa, 1078.
 Taller participatiu: Dimecres, 27 de novembre de 2007 - De 9 a 14 h.
 Lloc: Edifici Marçal 10, Davales, 12.

Mataró
 Sessió informativa: Dimecres, 7 de desembre de 2007 - De 19 a 21 h.
 Lloc: Centre Cívic Pau de Breda, Avda. Salvador Espriu, 6.
 Taller participatiu: Dimecres, 7 de desembre de 2007 - De 9 a 14 h.
 Lloc: Centre Cívic Pau de Breda 6, Avda. Salvador Espriu, 6.

Barcelona
 Sessió informativa: Dimecres, 22 de novembre de 2007 - De 19 a 20.30 h.
 Lloc: Consell de Bar. Eixac 4-6.
 Taller participatiu: Dimecres, 22 de novembre de 2007 - De 9 a 14 h.
 Lloc: Consell de Bar. Eixac 4-6.

La producció de les sessions participatius es farà a partir de cada sessió informativa.

Internet
 A través del web de l'Observatori del Paisatge, www.catpaisatge.net, podeu opinar sobre els paisatges de Regió Metropolitana de Barcelona.

Inforna-te'n i digues-hi la teva!
 Pots participar per a l'elaboració del Catàleg de paisatge de la Regió Metropolitana de Barcelona

Sessions informatives a Terrassa, Sabadell, Mataró i Barcelona
 Tel. 93 552 60 63
dgparticipacio.m@genccat.net

Per assistir a una sessió informativa, cal que trucis al 93 552 60 63 o que envïis un correu electrònic a dgparticipacio.m@genccat.net, on què has de consignar a quin de les sessions vols assistir, el nom i cognoms, el telèfon i l'adreça electrònica. La inscripció en els tallers participatius es farà al final de cada sessió informativa.

www Internet
www.catpaisatge.net

Més informació:
 Generalitat de Catalunya
 Departament d'Interior,
 Relacions Institucionals i Participació
 Direcció General de Participació Ciutadana

Av. Diagonal, 408 - 08008 Barcelona
 Tel. 93 552 60 63 - Fax 93 552 60 70
dgparticipacio.m@genccat.net

Coneixes el paisatge que t'envolta?
 Com t'agradaria que fos el paisatge?

Regió Metropolitana de Barcelona
 Observatori del Paisatge

Process participatiu per a l'elaboració del Catàleg de paisatge de la Regió Metropolitana de Barcelona

Inforna-te'n i digues-hi la teva!
 Observatori del Paisatge
 Generalitat de Catalunya
 Departament d'Interior
 Relacions Institucionals i Participació
 Direcció General de Participació Ciutadana

Què són els catàlegs de paisatge?
 Són instruments per protegir, gestionar i ordenar el paisatge de Catalunya i estan concebuts, principalment, com a eines de suport a la planificació territorial. També són útils en altres polítiques públiques que hi estan relacionades com ara: la conservació de la natura, l'agricultura, la indústria, les infraestructures de transport, la cultura o el turisme.

La Llei de paisatge de Catalunya els defineix com els documents que determinen els diferents tipus de paisatges de Catalunya, identifiquen els seus valors i l'estat de conservació i proposen els objectius de qualitat que han de complir. Els catàlegs ens permeten conèixer com són els nostres paisatges, quins valors tenen, quins factors expliquen que siguem determinats paisatges i no uns altres, com evolucionen i, finalment, quins paisatges volem i com podem assolir-los.

Quins continguts tenen?
 Els catàlegs contenen, entre altres aspectes:

- Els valors en el paisatge.
- Les activitats i els processos que impliquen o han incidit de manera més rotunda en la configuració actual del paisatge.
- Els principals reconeguts i llocs des dels quals es percep el paisatge.
- La delimitació dels diversos paisatges i el seu nom.
- La definició dels objectius de qualitat paisatgística per a cada paisatge.
- Una proposta de mesures i d'accions necessàries per assolir els objectius de qualitat paisatgística.

Quants catàlegs hi ha?
 L'Observatori del Paisatge elabora, per encàrrec de la Generalitat de Catalunya, est catàleg de paisatge que coincideix amb les set demarcacions territorials de Catalunya.

Vols participar en l'elaboració del Catàleg de paisatge de la Regió Metropolitana de Barcelona? T'expliquem com fer-ho
 Actualment, l'Observatori del Paisatge està elaborant en el Catàleg de paisatge de la Regió Metropolitana de Barcelona. Un equip de persones expertes s'encarrega de l'elaboració tècnica, però és fonamental que la ciutadania identifiqui i valori el paisatge in situ, conegui les dinàmiques que el transformen, les seves potencialitats i oportunitats, els seus riscos i, especialment, que participi en les decisions sobre la seva protecció, gestió i conservació.

ALT PENEDÛS I ARAG
COMARQUES CENTRALS
COMARQUES GIRONINES
REGIÓ METROPOLITANA DE BARCELONA
TERRES DE L'EGBE
TERRES DE LLEDA
CAMP DE TARRAGONA

— No existit
 — En elaboració
 — Pendent d'aprovació

Pictures 11 i 12. Informative leaflet of the informative sessions of the Landscape Catalogue of the Regió Metropolitana de Barcelona.

also used to inform about the participatory processes of the landscape catalogues, such as issuing press releases, conferences, email messages to specialist distribution lists, and the addition of explanatory leaflets or articles that explained the preparation work of the catalogues. Another important means of dissemination of the participatory processes of the catalogues were the sessions themselves and the participative instruments.

To ensure good information and communication, the Landscape Observatory developed diverse communication instruments: informative sessions at the beginning of each catalogue, a landscape letterbox that was open throughout the entire preparation period of the catalogue, and the feedback tasks, carried out at the end of each participative mechanism. Below, the two main information and communication mechanisms mentioned are explained, as well as the diverse feedback channels for the participation.

Informative sessions about the catalogues

For some mechanisms, the importance that the participants should have a common framework for participation became clear. Therefore, informative sessions about the catalogues were held with the objective of making everyone who wanted able to participate. For the for landscape catalogues (Comarques Gironines, Alt Pirineu i Aran, Regió Metropolitana de Barcelona and Comarques Centrals), the Landscape Observatory of Catalonia and the General Directorate of the Government of Catalonia jointly organised open sessions for everyone interested, in which interesting information was provided.

To ensure the maximum dissemination of the informative sessions, identified landscape stakeholders were invited, as well as local administrations. In addition, for some stakeholders, a reinforced invitation was made by means of a phone call. All the invitations incorporated a leaflet that was edited for each of the sessions (see figures 11 and 12).

Landscape letterbox

The Landscape Observatory set up an email address called the landscape letterbox on the website, www.catpaisatge.net, to which interested people could send in their opinions or questions about the landscape catalogues, as well as any other related information. These contributions (impacts, itineraries, viewpoints, values, images, documentation, studies) came from individuals as well as from landscape stakeholders. Some people and associations also used the letterbox to show interest and to volunteer to collaborate in the preparation of the catalogue.

Participation feedback

In citizen participation processes, it is important to inform, quickly and clearly, the people who have participated about which contributions of the participat-

ory processes have been taken into account and which have not. This task, that is given the name of participation feedback, gives the entire process transparency and avoids there being the impression that the process did not serve any purpose. In the catalogues, the feedback took place in two phases, an initial phase for informing the participants (and in the case of the website consultations, all the interested parties) about the results obtained by each participatory instrument and, a second phase, when the Ministry of the Territory and Sustainability approved a certain catalogue.

2.11.5. Extent of the participation

The participation enriched the landscape catalogues. The information obtained in the participation process influenced it in diverse ways. In general, five kinds of contribution can be identified:

Tool	Characterisation of the landscape	Landscape assessment	Landscape quality objectives	Criteria and actions
Telephone survey	• •	•	-	-
Opinion poll	• •	•	-	-
Consultation via the web	• • •	• •	• •	•
Discussion groups	• • •	• •	•	-
Interviews with agents	• • •	• •	•	•
Workshops with agents	-	•	• • •	• •
Workshops with individuals	•	• •	• •	• •
Open workshops	• •	• •	•	-

Table 15. Contribution of diverse participative instruments in each phase of the catalogue.

- not relevant; • small contribution; •• average contribution; ••• significant contribution

- Contributions with new information: the contributions with information that the work teams of the catalogues were unaware of mainly corresponds to intangible values, a sense of place or symbolic ones. This is the information that is most difficult to achieve without the complicity of the general public.
- Contributions that corroborate the work team: many contributions coincided with the information already available to the work teams.
- Contributions that contradict the work team: in some cases, the contributions obtained through participation obliged the work teams of the catalogues to review aspects of the technical documents of the landscape catalogues, such as the definition of the limits or of the names of the landscape units.
- Contributions that modulated the work team: information that the team were already aware of but which, thanks to the participation, was given more importance, such as emblematic places, features of interest or places from which to observe the landscape.
- Invalid contributions: opinions that were too general, too detailed or that did not have a direct relationship with the landscape were considered not to be valid.

All the participation mechanisms used provided, in one way or another, valid information for the landscape catalogues (see table 15), and the mechanisms were complementary to each other. The main contributions of participation in the catalogues are related to the definition and delimitation of the landscape units, the identification of values, the situation of the main routes and viewpoints in the landscape, the analysis of the dynamics and the definition of landscape quality objectives and criteria and actions. In chapters 3, 4 and 5, which describe the methodology used in each elaboration phase of the catalogues in detail, specific examples are given on the extent of the participation in each case.

2.11.6. Some valuations on the participation process

The availability of resources, the representative nature of the participation and the scale of the work were the aspects that mostly conditioned this participation. With more resources, for example, more stakeholders could have been interviewed and more workshops or more statistically representative public consultations could have been held. An increase in resources would also have allowed the involvement of the general public to be reinforced, with a more exhaustive information and communication campaign.

On the other hand, as we have already mentioned, the use of different instruments favoured the representative nature, as the objective of the participation was precisely that of getting to know the points of view of a wide range of general public from each area. However, in most of the instruments (apart from the surveys, in which there was direct control over the samples), there were collectives that participated very little from a proportional point of view: elderly people, young people, immigrants, visitors, tourists or owners of second homes, among others. All these profiles would have been of great interest for the landscape catalogue: the landscape of elderly people's memories, the future desires of the young population or the particular perception of the landscape by a newly arrived person or a person with more difficulties in accessing certain landscapes. However, in almost all the instruments, people with greater awareness towards the landscape and the environment were more likely to participate, and those of territories that had a more deeply rooted tradition of participation, or those of places where a more significant landscape transformation was taking place. There were also people who had no interest in participating, such as the case of urban developers and builders at some workshops in the Comarques Gironines and the Alt Pirineu i Aran.

Thirdly, it should be taken into account that a catalogue covers a huge territorial area, and it is complicated being able to reach every part of the territory. This is, in fact, one of the great challenges which can be extrapolated to territorial planning. This scale (both from a spatial as well as a time perspective) is so far removed from the habitual perception that society has of the landscape, that it is only able to be communicated by representations with a high level of abstraction and this is a quality accessible to few citizens with certain technical knowledge. In any case, the scale of the landscape units meant that, in some cases, this problem could be invoked, as it is that which is closest to the general public.

The experience of the landscape catalogues can be considered a step in the right direction, but there is still a long way to go so that the general public and the administrations take joint consideration for the decisions related to the protection, management and planning of the landscape. To achieve this, greater involvement, education and awareness creation need to be worked on with the general public.

2.12. The numbers of the seven catalogues

With the preparation of the seven landscape catalogues, it is arguable that a great volume of information has been generated on the Catalan landscapes which was not previously available. Below, there is a table with data that shows the dimension of this information (identified landscapes, photographs, pages of text, people involved, etc.).

Alt Pirineu i Aran	
3	volumes
773	pages (DIN-A3)
79	maps
778	photographs published in the report
853	photographs from the photographic archive of the Alt Pirineu i Aran
20	landscape units identified
3	special attention landscapes
10	landscape quality objectives for all the Alt Pirineu i Aran
184	criteria for achieving the landscape quality objectives
81	actions for achieving the landscape quality objectives
21	landscape stakeholders interviewed
243	contributions to the public participation by the website
78	people involved in the preparation of the Catalogue
123	viewpoints
43	itineraries
Terres de Lleida	
3	volumes
631	pages (DIN-A3)
103	maps
273	photographs published in the report
1.119	photographs from the photographic archive of the Terres de Lleida
22	landscape units identified
4	special attention landscapes
21	landscape quality objectives for all the Terres de Lleida
138	criteria for achieving the landscape quality objectives
70	actions for achieving the landscape quality objectives
22	landscape stakeholders interviewed
470	contributions to the public participation by the website
62	people involved in the preparation of the Catalogue
76	viewpoints
55	itineraries
Camp de Tarragona	
3	volumes
661	pages (DIN-A3)
67	maps
321	photographs published in the report
256	photographs from the photographic archive of the Camp de Tarragona

29	landscape units identified
4	special attention landscapes
21	landscape quality objectives for all the Camp de Tarragona
135	criteria for achieving the landscape quality objectives
89	actions for achieving the landscape quality objectives
24	landscape stakeholders interviewed
849	contributions to the public participation by the website
74	people involved in the preparation of the Catalogue
41	viewpoints
72	itineraries
Comarques Gironines	
3	volumes
933	pages (DIN-A3)
70	maps
809	photographs published in the report
816	photographs from the photographic archive of the Comarques Gironines
26	landscape units identified
3	special attention landscapes
18	landscape quality objectives for all the Comarques Gironines
222	criteria for achieving the landscape quality objectives
74	actions for achieving the landscape quality objectives
32	landscape stakeholders interviewed
827	contributions to the public participation by the website
101	people involved in the preparation of the Catalogue
77	viewpoints
135	itineraries
Terres de l'Ebre	
3	volumes
885	pages (DIN-A3)
73	maps
601	photographs published in the report
806	photographs from the photographic archive of the Terres de l'Ebre
19	landscape units identified
4	special attention landscapes
15	landscape quality objectives for all the Terres de l'Ebre
153	criteria for achieving the landscape quality objectives
91	actions for achieving the landscape quality objectives
22	landscape stakeholders interviewed

376	contributions to the public participation by the website
140	people involved in the preparation of the Catalogue
30	viewpoints
45	itineraries
Regió Metropolitana de Barcelona	
3	volumes
825	pages (DIN-A3)
65	maps
530	photographs published in the report
531	photographs from the photographic archive of the Regió Metropolitana de Barcelona
25	landscape units identified
5	special attention landscapes
11	landscape quality objectives for all the Regió Metropolitana de Barcelona
169	criteria for achieving the landscape quality objectives
55	actions for achieving the landscape quality objectives
62	landscape stakeholders interviewed
737	contributions to the public participation by the website
52	people involved in the preparation of the Catalogue
115	viewpoints
50	itineraries
Comarques Centrals	
3	volumes
1.042	pages (DIN-A3)
70	maps
743	photographs published in the report
778	photographs from the photographic archive of the Comarques Centrals
27	landscape units identified
3	special attention landscapes
12	landscape quality objectives for all the Comarques Centrals
177	criteria for achieving the landscape quality objectives
79	actions for achieving the landscape quality objectives
38	landscape stakeholders interviewed
211	contributions to the public participation by the website
62	people involved in the preparation of the Catalogue
82	viewpoints
78	itineraries

Table 16. Numerical data of the landscape catalogues.

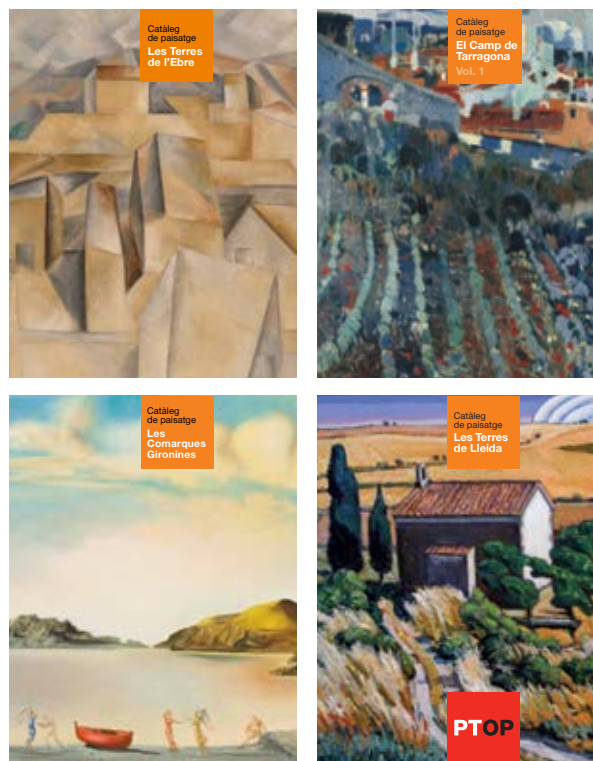
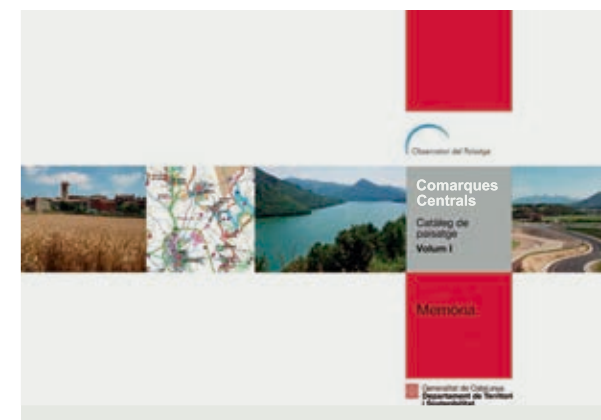
2.13. Access to the information of the landscape catalogues

The information contained in the landscape catalogues can be consulted in full in several formats:

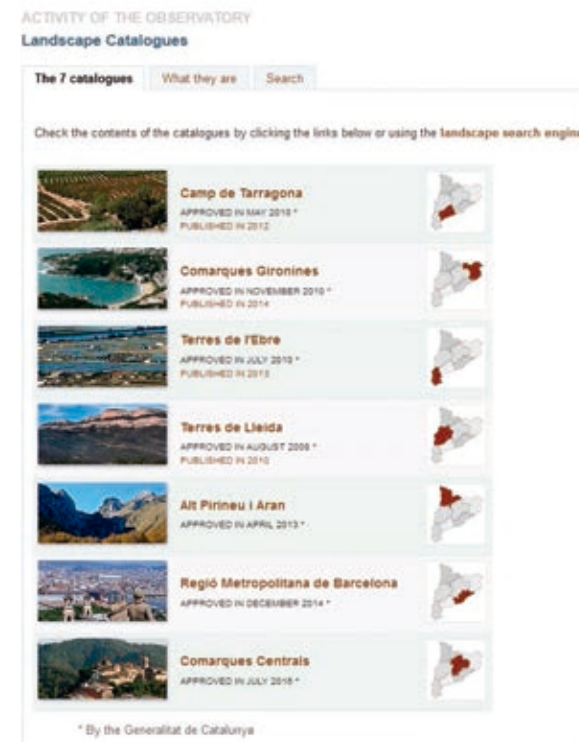
- **The seven technical documents of the catalogues**, as approved by the Ministry of the Territory and Sustainability of the Government of Catalonia, may be downloaded in PDF format from the Landscape Observatory of Catalonia website (www.catpaisatge.net) and from the website of the Ministry of the Territory and Sustainability (<http://territori.gencat.cat>). The download also allows all the maps to be obtained in PDF.
- The landscape catalogues also have a **published edition** which updates their contents. This can also be downloaded in PDF format from the Landscape Observatory of Catalonia's website (www.catpaisatge.net) and from the website of the Ministry of the Territory and Sustainability (<http://territori.gencat.cat>).
- The Institut Cartogràfic i Geològic de Catalunya (ICGC) (Cartographic and Geological Institute of Catalonia), in collaboration with the Observatori del Paisatge, has published the **map of the landscape units**.
- **The map of the landscape units can be consulted and/or downloaded in five different formats:** PDF, ArcGIS shape files, Google Earth KMLs, link to the WMS service and to the Instamaps platform created by the Institut Cartogràfic i Geològic de Catalunya (ICGC).
- **The various consultation formats** of the catalogues can be accessed in the corresponding part of the Observatory's website. From here, you can also obtain information through a search engine that allows access from each of the 134 landscape units, from the regions or from the municipalities.

All these formats increase the potential use of the information contained in the catalogues and landscapes maps, in the planning and management policies, in research or in awareness creation, among other areas.

Picture 13. Cover of the Landscape Catalogue of the Comarques Centrals, the last one that was approved.



Picture 14. Covers of the four catalogues published.



Picture 15. Specific section of the landscape catalogues on the Observatory website (www.catpaisatge.net).

Landscape units and urban planning

Over recent years, diverse institutions and entities have published books or other technical documents that delve into the catalogues or into the landscape units (see Chapter 3). One example is the document *Unitats de paisatge. 2015*, published by the General Directorate of Territorial Planning and Urban Development of the Ministry of the Territory and Sustainability (available at <http://territori.gencat.cat>).

The document, structured in files, is conceived as an awareness creation instrument for the landscapes of Catalonia, of support to urban and sectorial planning and as a useful tool for cultural and social initiatives in the territories of each unit. The files of this inventory combine texts and images. The first part contains a map of the unit and one of its location in Catalonia, the list of the municipal areas included, a brief description of the defining features of the unit, the link to complete information of the landscape catalogues to which it belongs and some photographs of the unit taken from the catalogues. The second part contains a list of the most distinctive landscape features and another one of the main values of the landscape unit. Each file also contains a chart with statistical data to help the comparison between them, in aspects such as administrative division, the main geographical features (covered by land, sloping land, and occupation of open space for building purposes), categories of open territorial planning spaces, natural protected areas, urban classification, as well as the expectations for development and the infrastructures that take place in it.



DIVISIÓ ADMINISTRATIVA			
	Sencers	Parts	Total
Nombre municipis	10	11	21
Nombre comarques		3	3
Nombre nuclis població	99		
Km de costa	36.478		
Km de limit amb França i Aragó			

CLASSIFICACIÓ DEL SÒL (MUC)		
	Superfície (ha)	Percentatge
Sòl urbà	4.051	33,3%
Sòl urbà no consolidat	226	1,9%
Sòl urbanitzable delimitat	770	6,3%
Sòl urbanitzable no delimitat	120	1,0%
Sòl no urbanitzable	6.961	57,2%

COBERTES DEL SÒL		
	Superfície (ha)	Percentatge
Sòl artificialitzat Improductiu	4.890	40,2%
Conreu	1.476	12,1%
Forestal	5.778	47,5%
Aigües continentals		0,0%

SISTEMA D'ESPAIS OBERTS EN EL PLANEJAMENT TERRITORIAL		
	Superfície (ha)	Percentatge
Sòl protecció especial	5.598	46,0%
Sòl protecció territorial	0	0,0%
Sòl protecció preventiva	1.302	10,7%

SÒL EN ESPAI PROTEGIT		
	Superfície (ha)	Percentatge
Espais naturals de protecció especial (ENPE)		
Protecció especial d'interès natural (PEIN)	2.704	22,2%

SÒL EN PENDENT		
	Superfície (ha)	Percentatge
Menys del 20%	7.005	57,5%
Més del 20%	5.176	42,5%

SÒL NO URBANITZABLE GRAU D'OCCUPACIÓ PER EDIFICACIONS		
Percentatge de sòl no urbanitzable		57%
Nombre edificacions		4985
Superfície edificada (m2)		816.868
m2 lliure / m2 ocupat		85
Nombre edificacions / km2		71
Ocupació mitjana de les edificacions (m2)		164

SÒL URBÀ QUALIFICACIONS MUC		
	Superfície (ha)	Percentatge
Teixit compacte (R1-R5)	815	6,7%
Ciutat jardí (R6)	1.298	10,7%
Activitat econòmica (A1-A3)	219	1,8%
Altres sòl urbà	1.719	14,1%
Total	4.051	33,3%
Relació R6 / R1-R5		1,59 m2/m2

SÒL EN SECTORS DE DESENVOLUPAMENT		
	Superfície (ha)	Sòl pendent d'edificar (ha)
Urbà no consolidat residencial	210	114
Urbanitzable delimitat residencial	512	283
Urbanitzable no delimitat residencial	20	
Urbà no consolidat activitat econòmica	17	12
Urbanitzable delimitat activitat econòmica	154	55
Urbanitzable no delimitat activitat econòmica	4	

XARXA DE MOBILITAT		
	Longitud (Km)	m / ha
XARXA VIÀRIA		
Xarxa bàsica	42,6	3,50
Comarcal	4,1	0,34
Local	70,2	5,77
Total carreteres	116,9	9,61
XARXA FERROVIÀRIA		
Linia convencional	24,6	2,02
Alta velocitat	0,0	0,00
Total	24,6	2,02

Figure 11. Fragment of the document *Unitats de paisatge. 2015*, published by the General Directorate of Territorial Planning and Urban Development of the Ministry of the Territory and Sustainability.

3. Landscape units

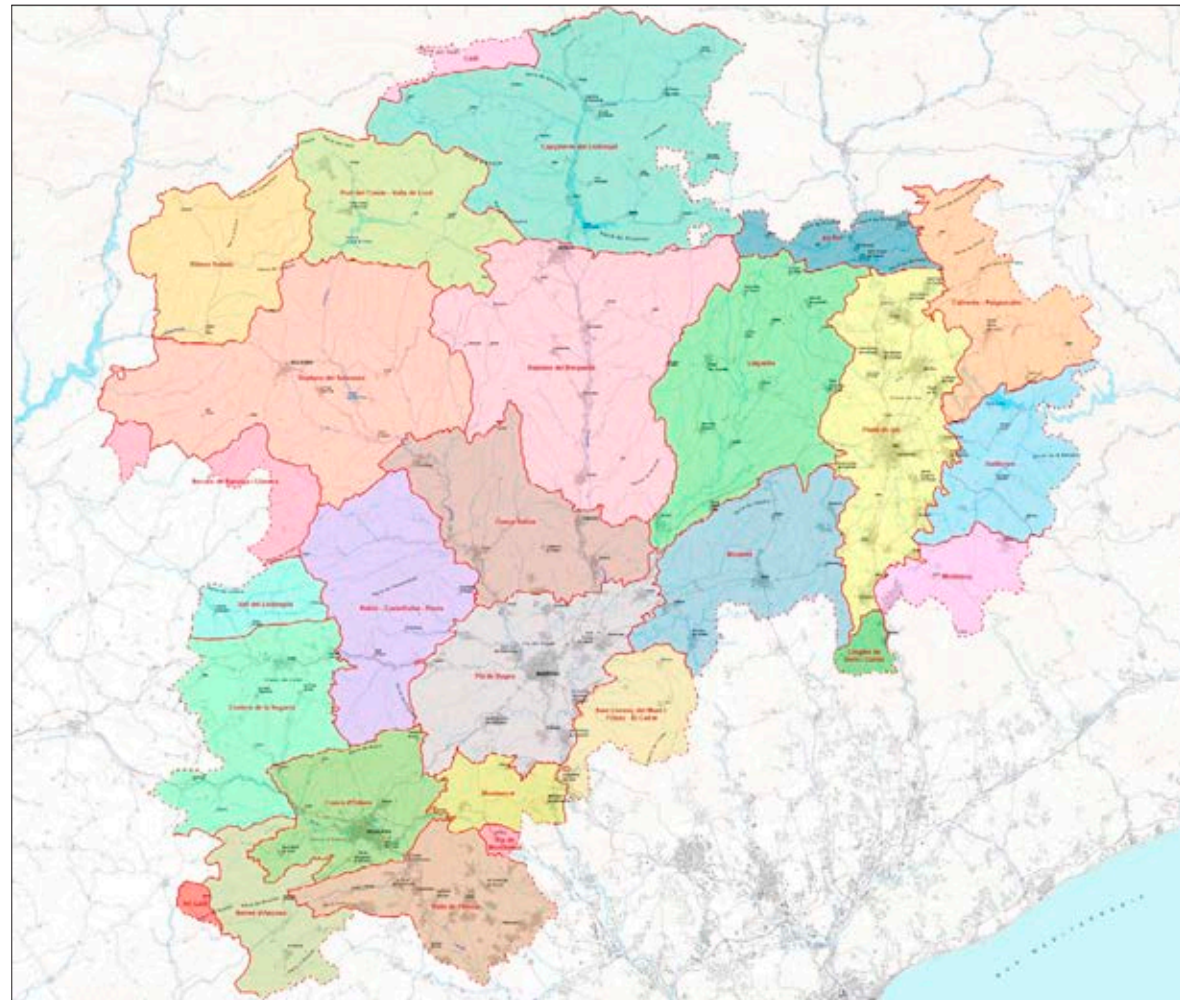
The main aim of the first preparation phase of the landscape catalogues was the characterisation of the landscapes of each territorial area, as explained in Chapter 2. The first step in the landscape characterisation process is to identify the landscape, which leads to the landscape units, based on the character of the landscape and, therefore, on the tangible and intangible natural and cultural elements as well as the visual ones that distinguish one certain landscape from another one. In other words, identifying a landscape means specifying its distinctive features.

Therefore, landscape units represent the portions of the territory that have a character of their own and are the first step for analysing and describing the internal characteristics, analysing their current state and describing the dynamics that have caused them to take on their current appearance and that transform them, as well as specifying the evolutive processes that affect them. Therefore, this task offers an initial, extremely necessary diagnosis of the values and the challenges of the landscape and contributes to the comprehension and visualisation of the structure and the general functioning of each of the areas of territorial planning and of the landscape diversity of Catalonia. It is also essential for the later formulating of the landscape quality objectives (see Chapter 5) aimed at the improvement and correct management of the landscape (recovery, restoration, promotion, etc.) as well as the criteria and actions (see part 5.2) to be integrated into the partial territorial plans and in other territorial and urban planning instruments, as well as into the sectorial policies.

The latter function gives the landscape units that arise from the catalogues relevant importance simply by the fact that they have been delimited on the grounds that they should serve the territorial planning instruments, urban planning and all the decisions on actions and interventions on the territory derived from the introduction of sectorial policies (infrastructures, agricultural, forestry, tourism).

The quantity and variety of landscape variables that can be used to identify and characterise the landscape constitute a methodological difficulty when seeking the procedure to carry out this kind of work. To this end, the methodology used as explained in this chapter is based on three fundamental premises: simple pro-

cedure, use of the maximum information available and useful for territorial and urban planning and for the sectorial planning. The identification and characterisation would not be complete without the participation of the general public in the recognition of the landscapes, as explained in part 3.6.



Map 3. Map of landscape units of the Comarques Centrals.

3.1. Concept of a landscape unit

A careful analysis of the studies done on landscape in Catalonia before 2005, which is when the methodology of the catalogues was designed, shows that to delimit and characterise the types of landscape, the “landscape unit” concept had mainly been used which, at the same time, was part of a family of similar concepts that often express different realities. This diversity in the conceptualisation of the term contributed towards enriching the visions that had been held regarding the landscape, but, in contrast, did not facilitate communication between specialists.

The traditional methodologies to delimit and characterise landscape units can be grouped into two main trends. From the systematic visions, a series of methods were developed to divide the landscape into increasingly smaller units with the aim of explaining the structure and the dynamics of the landscapes, highlighting the existing interactions between the diverse components. From the visions connected to regional studies, the tendency was to divide the landscape into coherent units from the morphological and functional point of view, with the aim of characterising the stakeholders and the dynamics that maintain the particular physiognomy of each resulting unit.

The landscape catalogues give a new sense and unique meaning to the landscape unit, in keeping with the trends observed around Europe and internationally, trends that give growing importance to dynamic, perceptual and experiential elements of the landscape (in addition to the static and material ones), when defining their character. This is an operational concept of landscape unit, understood as part of the territory characterised by a specific combination of landscape units of a natural, cultural and symbolic nature, as well as of clearly recognisable dynamics, which, as a whole, give it a differentiated idiosyncrasy from the rest of the ter-

Two methodological approaches for delimiting landscape units

The synthetic methodologies are based on setting up divisions or groups of sectors of the territory based on the recognition of homogeneous characteristics. The fundamental criterion is the recognition of the most relevant landscape discontinuities of the geographic environment. It may proceed based on subdivisions of units of a larger rank based on internal differentiation or, the other way round and carry out a classification by agglomeration that comes about from a system of aggregation of units of a lower rank based on the morphological similarities of each sector.

The background to the synthetic method can be found in territorial recognition work carried out by the Australian CSIRO in the 1950s and 60s and was adopted and later modified by the FAO. Troll's Landscape Ecology and Bailey's Ecosystem Geography also use the synthetic method to delimit landscape units. In Spain, it was the methodology used in the identification of the landscape units of the *Atlas de los paisajes de España*. This method is supported to a great degree by the information extracted from the images taken by remote sensors that is complemented with fieldwork.

The analytical type methodology uses superimposing or adding of layers of information on the landscape elements that

are considered relevant. Each of them is represented by means of thematic maps that are superimposed so as to define the territorial units after valuing the integration of the various thematic maps. The method was introduced in landscape studies by the architect McHarg in his work of reference *Design with Nature*.

These guidelines were followed by Antrop in landscape characterisation work in Belgium, although they were enriched by the introduction of procedures of a statistical nature and the use of Geographic Information Systems on the analysis of the variables. The Countryside Commission, when establishing the landscape units of the Character of England, used a synthetic method applied by landscape experts, but which was later validated with the results obtained by means of an analytical type of procedure, the Twinspan, which was designed for this purpose.

Although the two systems may be perfectly complementary, the first of the methodologies leads to the establishing of chorological type units while the second, if applied strictly, can lead to a typification or typology of units of a general character.

ritory and which is, at the same time, recognised and experienced as such by the general public.

Methodologically, this means that the landscape unit is not just the result of the delimitation of a specific combination of merely structural elements, such as topography, vegetation or land uses. The landscape unit also considers the particular relations (social, economic, cultural) that have been established between a territory and its inhabitants and that have shaped part of the identity of the people who live in it. Therefore, the identified units were obtained by means of the analysis and the interaction of many factors: the climate, the combination of topography (mountains, valleys,

plains, etc.), the vegetation, the land uses (crops, urbanised areas, riverbank forests, etc.), the organisation of the space, the heritage, the thousand-year-old human activity on the territory (paths, secular and modern landscape structures, etc.), the perception (texture, colours, shapes, visibility, etc.), and the existing landscape dynamics, among many other factors. The relations that are established between the population and their landscape were also analysed, which are difficult to identify with the simple superimposition of cartographic layers (proximity, emotional ties, sense of belonging, etc.). In the identification of these aspects, which are dealt with in part 3.3, the public participa-

Landscape character

One relevant characteristic of the landscape units in the landscape catalogues is precisely that of being based on their *character*, in other words on the elements and distinctive features of each of them, features essentially of a natural, cultural and symbolic *character*. This approach has been found to be very useful both on the understanding of the word landscape by the administration, the entities and the general public, as well as in the application of valid instruments. In this case, the term *character* has by no means a static meaning. Landscapes are dynamic by nature and these dynamics model their *character* without completely disfiguring it, while maintaining, over time, visually recognisable characteristic features that give it identity and personality. They are landscapes which we inherit but which, at the same time, we continue to construct, which we inject with contemporaneity, which we look at and interpret as heritage from the present.

tion processes carried out during the preparation of the catalogues played a key role (see part 3.6).

The result of this process means that each landscape unit is unique, singular, different from the rest of the neighbouring ones and other parts of the territory. Therefore, each of these landscapes, like those everywhere, is exclusive, simply because the cities and their surrounding areas, the agricultural and forest mosaics, the vegetation, the architecture, the names of each place, the fragrances, the sounds, the touch or other sensorial impressions make up landscapes that are characteristic of each place and of nowhere else.

3.2. General criteria for delimiting landscape units

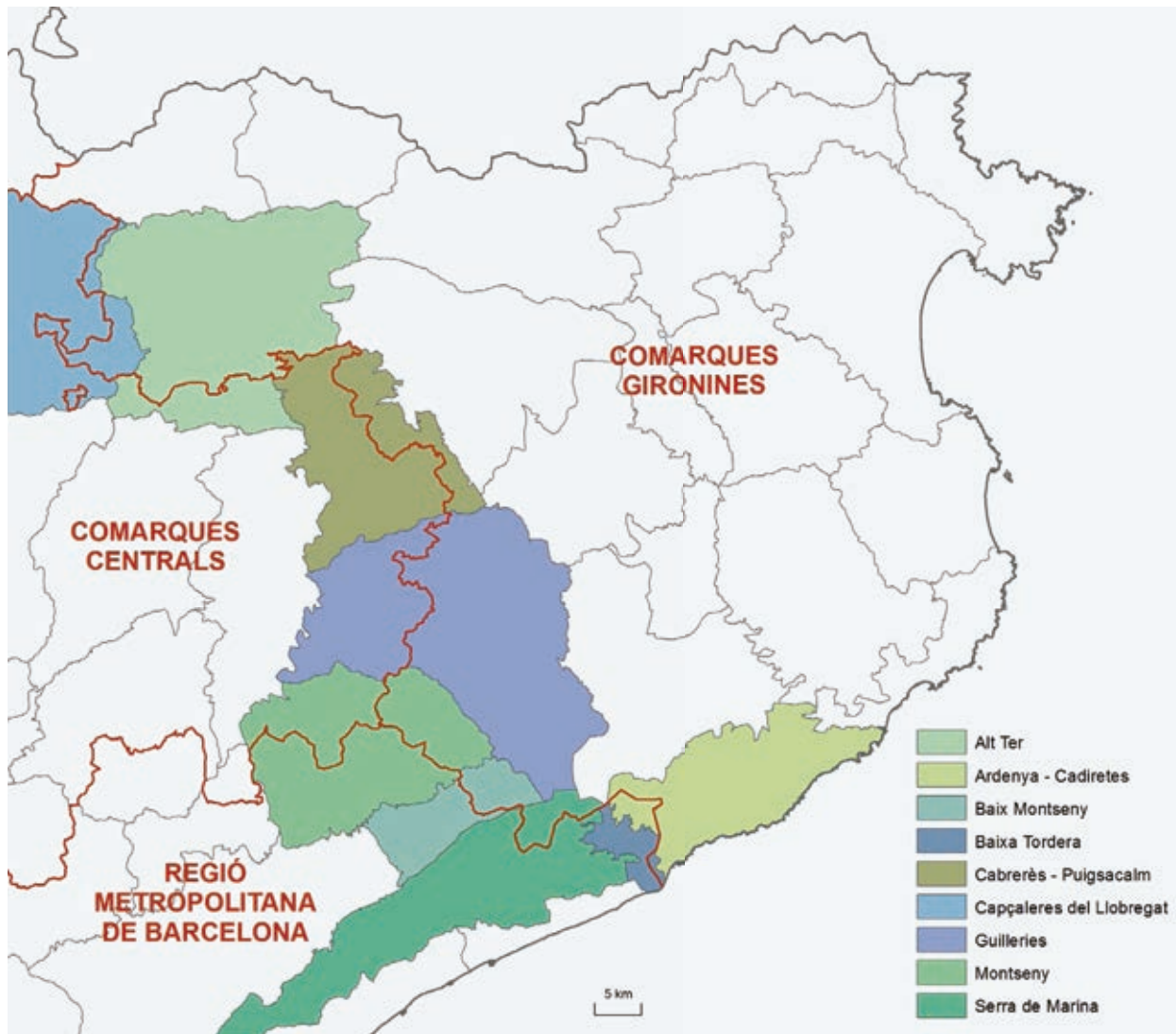
The delimitation of landscape units takes the following criteria into consideration:

- They cover the entire territory, so that each point or each place always belongs to a certain landscape unit. This observation is important because it indicates that the landscape catalogue is not conceived as a sum of diverse spaces of landscape interest, nor does it only deal with landscapes with certain exceptional scenic, historical or natural values, but takes on all kinds of landscapes to cover every inch of the territory, including those that are paid less attention, as insisted on in the European Landscape Convention.
- They are sufficiently large so as not to lose their efficiency in the process of incorporating directives in the planning and in the sectorial policies. In this sense, the territorial areas are subdivided into between 20 and 30 landscape units, depending on the characteristics of each region.
- The main objective of the landscape catalogues, that is to say, integrating the landscape into the territorial planning, marks the scale of the work, without a doubt. Therefore, the scale is the same that is used in the partial territorial plans: 1:50,000, as mentioned in the previous chapter (see part 2.4). This level of detail is optimal for studying the information on landscape matters necessary for the territorial planning, the sectorial development plans or other territorial development strategies. However, this does not rule out the identification of certain landscape elements that define the landscape unit being done by means of base cartography with larger scales (1:25,000).
- The fact that the definition of the units is based on their *character*, and not on their type (fir woods, dry-land crop, riverbank forest, etc.), creates units which,

in some cases, could show a certain internal heterogeneity, which can be clearly appreciated as the scale increases. Therefore, landscape discontinuities were sought at the pre-established work scale and those configurations of the territory expressed in landscapes with their own identity and distinguished from the surrounding landscapes were identified. The most important thing was the clear identification of an area with characteristics of its own, rather than extreme precision in the limits. Some examples are the Serres de Montsià-Godall, Vall Baixa del Llobregat, Altes Nogueres, and the Paisatge Fluvial del Segre, which internally are highly diverse.

- The definition of the units is based on landscape elements that last over time, to ensure that the catalogues will have a high period of validity.
- Participation played a relevant role in the identification of the landscape units, both with respect to the limits as well as their name, as explained in part 3.6. Some more intangible aspects, such as the sense of belonging or the sense of place, which are fundamental in the definition of the unit, would not have been possible to identify without the participation of the population and the stakeholders.
- One remarkable aspect which caused some methodological challenges was that of avoiding discontinuity of landscape units in the administrative borderline between the territorial areas. This means that a determined landscape unit does not necessarily trace its limit coinciding with the limit of the administrative territorial area.

In the Landscape Catalogue of the Comarques Gironines, for example, there are nine units that have continuity in the neighbouring territorial areas (Regió Metropolitana de Barcelona and Comarques Centrals). These nine units are Ardenya-Cadiretes, the Baixa Tordera, the Serra de Marina and the Baix Montseny, that have continuity through the Regió



Map 4. Continuity of the landscape units between Landscape Catalogues of the Comarques Gironines, Comarques Centrals and Regió Metropolitana de Barcelona.

Metropolitana de Barcelona, the Alt Ter, the Cabrerès-Puigsacalm, the Guillerès and the Capçaleres del Llobregat, that have continuity through the Comarques Centrals, and the Montseny, which has continuity through both areas (Regió Metropolitana de Barcelona and the Comarques Centrals).

- The landscape units also take into account their continuity with the borders of other autonomous communities (Aragon and Valencia) or neighbouring European states (Andorra and France). The results obtained by the landscape units in these borders, despite being the result of the use of a highly specific methodology, are compared with other initiatives of landscape classification at a state and European scale, such as the *Atlas de los paisajes de España*, (prepared by the Spanish Ministry of the Environment) and the *Pan-European Landscape Character Map and Classification* (scale 1:5,000,000) of Landscape Europe.⁴

4. The *Pan-European Landscape Character Map and Classification* is a map of landscape units throughout Europe which has the aim of becoming a cartography of reference for European states and regions in the development of the application policies of the European Landscape Convention.

3.3. Variables used for delimiting landscape units

The delimitation of landscape units is based on the identification of natural, heritage, visual and perceptible elements that distinguish a certain landscape from another one. The six landscape variables used to delimit the landscape units are physiographical elements; the land uses; the historical dimension of the landscape; the visibilities; the dynamics; and the perception and feeling of belonging:

- **Physiographical factors.** Lithology, differences in altitude, the gradient of the slopes or their orientation explain part of the characteristics of a certain territory and play an important role in the distribution of the plant life communities and of the aspects related to human activities, both of an agricultural nature as well as industrial or urban, in addition to often conditioning the layout of the large communication infrastructures. The lithology was obtained from the digital geological map of the Institut Cartogràfic i Geològic de Catalunya (ICGC) (Cartographic and Geological Institute of Catalonia), while the altitude, the orientations and the slopes were obtained from the Digital Elevation Model of Catalonia also supplied by the ICGC. Other biophysical variables were also taken into account (soil, temperatures, rainfall, hydrography, etc.).
- **Land uses.** The land uses are an important factor in the characterisation and delimitation of the landscape units. The forestry, agricultural and urban spaces show a great differentiation with respect to the elements and the morphologies that characterise them, which enables one to distinguish at first glance the landscape in which clearly one or another of the above-mentioned uses of the land but predominate. The procedure that was followed in the analysis of the uses of the land aimed at the delimitation of the landscape units was based on the use of the CREAM

and the Institut Cartogràfic i Geològic de Catalunya (ICGC) land cover maps. These bases can be differentiated above all in the scale of representation of the information. Information about the vegetation, which was extracted from the map of habitats of Catalonia was also incorporated. This information allowed differentiations to be made, within the areas with a predominance of forest cover, of the type of plant life of a markedly different character and which therefore gives a personality of its own to the landscape.

A map of land uses is not a map of landscapes

This is a relevant matter, of a more conceptual nature which has a clear cartographical consequence. If the landscape is understood to be a sum of nature and culture, of the past and the present, of knowledge and feeling, it could be agreed that landscape, territory and environment are not the same thing, although they are closely connected. One of the first cartographical consequences of this verification is, for example, the nature of a map of land uses. Maps of land uses represent a certain physical portrait of the territory, they show an objective structure, they can help to understand the social, cultural and economic processes that have conditioned forms of occupation of the territory, and to project future settings of evolution, and are at the same time, and often, fundamental as a basis of information for mapping the landscapes, due to the possibility they offer of combining with each other and with other information, but they are not a map of the landscape in themselves, understanding the landscape as described above.

- **Historical dimension of the landscape.** This looks at the study of the human factor as a main agent of transformation of landscape from a historic point of view. It takes into account the historic information linked to a landscape by means of the identification of landscape shapes and structures that have reached

us today, for example urban patterns (the shape and sizes of the nuclei), the structure of plots of lands and of the property, types of settlement in the territory (dispersion or concentration of the population), constructive types (farmhouses, mills, huts, sheds, towers, bridges, castles, city walls, churches), infrastructure systems for retaining soil (terraces, patches), former networks of paths and other communication and transport infrastructures (roads, railways), water infrastructures (reservoirs, canal networks and irrigation canals). Their survival in the territory today contributes towards defining the character of a certain landscape and the identity of a territory.

- **Determination of visibilities.** The vision of the landscape is highly conditioned by the existence of certain observation points and visual routes (topographical milestones, urban centres, communication roads, etc.). The determination of the most important observation points —by virtue of their visual range or their frequenting by humans— and the mapping of the viewsheds (set of points visually connected to a determined observation point) are essential requirements in the delimitation of the landscape units, as they permit the degree to which each sector contributes to the perception of the landscape to be determined. The intervisibility (degree of reciprocal visibility between a series of observation points) is another variable that completes the analysis of landscapes and that provides relevant data to characterise it. To study the visibilities and intervisibilities, the same Digital Elevation Model of Catalonia was used as generated in the analysis of the physiographical variables (see first point).

In addition to the delimitation of the landscape units, the analysis of visibilities allows accurate results to be obtained on:

- 1) The views from the main routes and viewpoints and enjoyment of the landscape (mainly the roads,

but also the milestones, the viewpoints and the sea).

- 2) The places from where the main milestones or elements of unique relevance of the landscape, due to their natural, cultural or aesthetic interest, can be observed.
- 3) The less visible zones, with which the more hidden, harder to observe places are determined.
- 4) The places from where the main landscape impacts found in the territory can be observed.

- **Dynamics.** The definition of the landscape units is also based on the recognition of the dynamics found in the territory with the ability to characterise certain given landscapes. Projects that already affect parts of the territory and that are not shown in the reference cartography were taken into account.

- **Sense of place.** The landscape is much more than a set of natural components or the result of historic and socioeconomic factors that have shaped the territory. The landscape is mainly an experiential element, in other words, shaped on the sum of experiences over the years, with the feelings of belonging and identity that this involves.

The ancestral social and economic relation established between different populations of a territory or between a town and a nearby river or the special recognition of certain landscapes (due to their importance during childhood or their everyday use) are, among others, factors —often intangible— that identify us with a certain landscape and that were taken into consideration in the definition of the landscape units.

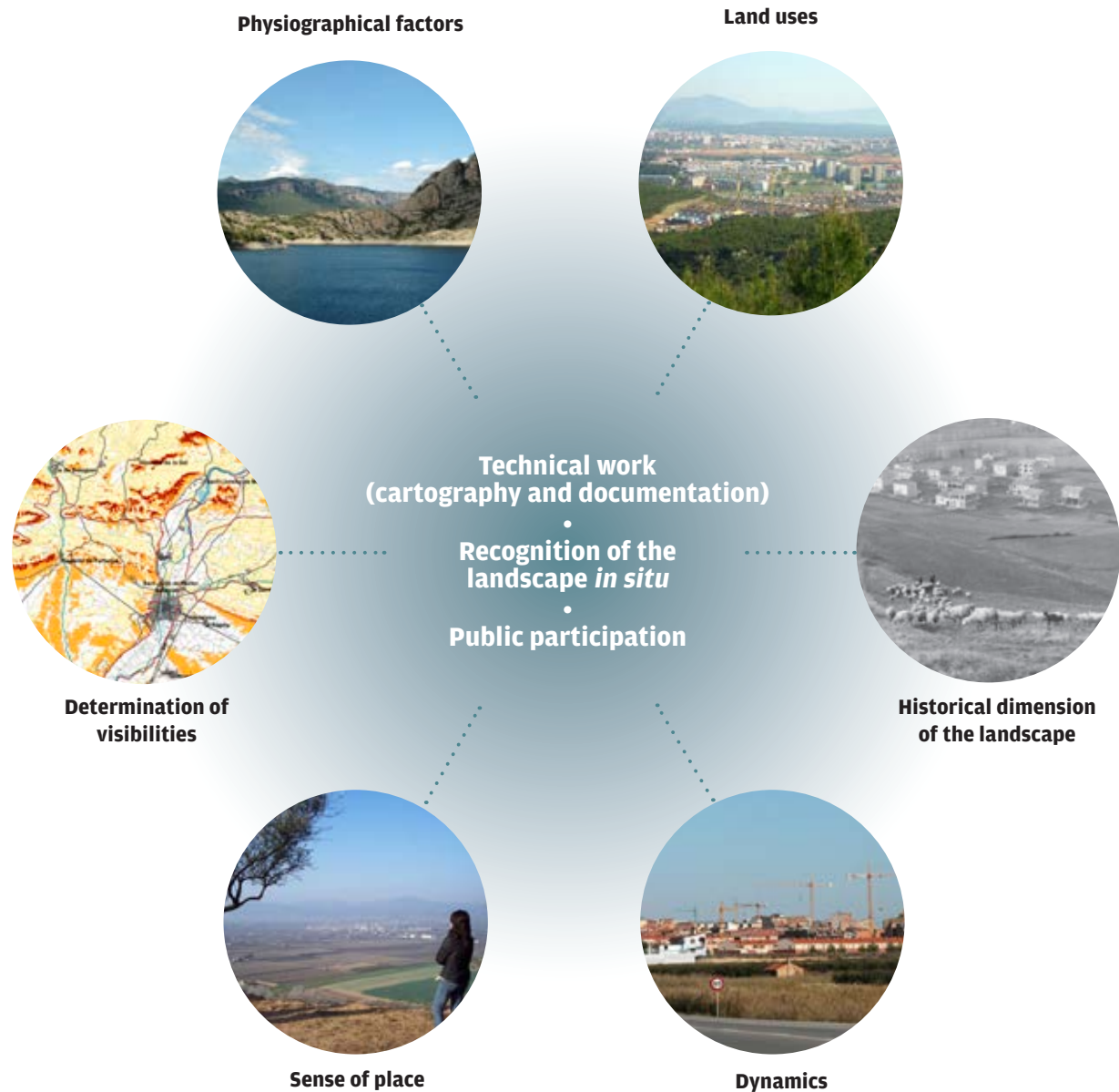


Figure 12. Landscape variables used for the definition of the landscape units.

3.4. Procedure for delimiting landscape units

The procedure for delimiting landscape units is based on the following tasks:

- **Technical work (cartography and documentation).** The landscape variables (see part 3.3) were combined and outlined by means of GIS to achieve an initial proposal for delimiting landscape units, that was later compared and verified with the fieldwork (see next paragraph) and with the results of the participation (see part 3.6).
- **Recognition of the landscape *in situ*.** The recognition of the landscape *in situ* is essential for detecting the diversity of possible visions from the human perception scale and highly suitable when working on large scales, such as the case of the catalogues. For example, the sense of place of somewhere will be very difficult to capture from a laboratory or through a cartographic combination.

The fieldwork also allows visual factors to be studied that characterise the landscape (colours, lines, volumes, structures, balances, schemes, shapes, textures, symmetries); to identify the geological outcrops⁵; to define the elements that distort the vision⁶; to detect other recent dynamics and different trends to those identified in part 3.3; to identify new significant, notable elements of the perception and the vision of the landscape; to get to know new ob-

5. The analysis of the lithology was not taken into account as yet another landscape variable in the group of the physiographical variables because it was considered that it is not an element that is directly perceptible in the landscape, but that constitutes the substratum that conditions the rest of the elements (relief, plant life, human settlement, etc.). Nevertheless, it would be a mistake not to consider the lithology in the delimitation process of the landscape units as, without a doubt, it conditions the vision we have of certain landscapes (the colour of the materials that are found, their texture, etc.).

6. In the visibility study, it is important to take into account barriers to the view, such as woody masses.

servation points of the landscape; as well as itineraries and corridors of special interest and visual wealth not previously identified.

Therefore, the visions obtained in the fieldwork provide appreciations and valuations, which may be coincidental or complementary, that contribute to characterising the landscape and its diversity. The observations obtained by these means are documented, verified and compared with the objective data from the analysis of other sources of information (aerial photography, land photography, cartography, bibliography, etc.).

During the fieldwork phase it is very useful to have informal contacts with local stakeholders who are highly familiar with the recent trends of the landscape. Therefore, there must be contact between the work teams and the people who live in the territory so that they can share their knowledge about a given place. This exercise complements the participation process (see part 3.6).

- **Public participation.** The identification of the landscape units is not possible without expert knowledge of the functioning of the territorial system that leads to the structures, patterns and elements that make up the morphological component of the landscape. But it is not the only knowledge that is taken into consideration. Public participation gave an extraordinary contribution to this task, as explained in part 3.6.

3.5. Name of the landscape units

In order to bring the landscape units closer to the general public, they were named briefly, clearly, descriptively, and in an understandable way, based on the most habitual popular recognition, expressed in the public consultation and citizen participation process of the landscape catalogues (see part 3.6). Therefore, the landscape units were given names deeply rooted in the population belonging to the collective memory, and not given a technical or academic name far removed from their social reality. The study of place names is a fundamental element of the cultural expression of the landscape and one of the most expressive elements of the identity of a certain territory.

Generally, the names coincide with the relief features (mountain ranges, farmhouses, cliffs, peaks, basins, plateaux, plains, valleys), terms that give nuances to the relief features (coastal, maritime, sunny side), natural formations (deltas, fluvial areas), types of crops



Pinture 16. The name Conca de Tremp already belongs to the collective memory of the territory.

Designation of 134 landscape units

Alt Gaià	Costers de l'Ebre	Pastures de l'Alt Pirineu	Secans de Belianes i d'Ondara
Alt Maresme	Costers de la Segarra	Pla de Bages	Serres de Cardó - Boix
Alt Sió	Cubeta de Móra	Pla de Barcelona	Serra de Llaberia
Alt Ter	Delta de l'Ebre	Pla de Girona	Serra de Marina
Alta Garrotxa	Delta del Llobregat	Pla de Montserrat	Serres de Pàndols - Cavalls
Altes Nogueres	Empordanet - Baix Ter	Plana d'Algerri - Balaguer	Serra del Tormo
Altiplà de la Terra Alta	Escornalbou - Puigcerver	Plana d'Almenar i Alguaire	Serrats de Sanaüja i Llanera
Ardenya-Cadiretes	Estany de Banyoles	Plana d'Urgell	Serres d'Ancosa
els Aspres	Garraf	Plana de l'Alt Camp	Serres de Bellmunt i Almenara
Aspres de la Noguera	Garrigues Altes	Plana de l'Empordà	Serres de Montsià-Godall
Era Baisha Val d'Aran	Garrigues Baixes i Vall del Corb	Plana de l'Hospitalet de l'Infant	Solana del Baridà
Baix Gaià	Garrotxa d'Empordà	Plana de l'Urgellet	Terraprim
Baix Maresme	les Gavarres	Plana de la Selva	la Terreta
Baix Priorat	Gavarres Marítimes	Plana de Vic	Vall Baixa del Llobregat
Baix Segrià	Guilleries	Plana del Baix Camp	Vall Cerdana
Baix Sió	Horta de Pinyana	Plana del Baix Ebre - Montsià	Vall de Camprodon
Baixa Segarra	Litoral del Baix Ebre	Plana del Garraf	Vall de Rialb
Baixa Tordera	Litoral del Camp	Plana del Penedès	Vall del Llobregós
Barrufemes	Litoral del Penedès	Plana del Vallès	Vall del Silenci
Boumort-Collegats	Lluçanès	Port del Comte - Vall de Lordos Ports	Valls d'Àneu
Burgans	Massís de Bonastre	Priorat Històric	Valls d'Olot
Cabreres-Puigsacalm	Massís de l'Orri - Valls de Castellbò i d'Aguilar	Regadius del canal d'Aragó i Catalunya	Valls de l'Anoia
Cadí	Mig Segre	Replans del Berguedà	Valls del Freser
Camps de Santes Creus	Moianès	Replans del Solsonès	La Vansa
Camps del Francolí	el Montmell	Reus - Tarragona	Vessants de Tivenys - Coll de l'Alba
Cap de Creus	Montsant	Ribera Salada	Xaragalls del Vallès
Capçaleres del Llobregat	Montsec	Riberes de l'Algars	
Cims i estanys d'Aiguestortes i Sant Maurici	Montseny	Rocacorba	
Cingles de Bertí i Gallifa	Montserrat	Rodalia d'Oliana	
Collserola	Muntanyes d'Ordal	Rubió - Castelltallat - Pinós	
Conca d'Alforja-Vilaplana	Muntanyes de Prades	Salines - l'Albera	
Conca d'Òdena	Muntanyes de Tivissa - Vandellós	Sant Gervàs-Montcortès	
Conca de Poblet	la Mussara	Sant Llorenç del Munt i l'Obac - el Cairat	
Conca de Tremp	Era Nauta Val d'Aran	Secans d'Utxesa	
Conca Salina	Paisatge fluvial de l'Ebre		
Congost del Segre	Paisatge fluvial del Segre		

(dryland farming, pastures, vegetable gardens); historic, cultural or artistic aspects, particularly in places in which a certain historical inheritance or artistic expression of the landscape plays a notable role (historic crops, nuclei, historic or symbolic names). As an example, and used throughout the 134 landscapes, names such as Moianès, Horta de Pinyana, Cubeta de Móra, Conca de Tremp and Plana de Vic are very popular and are already part of the collective memory of the territory. This is precisely why they were used.

The involvement of the population in the final naming of the landscape units was a determining factor in the recognition and later use of the final map.

3.6. Public participation in the delimiting and naming of landscape units

Participation played a relevant role in the identification of the landscape units, both with respect to the limits as well as their name. The participative processes were often used to validate or help to define the proposals of the limits of the units made by the work teams of the catalogues. For example, the final landscape unit map of the Landscape Catalogue of the Comarques Gironines is very similar to the map of units that was obtained by integrating the contributions obtained from the interviews given to the landscape stakeholders. As far as the naming was concerned, most of the participants in the website consultations agreed with the name proposed for the units.

Sometimes, however, the arguments of the participants on the units caused some of the work teams' proposals to be changed or questioned or, at least, made them take into account aspects that the work team had

not considered. This is the case, among many others, of the delimitation of Estany de Banyoles and Valls d'Olot units in the Landscape Catalogue of the Comarques Gironines to change the limits to the Besalú zone. The participation in the consultation on the website led to doubt as to whether the Besalú zone belonged to the Estany de Banyoles unit.

Sometimes, however, the contributions of the participants did not subscribe to the limits, and they also provided information that favoured the change of names of units. In fact, more than 20% of the landscape units of the catalogues changed name as a result of the participation. One example is the *Garrigues Altes* unit of the Landscape Catalogue of the Terres de Lleida in which the sum of the contributions made by landscape stakeholders and by participants in the website consultation caused a change of name. Initially, the work team had called it *Plataforma Garriguenca*, a name which was changed for *Plans de les Garrigues* as a result of the in-depth interviews to landscape stakeholders, who considered that the word “*Garrigues*” should be incorporated. Finally, this name was replaced with *Garrigues Altes* due to contributions to the website survey.



Figures 13 and 14. Landscape unit proposals from the stakeholders interviewed (above) and final version prepared by the work team of the Landscape Catalogue of the Comarques Gironines (below). The final landscape unit map of the Landscape Catalogue of the Comarques Gironines is very similar to the unit map that was obtained by integrating the contributions from the interviews given to the landscape stakeholders.

3.7. 134 landscapes

The preparation of the seven landscape catalogues enabled the map of the landscape units (or of the landscapes) of Catalonia to be obtained for the first time; a map that was previously non-existent. With 134 landscapes, the map shows the great diversity and wealth of landscapes in Catalonia, among the highest on the European continent. This converts the landscape into a first-class heritage. As already mentioned, each of the 134 landscapes has a landscape character of its own and is characterised by a set of elements that give it a differentiated idiosyncrasy from the rest of the territory and contribute to making one landscape different from another (neither better nor worse).

The fact that the landscape map covers the entire territory indicates that, in landscape policies, all landscapes need to be considered and not just the most excellent ones. A map of this kind enables us to flee from topics and to highlight landscapes with great values that are highly interesting but little-known and often even less valued.

The landscape units are relevant because they constitute the 134 basic territorial pieces in which to apply specific landscape policies, taking into account each character (defending the character of a place does not exclude this landscape from evolving or being intervened on). They have an average extension of 240 km², ready to be integrated—in fact, they are already being integrated—into territorial and spatial planning at regional and urban scale, through the landscape directives, in other words, the specific landscape regulations for each territory that come from the landscape catalogues. This map is also increasingly useful for preparing or revising municipal urban plans. Possibly, the most important reason is that it is being used by the local administration and by the public when promoting from the base supramunicipal initiatives aiming at showcasing a given landscape. The recent initiatives for the creation of the

As an example, the following 21 landscapes that can be identified on the map are still not very well known today, although they are home to exceptional values:

- In the Alt Pirineu i Aran: Massís de l'Orri – Valls de Castellbò i d'Aguilar, Solana del Baridà and Altes Nogueres.
- In the Terres de Lleida: Paisatge fluvial del Segre, Secans d'Utxesa and Vall del Llobregós.
- In the Terres de l'Ebre: Serra del Tormo, Burgans and Cubeta de Móra.
- In the Camp de Tarragona: Vall del Silenci, Conca d'Alforja – Vilaplana and Baix Gaià.
- In the Regió Metropolitana de Barcelona: Muntanyes d'Ordal, Vall Baixa del Llobregat and Montmell.
- In the Comarques Gironines: Garrotxa d'Empordà, Terraprimis and Rocacorba.
- In the Comarques Centrals: Ribera Salada, Replans del Solsonès and Serres d'Ancosa.

Consortium of the Aspres de l'Empordà, the impulse of the Lluçanès Landscape Charter or the development of the Cerdanya cross-border landscape plan, that take their respective landscape units as a basic area for the action, is a highly illustrative example of this.

Therefore, the experience shows the use of the landscape units, not just as an area of understanding and description of the character of a certain landscape, but as an area for management, planning and intervention. Thus, the map of 134 landscapes is more than a simple map of landscapes; the landscape units become authentic functional areas, points of reference, that go from generalisation to specification; they are basic territorial pieces in which to apply initiatives, local strategies, to implement landscape directives, to offer guidelines for open spaces, to apply regulations or to design specific landscape projects.

Their great educational and awareness creation capacity should be added to these qualities. In fact, the

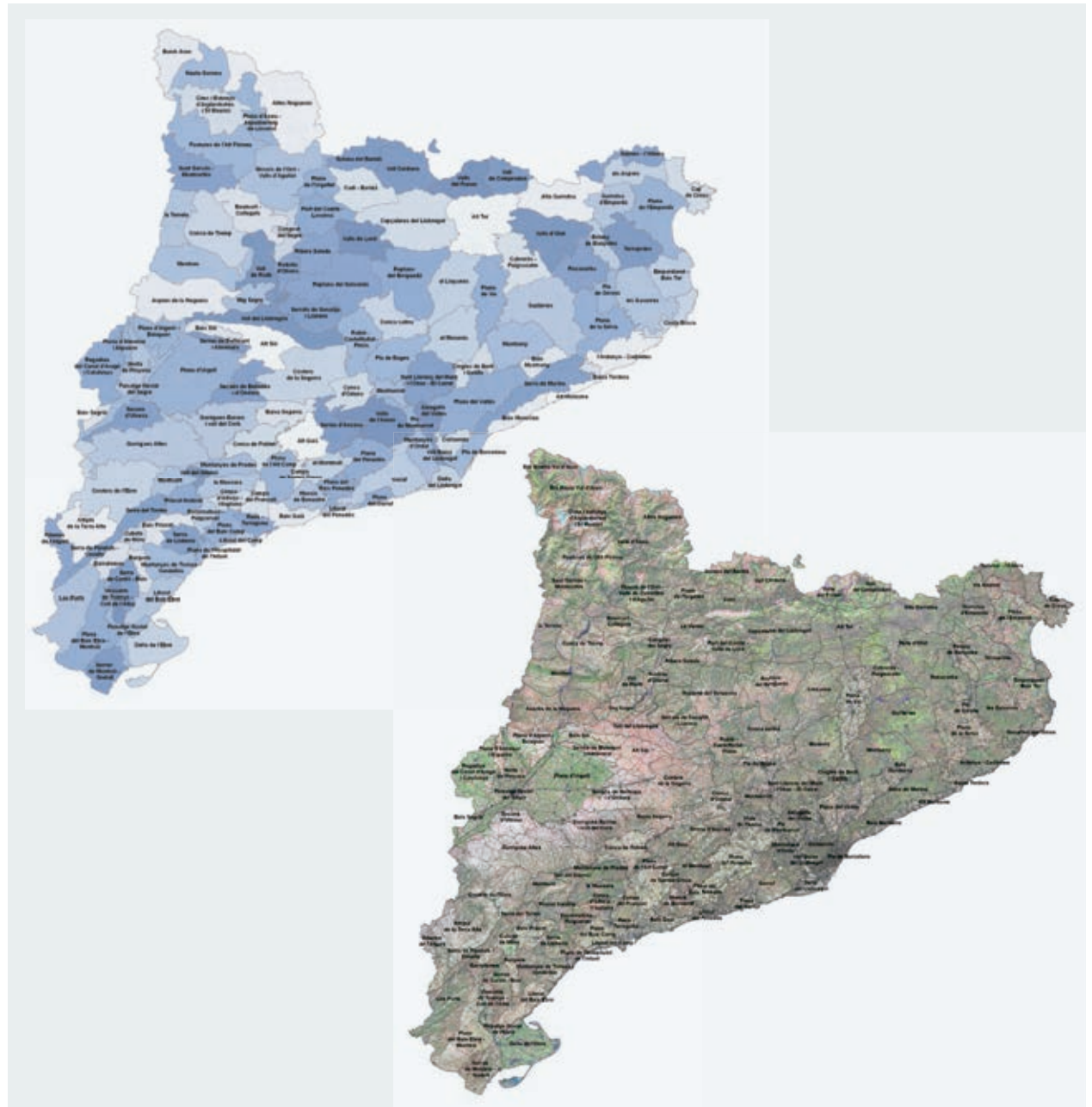
landscape map of Catalonia is also a powerful educational tool so that young people and the Catalan public in general can become aware of the landscapes in which they live, of the importance of their natural, historic, social, productive, symbolic and identity-giving values, and also of their uniqueness and their risks. This is why the map has already been included in some sixth form schoolbooks as a theme in social sciences. It has also served as the basis for preparing educational materials for secondary school education *City, territory, landscape*. Another initiative along these lines is the creation of “The landscape of the month” section in the magazine *Descobrir Catalunya*, in which one landscape unit per issue has appeared monthly for some time now.

The landscape catalogues appeared at these times of change of paradigms in relation to the new way of understanding political action and new ways of governing the territory that society demands. This gave rise to the interest awoken by this reading of the territory in terms of landscape, as well as the division into 134 landscape units which are not viewed as political-administrative entities, but as spaces with life, meeting places, areas that contain collective memories and even areas ideal for redesigning landscape governance. Each of these 134 landscapes is accompanied by a complete file which can be downloaded from www.catpaisatge.net, in which the most notable main characteristics are presented along with their historic evolution, their dynamics, the artistic expression to which they have given rise, as well as their risks and their threats. Only countries such as England or France or European regions such as Wallonia (Belgium) or Tuscany (Italy) have a similar landscape map (in the case of England, it is known as The Character of England), in other words, one that covers the entire territory and in which each landscape has a detailed description, diagnosis and specific proposals for action. In this sense, Catalonia, starting when it did, has taken a huge step ahead in the last decade.

3.8. Cartographical representation of the landscape units

As previously mentioned the preparation of the seven landscape catalogues has meant that, for the first time, a cartography of the landscape units of Catalonia (Landscape map of Catalonia) has been obtained. Catalonia had geological maps, maps of land use cover, maps of vegetation, among many others, but it did not yet have a landscape cartography, understanding the landscape as stated in the European Landscape Convention. The map of the landscape units of Catalonia offers a particularly complex challenge; the cartographic representation of limits. To this end, during the preparation of the map, several types of very different limits had to be dealt with; a crest line dividing two valleys, for example, is a type of limit that is “drawn” by the territory itself and is therefore easy to represent. A more difficult limit to express on a map is that which is established, for example, between an eminently forest landscape and another one that is agricultural and forest, in which the difference is more diffuse. Another difficulty is found when drawing the limit between two landscapes that are visibly very different (dryland crops and irrigated arable land), which are found in the midst of very fast transformation dynamics (for example, an evolution of dryland farming to irrigation farming). Finally, the feeling of belonging to one landscape or another neighbouring one expressed by the population would be another example, due to the difficulty there often is in deciding where one landscape starts and where it

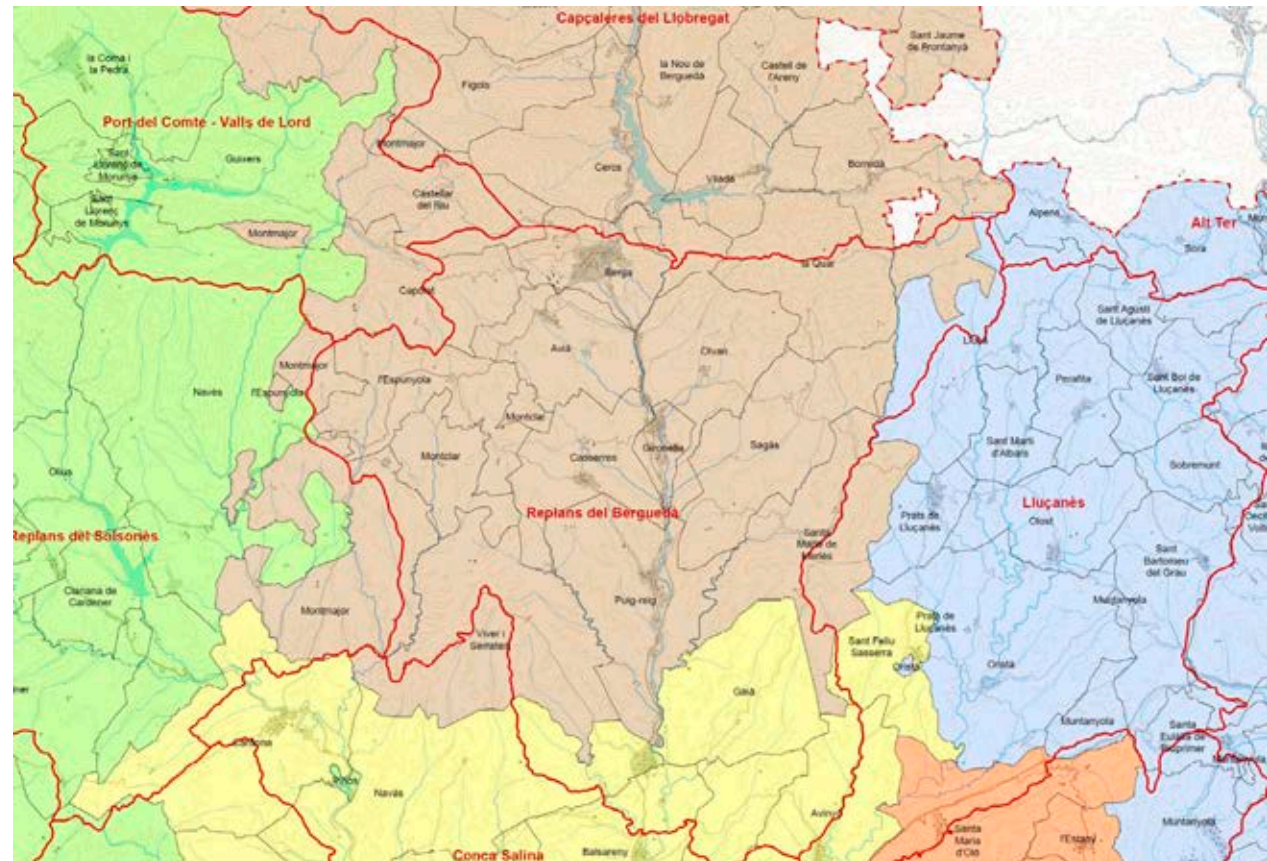
Maps 5 and 6. Showing the diversity and the richness of the landscape of Catalonia on a map is not an easy task. This is why the *Observatori del Paisatge* continues working on several versions of the landscape map of Catalonia, as the current version (map below) still oversimplifies the content of a map that aims to represent the great diversity of structures and landscape values that Catalonia has.



ends as recognised by a collective. This complex nature in the delimitation of the landscapes is also difficult when making a cartographic representation: how can one graphically express a limit that is diffuse? Suffice to say that the difficulty when defining some limits is particularly problematic as the administration needs clear, precise limitations.

Despite the fact that this cartography has the aim of illustrating the enormous diversity of landscapes, the results are visually similar to a typical map of territorial political-administrative division rather than the desired map of landscapes. One option tried out by the Observatory was that of using a thematic cartography as a base (a satellite image, for example) which, without the slightest doubt, provides a new dimension. This is a line that needs to continue to be explored.

One of the maps that has been found most useful was that which crosses the landscape units and the administrative limits, as it allows the reader or the planner to situate themselves in a regional or municipal context. This is the only map of the catalogue that includes the local administrative limits.



Map 7. Detail of the landscape unit map and administrative division of the Comarques Centrals.

4. Characterisation and evaluation of the landscape

After identifying landscape units, the areas of the territory that have a similar character, the following phase consists of describing the values and dynamics that make up each of these landscapes and of later evaluating them.

Of the entire landscape characterisation process, the most significant part is that of identifying the values (see part 4.1) attributed by the stakeholders that intervene and by the general public that live in it (natural values, aesthetic values, productive values, historic values, values of social use, and symbolic values). In this process of identifying values, the exploration of the artistic legacy (see part 4.2) of each place plays an important role, particularly with respect to values of a more cultural and perceptive kind.

The characterisation also analyses the current landscape, its dynamics and its possible future evolution (see part 4.3). It also shows the main routes and observation points from which the landscape is perceived (see part 4.4).

During the characterisation process, special attention landscapes (see part 4.6) are also identified, the sectors of the territory with unique features or those that are the object of great transformations with significant landscape repercussions.

The characterisation is essential for undertaking the landscape evaluation phase (see part 4.5), studying its strengths, weaknesses, opportunities and threats to protect, manage and plan the landscape.

In the following parts, the key points necessary to characterise and evaluate the landscapes in the context of the catalogues are analysed. In each part, emphasis has been placed on the most notable methodological aspects, on the incidence of participation and on the challenge posed by the cartographic representation.

4.1. Values in the landscape

Of the entire landscape characterisation process, the most significant part is that of identifying, describing and mapping the values. The landscape catalogues were based on the existence of diverse values or types of landscape values attributed by the stakeholders who intervened and by the population who enjoy it. The landscape values are dealt with in all their dimensions through a broad classification chosen in keeping with the wealth and diversity of cultural landscapes of Catalonia.

The importance of the identification of the landscape values lies in both the knowledge of these values as well as, and in particular, in the fact that the values identified were very much taken into consideration when defining and specifying the proposal of landscape quality objectives, of criteria and of actions.

The public participation in this phase was essential to be able to capture the values that depend on sensorial or emotional perception, that are impossible to identify just through the analysis of the existing reference cartography, of the specialist knowledge or through fieldwork. In the same way, the perception of the landscape is highly diverse and depends on so many factors that it is difficult to limit oneself to one interpretation of the points of view of the public and the stakeholders of the landscape in strictly quantitative terms. This is why the participation process of the catalogues (see part 2.11) was based on eminently qualitative instruments. Thus, the techniques used meant that above all a subjective knowledge could be gathered (opinions, feelings or beliefs), highly relevant in the analysis of the landscape, in which information obtained directly from people who have participated in the participation processes is treated so that ideas, reflections, values or dimensions of the phenomenon that would otherwise be excluded can be taken into consideration.

This identification of values has made the landscape catalogues a tool of interest for diverse areas and administrations, whether for designing tourist strategies (it should be remembered that the landscape is a first class asset), or for integrating them into landscape education initiatives, among many other functions already mentioned. In the same way, the values of the landscapes that have degraded to a greater or lesser degree should not just be conserved, in the most “static” meaning of the word, but must be “reinterpreted” and adaptable, if possible, to new uses and new forms. The only way of conserving certain landscapes is by reinventing them, adapting them to the new context without losing their identity or their *raison d’être*. Here, we are not just talking about simple tourist or recreational uses.

The values that are analysed are of different kinds. At the end of this section there are some examples:

- **Naturals:** These refer to the factors or elements that determine the quality of the environment, such as spaces with special natural and ecological interest (because of their uniqueness, representative nature, etc.), and also the landscapes that are legally recognised for strictly natural criteria. This value often reveals a special wisdom by the communities to make the most of the natural pre-existing basis through systems for using the land that are well adapted to the natural conditions. It gives the landscape the ability to transmit information about the history of its use, about the activities and the motivations of the human communities that transform it over time, and about the meaning that they give it.
- **Aesthetics:** These are related to the ability a landscape has to transmit a certain feeling of beauty, in keeping with the meaning and the cultural appreciation it has acquired over time. Supported on a tangible physical reality, the landscape becomes the support to an aesthetic reality founded on the landscape’s capacity of expression, not just through its mere contemplation, but also thanks to the mediation of other

arts, such as painting, literature, music, photography, etc. The results are landscapes which, due to their composition, the diversity of structures, textures or colours, or due to their harmony as a whole, are perceived as visually attractive and pleasant.

The aesthetic value of the landscape usually has a deep cultural base associated to certain patterns or models. To this end, the sea and the mountain are examples of landscapes with a valuation that has varied diametrically throughout the history of civilisations.

Some general examples of aesthetic values are the landscape interfaces in which harmonious combinations are produced, areas that are clearly recognisable with regard to their setting (agricultural and forest mosaics), scenic backdrops (mountain lines, horizons), monumental sites or other unique aesthetic features (lines of trees along roads and paths, ordered entrances into town centres). The appreciation of aesthetic values in the landscape contributes to increasing our awareness—both individual and collective—and respect towards this landscape, and to condition the use that is made, or that will be made, of it as a basic premise for its correct conservation.

The aesthetic dimension of the landscapes was defined in three categories:

- **Configurative elements.** Those that play a significant role in the visual composition of the setting. Several configurative elements were classified, such as the climate, water, morphology, agriculture, forest and historical and cultural elements.

- **Patterns.** Understood to be the combination of elements in identifiable complex structures that are repeated throughout the territory. Several kinds of patterns were identified, such as agricultural and forest ones, rivers, the structure of valleys, with contrast and urban settlements, among others.

- **Uniqueness.** Understood to be the unique landscape peculiarities that are not repeated in the area.

For example, the emblematic scenic backdrops, previously defined as configurative elements, are in themselves, a landscape singularity inseparable from open panoramic landscapes, in which the backcloth that frames them has a clearly identifiable, unique profile for the population residing in the area. In addition to emblematic scenic backdrops, other unique places were identified, such as the visual image of the plains, the geomorphic structure, unique agricultural areas, singular agricultural and forest areas or unique nuclei.

- **Historics:** These reside in the narrative capacity of a landscape, in other words, in its possibility to transmit information about the activities that have been undertaken by the population that transforms it. This corresponds to the most important imprints that man has left on the landscape throughout history, on some occasions these are of a secular origin, such as constructions of different types (mills, huts, towers, bridges, castles, city walls, churches), types of settlement, the historic centres of urban centres and other architectural groupings (industrial “colonies”), plot structures and their limits (the organisation of plots, field margins and walls), historical crops (vineyards, irrigated land, vegetable gardens, etc.), the historical use of the land (landscapes of cork and olive trees, etc.), land containment systems (terraces, embankments), irrigation systems (traditional irrigation, springs, stone bridges, wells), livestock trails and public road networks, etc. They also include the scenes of historical facts with social, economic or political relevance (battlefields, commemorative and memorial sites), and they may be associated with an activity, or with the life or work of a particular person or of a community with importance for the historical development of the area or the nation. The identification of historical values is not conceived as a mere inventory of facets of historical interest that are present in a determined area that lacks a landscape reading. Landscape elements are identified with a historical value, but also in the areas or the groups of elements

that are considered to have a landscape value from a historical perspective.

This historical value is always considered from a dynamic perspective that ensures its meaning at all times, for those who currently experience it, as well as for those who are to enjoy it in the future.

- **Social use:** These values are related to the use of a landscape made by an individual or by a specific group. The perception of them by the community as a social asset may be for reasons of pleasure, leisure, relaxation, observation, sport or therapeutic activities, in addition to the essential scientific importance of the knowledge that arises from studying them, as they are places of special relevance in the advance of science, for their educational value, and due to the clarity with which determined factors or techniques may be observed, determining their structure or composition (industrial, farming, water landscapes), etc.
- **Symbolics:** These values reside in landscapes that have an important symbolic significance for the people who live there and for those who establish relationships of belonging or expressions of identification. They are often explained due to the presence of natural factors (rivers, wetlands, mountains, horizons, scenic backdrops, etc.), to geostrategic locations (mountain passes, river fords, ports, bays and lighthouses), or cultural factors (terraces, areas with dry stone constructions, agricultural-forestry mosaics, tree-lined areas, castles and other defensive constructions, etc.). In addition to the landscape elements that relate to mythology, which are linked to the explanation of fantastic stories or legends or associated with rites and customs. This value also resides in landscapes with important historical and contemporary artistic representations, through painting, literature, songs, engravings, lithography, postcards, and others, which respond to a determined social conception and which have an enormous influence on the collective imagination. Symbolic values are

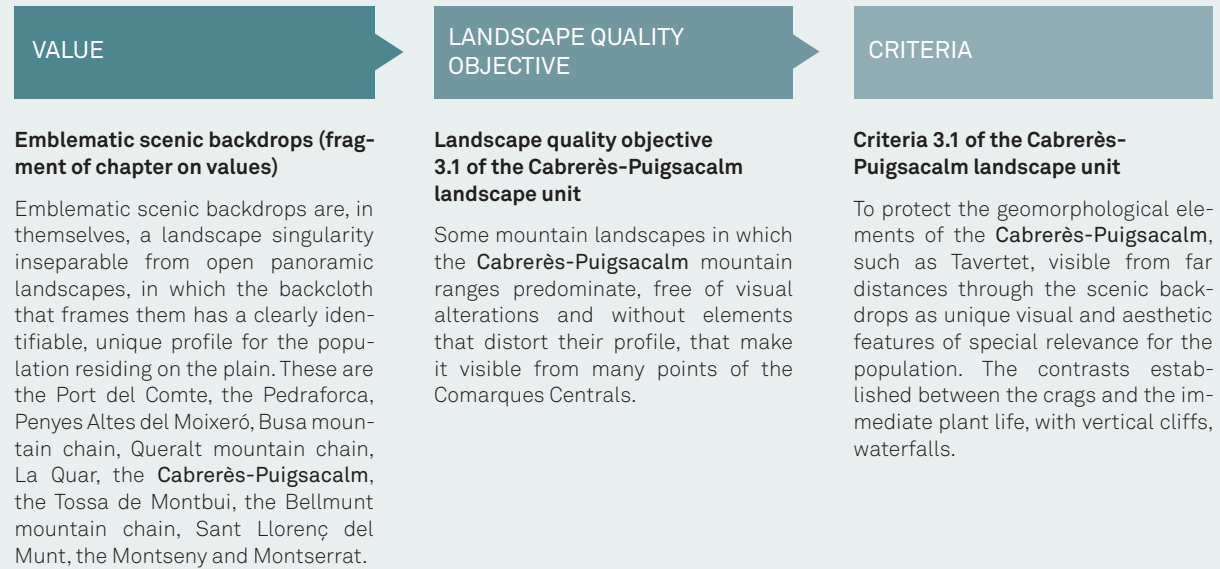
also often found in landscapes with determined spiritual and religious values (calvaries, shrines, places and routes where processions or pilgrimages take place, areas where social gatherings of a religious character are held).

The identity-giving value that a landscape may represent acquires increasing relevance within symbolic value, as an important system for a determined group, in other words, the landscape as a symbol by means of which a community recognises and identifies itself and before which it shows a certain emotional response.

This value is associated with landscapes related to living traditions, events, commemorations, ideas, practices or beliefs, in addition to those that create a feeling of belonging through which a determined group feels identified with the landscape.

- **Productives:** These values relate to the capacity of a landscape to provide economic benefits, converting its elements into resources, under the parameters of sustainability at all times. Tourism may be associated with these values, however at no time should this become the sole economic resource of a landscape. Landscapes must be understood as dynamic multifunctional units that may change in function over time, but which at all times must ensure their productivity. This may be of various kinds, from ecology, contributing to living standards, with reference to farming systems (vegetable gardens, fields, vineyards, forestry). woods, cork oak woods, pastureland or traditional livestock farming (livestock routes, pastures), to industrial and extraction processes (mining, salt flats, etc.) associated with transport and communication networks (roadways, railways, canals) to economic centres (livestock fairs, rural or urban centres), and so on. The proper management of these values will improve their multi-functionality, ensuring the renewal of resources and the generation of new ones over time.

Value identified that has become the basis for the definition of a landscape quality objective and for setting criteria for meeting it (the case of the Landscape Catalogue of the Comarques Centrals)



Picture 17. Scenic background of Cabrerès-Puigsacalm seen from the viewpoint at Sant Cugat de Gavadons.

4.1.1. Some characteristics of the identification of the values

Some characteristics of the methodology of analysing the values are:

- The landscape catalogues defend upholding the various kinds of values mentioned, and they do so on a scale that is optimal for territorial and urban planning instruments, without intending to be an exhaustive compilation at a highly detailed scale, which is more appropriate for other tools, such as landscape charters.
- As already mentioned, the differences of existing perception with respect to the landscape make it difficult to define a quantitative method of valuation of the quality of the landscape. It should be taken into account that not all landscapes have the same meaning for everyone and each landscape can be attributed diverse values to differing degrees, depending on the perception of the stakeholder or individual. Therefore, we need to accept the existence of methodological difficulties and of perspective differences with respect to the landscape that make it difficult to define a quantitative method of valuation of the quality of a landscape that is valid and accepted by everyone.
- For the same reason given above, the catalogues avoid the hierarchization of levels of quality of the landscape, a highly complex —if not impossible— task, given that most of the values respond to perceptions or sensations of the population that are subjective and incommensurable.
- Some values can be classified as perceptive. These correspond to sensorial perception (smells, sounds, etc.), not just visual ones as well as to the emotional perception a person has of a certain landscape (a safe, frightening, calm, noisy, wild, remote landscape, etc.). These values are easy to describe but very dif-

Areas of landscape interest:

- Areas defined in the Coastal system master plan
- Areas of interest according to the special plans for the protection of the environment and of the landscape

Areas recognised by regulations on natural areas:

- Natural Areas of Special Protection (national parks, natural places of national interest, natural reserves and natural parks)
- Areas of Natural Interest (PEINs)
- Special plan (regulation on protection of areas)
- Special plan (urban regulation)
- Game reserve
- Controlled hunting area
- Picturesque landscape at a local scale, established by Law 9/93, on the cultural heritage of Catalonia

Areas strictly known for their geological interest:

- Inventory of areas of geological interest in Catalonia

Open spaces strictly known for their cultural interest:

- Cultural asset of local interest (BCIL)
- Cultural asset of national interest (BCIN)

Open spaces recognised at a European level:

- Natura 2000 network (Special Protection Area for birds and Special Areas of Conservation)

Open spaces internationally recognised:

- Biosphere reserve
- Specially Protected Areas of Mediterranean Importance
- Areas designated as World Heritage

Figure 15. Some legally recognised landscapes.

ficult to identify, due to the great level of subjectivity they involved. These values have been compiled in keeping with the idiosyncrasy of each landscape and with the sensitivity and the capacity of observation and empathy with the place by the work team.

- The identification of values starts with the consideration of the “recognised landscapes”, in other words, the identification and mapping of those spaces whose value is recognised from a regulatory point of view at an international, national, Catalan or local scale (see figure 15).

4.1.2. Sources of information on the values

Some methods for getting to know the values of:

- **Documented sources.** These are particularly interesting for identifying tangible values (natural and historical), as well as some intangible ones (above all symbolic-identity giving). Some examples of these collections are the territorial diagnoses of the local Agenda 21s, reports of Municipal Urban Planning, Territorial/Urban Master Plans, Local/Regional Strategic Plans, Sectorial catalogues (PEINs, BCINs, etc.), landscape charters, specialist books, academic research, documentary photography or the press.
- **Spoken sources.** To identify the values of a more cultural or perceptive nature (such as aesthetic, social use or symbolic) and, therefore, with a more subjective valuation, it is very important to get to know the opinion of the people who live in the territory. These citizens, as well as the economic and social stakeholders, through the mechanisms of consultation and participation explained in part 2.11 (interviews given to landscape stakeholders, discussion groups, workshops with individuals, open workshops, opinion studies, telephone surveys, consultations via website, etc.) contributed to identifying which landscapes bring together these values. In part

4.1.4, on participation, these details are looked at in greater depth.

- **People who know the territory.** Informal contacts with local stakeholders and people who live in the territory who are highly familiar with the recent landscape trends, who allow knowledge regarding a given place to be shared. This exercise complements the participation process and is essential, as it allows aspects of the landscape which would otherwise involve a greater investment in time and resources to be looked at in depth.
- **Artistic and literary inheritance of the place** (painting, photography, engravings, postcards, literature, travel guides, music, tourist posters, etc.). This method, which is based on the exploration and study of the artistic production, the travel guides and the illustrations, is based on the idea that the representations of the landscape allow the relations between society, or part of it, and the landscape at a given moment in history to be discovered. This source of information is explained in greater detail in part 4.2.

4.1.3. Mapping the values

Throughout the preparation process of the catalogues, in which public participation played a notable role (especially when compiling the perception that people and stakeholders have of the intangible aspects of these landscapes, such as the meaning of the place, the memory of the territory or the sensations and emotions that it awakens in them), diverse types of landscape values were identified (natural, aesthetic, historic, social use, symbolic and productive), attributed by the stakeholders who intervened and by the population who enjoy them.

These values, many of which are perceptive, are complex to map, often due to a question of scale, but also due to their subjective load, among other reasons. It

EXAMPLE OF PERCEPTIVE VALUES

Map of the olfactory perception of the Landscape Catalogue of the Alt Pirineu i Aran

The Pyrenean landscapes, like all the others, are characterised by a presence of specific aromas that make them particularly evocative to the memory. It is possible to identify, in an illustrative way, some of the main olfactory values based on the land cover.

For example, the scrubland of *Genista balansae* makes up an area with a heavy aromatic presence, particularly in springtime. Other clearly Pyrenean fragrances contrast with them which could be considered to be typically Mediterranean aromas, which include scrubs of rosemary (*Rosmarinus officinalis*) —and thyme— with gutwort (*Globularia alypum*) and *Thymelaea tinctoria*. Smells have also been identified in evergreen coniferous forests, which have been associated to the smell of resin, and in deciduous forests, which have been associated to damp forest.

The smells of the main agricultural and livestock environments are related to the majority practices of the primary sector (mown grass on the different meadows throughout the Alt Pirineu i Aran give the atmosphere a particular smell, at the same time that this activity gives off different herbaceous particles that are easily identifiable by the most sensitive “nos-trils”). There are other smells, such as that of recently tilled land, which can be found where mechanisation allows the earth to be ploughed before it is sown. The “smell of animals”, that should be distinguished from the stench of excrement, was only identified in places in which the animals that pasture the high mountains during the summer months are found. It was done in this way because, it is in the pens where one can see a large number of animals as well as smell the odour of animals that is so characteristic in some collective imagination of the study area.



Map 8. Map of the olfactory perception. Landscape Catalogue of the Alt Pirineu i Aran.

was specifically when trying to represent landscape values derived from the impressions or the emotions of the population that a greater effort of imagination was required to overcome the classic mapping representation models

The mapping of the valuation of the landscape, in the way the landscape catalogues are conceived, did not consist of preparing a map of the sum of diverse values, but of preparing several maps that can superimpose these values. In other words, the list of resulting maps is not added, or grouped. Put simply, it constitutes yet another element of judgement when deciding on the future of this landscape (through the definition of the landscape quality objectives, in the chapter or the establishment of criteria and measures). It is not a good idea to obtain a final map that values the landscape integrally, as this is an exercise that each citizen, each stakeholder or each administration needs to do, weighing up each value in keeping with their preferences. What it proposes with this system, is to offer tools so that this analysis is possible.

The resulting mapping of each value was defined, fine-tuned and adapted as the catalogues developed, leading towards a single legend with the aim of being able to proceed with a homogenous reading of all the maps. For the purposes of documents, the mapping consists of an A0 map of the entire area of the catalogue for each of the values described (natural, aesthetic, historical, social use, symbolic and productive) and of two A3 maps inserted into the files of each landscape unit and that use the information generated on the A0 maps: one of these maps expresses all the aesthetic values of the corresponding landscape unit and the other shows the rest of the values.

4.1.4. The contribution of public participation

Most of the values respond to perceptions or sensations of the population and are therefore subjective and very difficult to quantify. To identify these more perceptive and interpretative values (such as the aesthetics, social use or symbolic ones) and therefore those with a more subjective valuation, it is very important to get to know the opinion of the population that lives in the territory. This is why the landscape catalogues have combined scientific rigour with the participation of the population and of the main stakeholders (see Chapter 2). This participation was basic for identifying many of the landscape values that are imperceptible when only scientific data is analysed.

The aesthetic values identified by the participants are both positive (flowering almond trees in the unit of the Altiplà de la Terra Alta, the landscape of the fields subject to flooding on the Plana de l'Empordà, the tree-lined irrigation canals in Lleida, the dry stone constructions in the Garraf, the hills that shape the Lleida plain, the red soil under the Cadí mountain range, the charm of the Tosca Forest in the Garrotxa region, the harmony of the Cubeta de Móra) as well as negative (disorderly, artificial, impacting, degraded, ugly open spaces). The aesthetic valuation of the landscape is often associated to colours (the yellow of silver birches in the autumn in the Boavi Plain, the colour of the sea at the Cap de Creus, the chromatic range of colours of the Montseny, the diverse city of colours at the markets in Barcelona), the smells (the smell of spring in the Pastures de l'Alt Pirineu, the smell of fruit trees in the Horta de Pinyana), the sounds (the silence and peace of the Pyrenees, the calmness of the Montsec, the sound of birdsong in the Paisatge fluvial del Segre) or the weather conditions (the sunsets and the northern wind known as the *tramuntana* on the Plana de l'Empordà, the fog in Lleida, the snow in the Pyrenees).

The symbolic values (which include identity-giving ones), that on occasions emerge with difficulty, appeared in the participation processes, often when looking for the name for a landscape unit or for specific places. The toponymy or the name that the public gives some landscapes contains a high load of symbolic and identity-giving values. Some examples of symbolic values detected in the participating processes of the catalogues were the silhouette of Els Ports, the Cap de Creus, the Cadí mountain range, the En Bas Valley and, of course, Montserrat. The Montserrat mountain represents much more than a mountain, much more than a natural park, much more than a religious space: it is a national symbol.

Another notable symbolic value is the area where the Battle of the Ebre place. Its valuation and significance for part of the population meant that it was dealt with in greater detail through the special attention landscape figure in the Landscape Catalogue of the Terres de l'Ebre. The participation also served to identify landscape elements that have mythological attributions linked to fantastic stories or to legends, such as the *minairó* in the Landscape Catalogue of the Alt Pirineu i Aran. The *minairó* is a tiny mythological character that lives inside a tube of needles and creates screes when accumulating all the stones of an area in one point. According to legend, many of the screes in the Pyrenees were created by these elves.

The perceptive values are related to the sensorial and emotional perception one has of a certain landscape. In the participatory processes, the Alta Garrotxa was defined as a harsh, wild, inhospitable place, while the Plana de l'Empordà was described as a calm, balanced, welcoming, familiar, friendly, peaceful landscape. The language referring to these two landscapes and, therefore, to the perception of them, is opposed.

EXAMPLES OF NATURAL VALUES⁷

Forests that protect from avalanches and forests that minimise floods (Landscape Catalogue of the Alt Pirineu i Aran)

Large forest masses, the green of the Pyrenees, stand out from the landscape perspective when the avalanches and the heavy floods open way in the form of linear scars. Therefore, the natural values of forests that protect from avalanches and forests that minimise floods should be mentioned, which are logically found in key places in the areas at the headwaters of the main river basins in the study area. Despite not forming homogeneous continuities, they outline a sufficiently wide area that needs to be taken into account in a preferential way, in view of the risk that any alteration of these places would pose.



Picture 18. The forests that protect from avalanches pay a key role in the headwaters of rivers and generate a highly visible broken landscape, such as this one on the shady side above the Boavi Plain which is ploughed through by the avalanche channels of Rovinets.

Unique forests (Landscape Catalogue of the Alt Pirineu i Aran)

There are a series of forests which, due to their uniqueness. The following forests are particularly notable: La Mata de València d'Àneu, a unique fir forest in Catalonia, due to its size and landscape qualities; the Baricauba Forest, which is also a large extension of fir trees with a significant density; as well as the Virós Forest with fewer fir trees than the first two, but with a large number of Scots pine and a small patch of beech trees unique to the Pallars Sobirà; the forests of Sant Joan de l'Erm, the forests of the valley of the River Santa Magdalena; the forests of the shady side of the Orri mountain range and of its eastern ravines; the shady side of Cadí; the fir forest in Riu; the shady sides of the Port del Comte; the Boumort mountain range; the shady side of Montsec; the shady side of the Molina Valley, from the Toses mountain pass; the Aubàs Forest; the Era Artiga beech forest and that of Toran; the Lladorre Forest; the shady sides of Bonabé; the forests at the headwaters of the Barravés Valley; era Contesa and era Èrla forests; and the Forat del Gel Forest and the shady side of Llebreta.



Picture 19. The Boumort-Collegats landscape is host to one of the unique forests of the Alt Pirineu i Aran.

Terraces and fluvial plains (Landscape Catalogue of the Terres de l'Ebre)

The presence of the River Ebre and its terraces and fluvial plains has created landscapes with high natural values. The riverbank forests, river islands, the galachos [a local name given to furrows caused by erosion], the riverbanks and the estuaries of streams and gullies generate water environments with a rich biodiversity in terms of plant life as well as wildlife, which are a contrast to the generally dry territory. Notable terraces and fluvial plains are the meander of Ascó-Vinebre, the central sector of the Cubeta de Móra, from Móra la Nova to Miravet, the sector between Xerta and Tortosa and the sector between Tortosa and Amposta, in addition to the Delta of the Ebre itself.



Picture 20. Riverbank forests along the River Ebre near Miravet.

7. Texts extracted from the landscape catalogues.

Snow line (Landscape Catalogue of the Alt Pirineu i Aran)

Snow is a fundamental feature that defines the landscape for a good part of the year on the peaks and the highest valleys, mainly concentrated in the Val d’Aran, Pallars Sobirà, Alta Ribagorça and Cerdanya regions. It is a phenomenon that is particularly visible above all during the winter period, made up of a white cloak of snow that covers the forests, meadows, crops and towns. In addition, the peaks and the snow-topped mountain ranges are part of the main scenic backdrops of the Alt Pirineu i Aran, which contributes to the population recognising them. From a landscape point of view, another key moment is the thaw, when the erosive consequences are visible on the more pronounced peaks and changes in level, the growth of water flow and the greenness of the vegetation in contrast to the winter white.



Picture 21. In some landscapes, such as that of Altes Nogueres, snow is a characteristic element throughout a large part of the year.

Tramuntana (Landscape Catalogue of the Comarques Gironines)

The *tramuntana* (a north wind) is a configurative feature of the landscape that is extremely important, particularly with respect to the layout and configuration of crops and the possibilities of spontaneous vegetation. It is an element that conditions the visibility as well as the texture we perceive of the landscapes of the Girona region, above all those in the Empordà, and is considered to be an identity-making feature by the population of the Empordà plains.



Picture 22. In areas that are highly exposed to the northern wind, the *tramuntana*, such as the Cap de Creus, the plant life adapts and takes on aerodynamic shapes which are often strange.

Profiles and scenic backdrops (Landscape Catalogue of the Regió Metropolitana de Barcelona)

The most notable configurative elements of the landscape are the scenic backdrops, in other words, the forms of relief with greatest visual exposure. In many cases, these forms become lasting horizons, which give them an important structuring function in the landscape and, in turn, a notable condition as visual points of reference. The main scenic backdrops, among many other secondary ones, are the following: Montserrat, the Serra de Collserola, the Cingles de Bertí and Montseny.



Picture 23. The Serra de Collserola is a clearly identifiable scenic backdrop from the city of Barcelona as well as from El Vallès or from other landscapes in the Regió Metropolitana de Barcelona.

8. Texts extracted from the landscape catalogues.

A windbreak of cypress trees (Landscape Catalogue of the Comarques Gironines)

Windbreaks are, without the slightest doubt, one of the most characteristic structural elements of the rural heritage of the coastal agricultural landscapes of the Comarques Gironines. Although their historic origin was decidedly functional (to protect the vegetable gardens and agricultural fields from the force of the tramuntana), over time they have become a singular feature in the Comarques Gironines and an unmistakable sign of identity. The effects of technification and agricultural intensity have contributed to there being fewer and fewer of these cypress tree barriers, meaning the progressive loss of one of the most defining aesthetic, historic and symbolic features of the rural landscape of the Empordà. There are still windbreaks in the municipal areas of Figueres, Vilabertran, El Far d'Empordà, Santa Llogaia d'Àlguema, Cabanes, Fortià, Peralada, Vila-Sacra, Vilanova de la Muga, Castelló d'Empúries, Siurana, Riumors, Vilamacolum, Sant Pere Pescador, Torroella de Fluvià, L'Armentera, Viladamat, Albons, La Tallada d'Empordà, Bellcaire d'Empordà, Torroella de Montgrí, Ullà, Ullastret, Gualta and Serra de Daró.



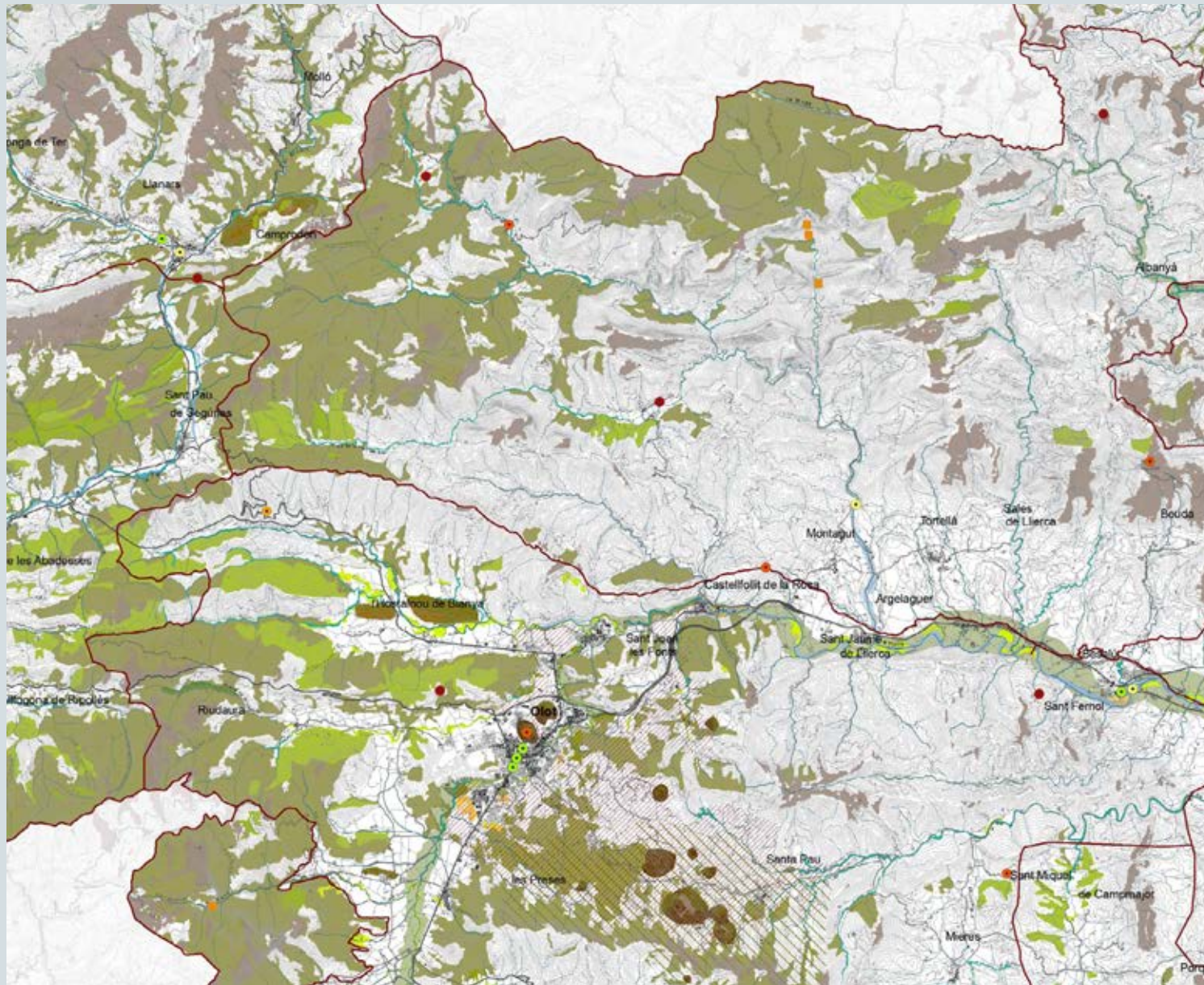
Picture 24. Rows of cypress trees are one of the most characteristic features of the Empordà landscape.

Dry stone constructions (Landscape Catalogue of the Comarques Centrals)

Dry stone constructions shape an aesthetically ordered landscape that is highly integrated into its environment, as they are constructions made with materials found in the area, respecting textures and colours. The dry stone walls, huts and wine vats are in themselves a clear example of traditional agricultural constructions. The walls associated to terraces, in particularly those delimiting crops of vines, or shepherds' huts for livestock use are two examples. In addition, between the Pla de Bages and Sant Llorenç del Munt i L'Obac-El Cairat, there is a unique area where there are more than a hundred dry stone wine vats distributed among several valleys and mountain ranges, specifically in the Flequer valleys, the Puig Gili mountain range, the Santa Creu de Palou Stream, the Farell-Matarrodona, the Àlber Stream, Les Generes, the Mura-Sant Esteve Stream and the Llobregat River, all of which are in the area of Talamanca, Mura, El Pont de Vilomara and Rocafort. These constructions pay witness to a past in which the region was the main wine producer in Catalonia.











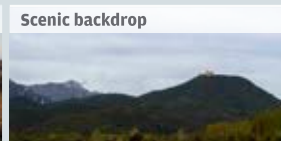












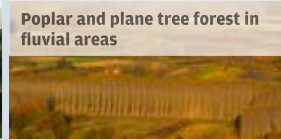








Picture 25. Dry stone hut in the municipality of Calders.



- Climate feature**
- Snow level
- Water feature**
- Main river (visual area)
- Wetland
- Surface water
- Morphological feature**
- Hill and mount
- Volcano
- ▨ Area of Geological Interest
- Scenic backdrop
- Cove
- Waterfall
- Agricultural feature**
- Windbreak
- Irrigation canal
- Rice field
- Irrigated land fruit tree
- Dry land fruit tree
- Intensive herbaceous crop (cereal and forage)
- Fenced in or enclosed areas
- Vegetable garden
- Forest feature**
- Mixed forest
- Deciduous forest
- Riverside forest
- Poplar and plane tree forest in fluvial areas
- Historic and/or cultural feature**
- ▨ Area with dry stone walls
- Castle
- Church and chapel
- Lighthouse
- Archaeological heritage
- Emblematic bridge
- Tree-lined promenade
- Tree-lined entry to a town
- Change from slate to roof tiles

Map 10. Fragment of the map of aesthetic values, features that make up the Landscape Catalogue of the Comarques Gironines.

Mosaic of images of the elements that make up part of the map of aesthetic values, features that make up the Landscape Catalogue of the Comarques Gironines.

Climate	Snow level 	Tramuntana 				
	Hydrological		Main river 	Wetland 	Surface water 	
Morphological	Hill and mount 	Volcano 	Area of Geological Interest 	Scenic backdrop 	Cove 	Waterfall 
	Agricultural	Windbreak 	Irrigation canal 	Rice field 	Irrigated land fruit tree 	Dry land fruit tree 
Fenced in or enclosed areas 		Vegetable garden 				
Forest		Mixed forest 	Deciduous forest 	Riverside forest 	Poplar and plane tree forest in fluvial areas 	
	Historic and/or cultural	Area with dry stone walls 	Castle 	Church and chapel 	Lighthouse 	Archaeological heritage 
Tree-lined promenade 		Tree-lined entry to a town 	Change from slate to roof tiles 			

Bocage or *closa* agricultural pattern (Landscape Catalogue of the Alt Pirineu i Aran)

In specific places at the bottom of some valleys or plains in the Pyrenees valleys, there is a unique agricultural structural formation of the landscape known as a bocage. This word, of French origin, is given to a landscape associated to smallholdings, consisting of little irregular plots of land that can be cropland or meadows, which are separated by living hedges, small walls, taluses and trees that often go around paths. It is an agricultural formation that is characteristic of humid climates with an abundance of livestock farms. This configuration of the territory offers great biological diversity as well as a great aesthetic value to the surroundings, particularly in autumn, when there is the chromatic change of the hedges that separate the plots. Some areas of bocage have particularly relevant or unique values, in which the meadows and their associated features (paths, low walls, rows of trees, terraces, etc.) play a protagonist role. This is the case of many Pyrenean valleys, such as the Àssua Valley, the Boí Valley, the Fosca Valley, the Cardós Valley, the Coma de Burg Valley, the Àneu Plain, the Solanes del Faro in the Unarre Valley, the Aguilar valleys, the Barruera Plain, the Sort Plain, the plain between Vilaller and Ginast in the middle of the Cubeta de Bono, El Pont de Suert, La Pobleta de Bellveí, the Corts Plain, the residual plains of Era Lana de Les and Bossòst and the meadows that surround a great number of the villages set halfway up the slope of the Val d'Aran, the Alinyà property, the area around Tuixén or the nuclei around the canyon of La Vansa, among others, to mention just a few of the more notable meadow areas. In all of them, the bocage spreads around the populated nuclei at the bottom of the valley, making the most of the few flat areas offered by the Pyrenean valleys.



Picture 26. The area around Barruera is a good example of enclosures in the bottom of the valley that have maintained their character.

Pattern of contrast between the bays, cliffs and the sea (Landscape Catalogue of the Terres de l'Ebre)

These places are aesthetically interesting because of the contrast between the greens of the maquis and thickets, the yellow colours of the cliffs and the blue of the sea. It is also a contrast that slightly varies depending on the time of year: in autumn and winter it is an austere landscape, with the dull greens of the plant life and the white crests of the waves in the sea caused by the winds; while in spring, with the brighter green of the vegetation, the contrast is accentuated. They are found on the Litoral del Baix Ebre and aesthetically speaking, the ones in L'Ametlla de Mar are worthy of a mention. There are many sectors that maintain a remarkable aesthetic quality, such as the Santes Creus in L'Ametlla, the Estany Podrit Bay, also in L'Ametlla, Maria Cove in L'Ampolla and Sòl de Riu in Alcanar.



Picture 27. The Litoral del Baix Ebre is one of the landscapes in the Terres de l'Ebre where the contrast between the plant life, the cliffs, the bays and the sea can be best observed.

Pattern of the urban settlement in the Empordanet (Landscape Catalogue of the Comarques Gironines)

Diverse settlement systems in the Comarques Gironines, due to their location in the territory, their long history and the abundant presence of heritage and identity-giving elements, make up notable patterns of urban settlement. They are patterns formed by remarkable sequential urban settlement structures with an identifiable appearance. The following groups that offer differentiated characteristics and that make up the landscape with a great identity of its own are notable. One of these patterns is formed of the set of nuclei in the Empordanet: small nuclei with a compact structure, with an organic morphology in keeping with the topography, usually built on a hill or slight mound in the land and with a church as the notable building. These are Tor, La Tallada, Jafre, Ultramort, Parlavà, Corçà, Monells, La Pera, Púbol, Vulpellac, Canapost, Ullastret, Serra de Daró, Gualta, Palau-sator, Peratallada, Fontclara, Pals, Torrent, Fontanilles, Fonteta, Llabià, Matajudaica, Casavells, Cruïlles, Sant Sadurní de l'Heura, Madremanya, Castell d'Empordà, Sant Feliu de Boada, Sant Julià de Boada, Sant Iscle d'Empordà, Rupià and Foixà.



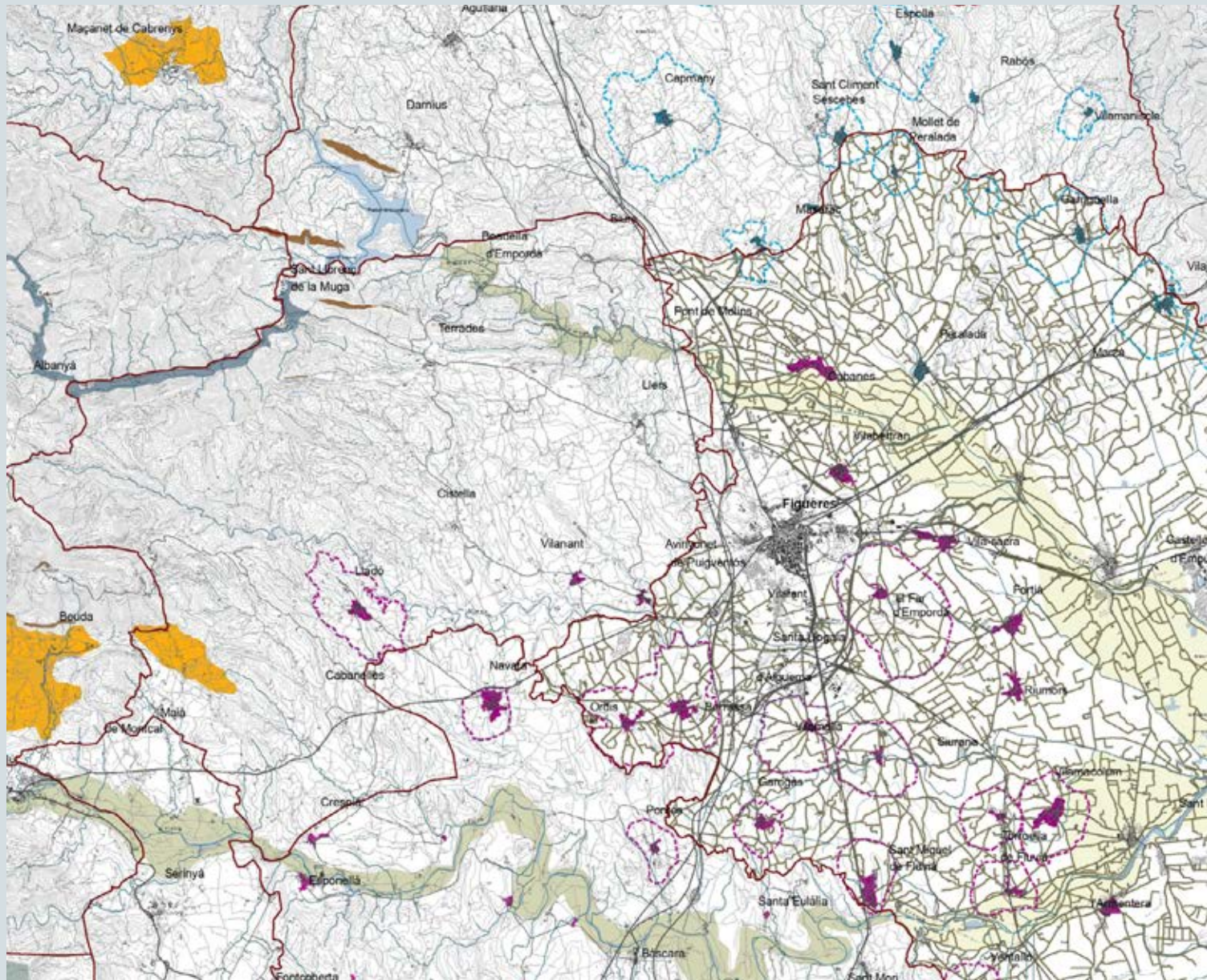
Picture 28. The village of La Pera is perched on a hill near Les Gavarres.

Linear patterns of urban settlements and their landscape (Landscape Catalogue of the Terres de Lleida)

This is a pattern of linear structures of urban settlements, which are remarkable due to their compact appearance, predominantly at the highest level. The settlements are usually found in a dominant position, often at the end of a narrow mountain range that controls the confluence of two valleys, although there are also villages at the bottom of the valleys, at the foot of the slopes or on top of a small terrace. In the areas around the towns, the former crops have often been replaced by livestock industries that form a kind of periurban crown in the outskirts, generally around the entrances. Thus, the immediate area around the towns is gradually replacing traditional agricultural use for industrial livestock. The urban settlements that follow this linear pattern are Set River: Cervià de les Garrigues, L'Albagés, El Cogul, Aspa and Alfés; Vall Major: Juncosa, Els Torms, El Soleràs and Torrebeßes; Torrent de la Femosa: Montblanquet, Omells de Na Gaia, Espluga Calba, Omellons, Vinaixa, La Floresta, Les Borges Blanques, Juneda and Artesa de Lleida; Corb River: Rauric, Llorac, Vallfogona, Guimerà, Ciutadilla, Nalec, Rocafort de Vallbona, Sant Martí de Malda, Maldà and Belianes; Sió River, in the Alt Sió unit: the chain of nuclei starts in Agramunt, and follows with Puigverd d'Agramunt, Castellnou d'Ossó, Ossó de Sió, Montroig, Les Pallargues, Sisteró i Pelagalls, Ratera, Concabella, Hostafrancs, Riber, Sedó and Tarroja de Segarra.



Picture 29. The village of Maldà is part of the pattern of settlements that follows the River Corb.



Map 11. Fragment of the map of aesthetic values, patterns of the Landscape Catalogue of the Comarques Gironines.

Patterns

Aesthetic values

Agroforestry

Cropland and forest terrace



Capillary highway section with historic roots



Mosaic of images of the elements that make up part of the map of aesthetic values, patterns of the Landscape Catalogue of the Comarques Gironines.

Fluvial

Medium basin



Low basin



Valley

Closed inland valley



Open inland valley



Coastal valley on the northern coast



Contrast

Crag and cliff with plant life



Cliff and sea



Forest and sea



Dune and sea



Forest and mountain pasture



Urban settlement and/or its surroundings

Els Aspres



Plana de l'Empordà



L'Empordanet



Terraprimis



Pyrenean mountain



Coast



The unique Terraprimis agricultural and forest space Tramuntana (Landscape Catalogue of the Comarques Gironines)

There are zones in which the forest and the agricultural fragments make up sets with great entity and aesthetic value. They are agriculture and forest areas that are linked to each other which, apart from their productive value and use as a landscape connector, have unique features defined by a type of crop, the structure of the plots, the morphology of the territorial matrix, their form or their size. One of these spaces is the Terraprimis mosaic, a huge area with a wavy relief which runs between the medium courses of the Ter River and the Fluvià River, with small villages or neighbourhoods and mixed pine and holm oak forests.



Picture 30. The Terraprimis are characterised by the combination of forest and agricultural fragments and the presence of farmhouses (*masies*) and small hamlets.

Headwaters of gullies (Landscape Catalogue of the Terres de l'Ebre)

Gullies are found in abundance in the calcareous mountain ranges of the Terres de l'Ebre and make up a highly notable and aesthetically valued unique feature. The headwaters of the gullies are characterised by their steep slopes and changes in level. Many are winding, with complicated access characterised by being narrow and with a course that is normally much wider than the flow they carry, which is usually null. Headwaters worthy of a mention are those of Els Ports with the gullies of the Vall d'Uixó, La Paridora, El Regatxol, La Fou, Valldebous, La Galera, Lloret, La Conca, Xalamera, Canaletes River, La Caramella, Els Estrets; also those of the Serres de Cardó-Boix, with the gullies of Les Nines, Vallpalmera, and La Victoria; and those of the Muntanyes de Tivissa-Vandellòs, with the gullies of El Pouet, Franquers, Escal-dabecs, Els Comuns and El Mas de Capcir.



Picture 31. Headwater of La Caramella Gully, in Els Ports.

Coastal front of the Ardenya (Landscape Catalogue of the Comarques Gironines)

One of the most highly valued aspects of the Ardenya is the appearance of the mountains and the sea. The impressive shapes of huge cliffs combined with plant life and the sea offer a place with an undeniable aesthetic value. The small bays distributed along the coast, encircled by impressive cliffs and not often visited due to access being so difficult, complete and complement the panoramic view.



Picture 32. The coastal façade of the Ardenya is notable, above all, due to the presence of plant life very close to the sea.

Abandoned villages (Landscape Catalogue of the Camp de Tarragona)

Abandoned villages, apart from their historic interest, also make up landscapes with a very determined appearance related to the charm of the solitude and melancholia of the remains of a more prosperous past. The landscape of these villages consists of houses that are mainly in ruins, bell towers without bells, cobbled streets, as well as some small architectural or functional details, such as old wine presses, wood-fired bread ovens or sundials. In the Camp de Tarragona, three areas with a significant number of abandoned villages have been identified: in the sector of the Tivissa-Vandellòs mountains there are five abandoned villages: Gavada, Fatxes, Masdevalentí, Castelló and Remullà. The centre of Mas de Valentí is barely appreciable, while in Castelló, an association has been carrying out rehabilitation tasks for the last seven years. In La Mussara sector there are the abandoned villages of Gallicant and La Mussara. A third sector, with plenty of abandoned villages is to the north of Montmell, where there are three abandoned villages: L'Albà Vell, Selma, and Marmellar.



Picture 33. Church in the abandoned village of La Mussara.

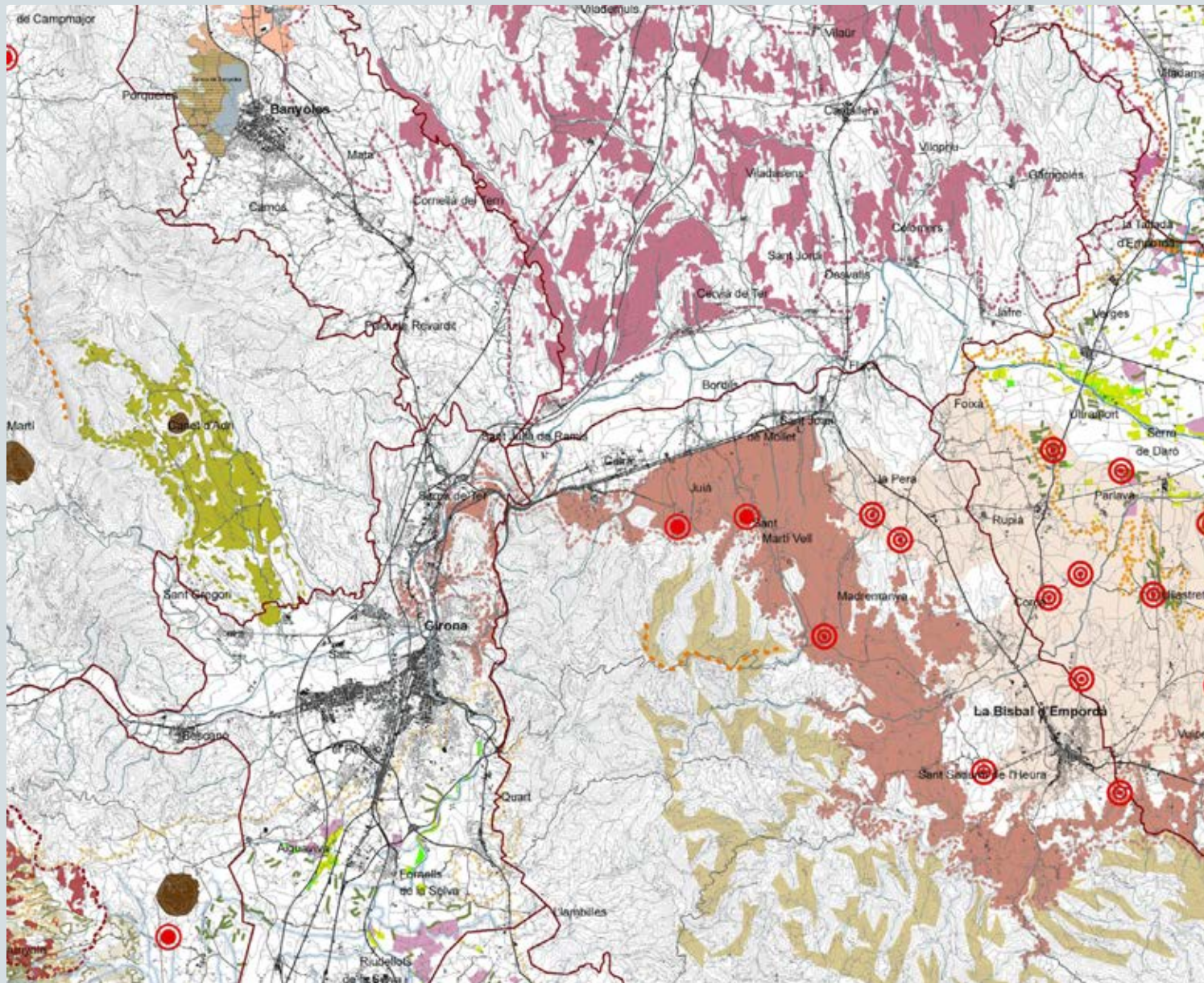
Unique nuclei (Landscape Catalogue of the Comarques Centrals)

In the context of the Comarques Centrals, we would highlight many unique nuclei that become landscape milestones and key elements in shaping the scenic backdrop; which are apart from the settlement patterns defined in other sections. The uniqueness of these other nuclei of a unique physiognomy belongs to their morphology, the structure of the urban centre and the integration with their surrounding environment, whether agricultural or forestry. We would particularly mention the nuclei of Bagà, Capellades, L'Estany, La Pobla de Lillet, Mura, Cardona, Calders, Sant Llorenç de Morunys, Viladrau, Rupit, Tavertet, Gósol, Castellar de n'Hug, Bellprat, Espinelves, Sant Julià de Cerdanyola, Tavèrnoles, Sant Jaume de Frontanyà and Vidrà.

We would also like to point out other nuclei that make up a different unique group because of their larger size, and particularly, because of the value or distinction of their historic centres. These are Calaf, Berga, Igualada, Manlleu, Manresa, Santpedor, Sallent, Solsona, Tona, Moià, Vic and Torelló.


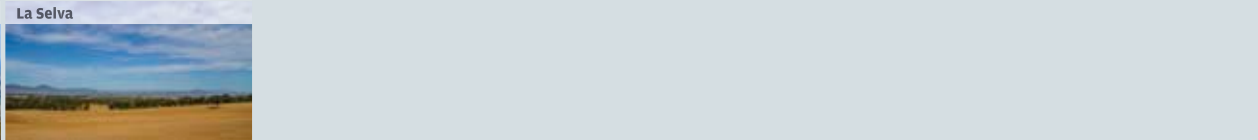

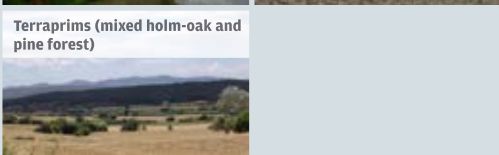
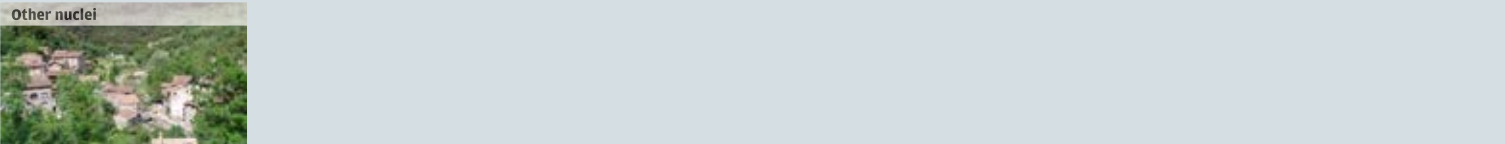


Picture 34. The set that makes up the nucleus of Cardona and the castle of the same name is one of the main urban milestones of the Comarques Centrals.



Map 12. Fragment of the map of aesthetic values, unique features of the Landscape Catalogue of the Comarques Gironines.

Mosaic of images of the elements that make up part of the map of aesthetic values, singularities of the Landscape Catalogue of the Comarques Gironines.

Emblematic scenic backdrop							
Visual image of the plains	Empordanet - Baix Ter	Alt Empordà					
Geomorphological structure	Granite formation of the Ardenya	Medes Isles	Dune	Formigues Isles	Network of hills on the Empordanet	Cap de Creus Coast	Profile of Montgrí
	Crest of Les Gavarres	Crag and cliff	Volcano	Sadernes Canyon	Escalaes Canyon	Delta of the Tordera	Montgrí Coast
	Begur Coast	Banyoles lake system	Núria Valley	Relief undulation on Plana de la Selva			
Agricultural	La Rovina and Closa de la Vila pieces	Ter Vell Meadows	Martís Plain	Banyoles Lake	Santa Coloma stream	Pals rice fields	En Bas and Bianya valleys
Agroforestry	Aspres (vines and dry land fruit trees)	Terrades (dry land fruit trees)	Gavarres (dry land crops)	Brunyola (hazelnut trees)	Canet d'Adri Plain (dry land crops)		
Unique physiognomy	Nucleus perched on a hill						

EXAMPLES OF HISTORIC VALUES⁹

Livestock trails (Landscape Catalogue of the Alt Pirineu i Aran)

Livestock trails outline an arterial system distanced from today's communication routes along valley bottoms, as they journey across the highest features and follow contours, avoiding the uneven characteristics of hillsides. As such, the main livestock routes in the study describe itineraries from the south to the north with small cross-connections that serve as key points. The confluence of paths in the north of La Pobla de Segur is noteworthy, these are used to redistribute flocks to the westernmost area: La Pobleta de Bellvéi, Senterada, Espui, etc., controlling the path of the main livestock trails between the left bank of the Noguera Rib-

agorçana and the right bank of the Noguera Pallaresa. Between the left bank of the Noguera Pallaresa and the Segre River, another main livestock trail connects La Conca de Tremp with the higher parts of the Noguera de Cardó Valley and the Noguera de Vallferrera Valley. Further east, the Cadí area was also crossed by a main route for livestock transport which, following the ridge of the Cadí, ran from west to east, aided by the orientation of the mountain itself. On the right bank of the Segre River there was a main route that crossed the Segre River at Martinet in the direction of the border crossings of Andorra, to the north of Lles de Cerdanya.



Picture 35. Landscape of the transhumance in La Terreta.

Tree-lined accesses to town centres and tree-lined boulevards (Landscape Catalogue of the Comarques Gironines)

Since its origins in the 19th century, avenues at the entrances to towns and cities have been considered to be an important heritage element, due to the numerous benefits they have provided local townsfolk, such as creating shade for travellers, acting as a guide in the night, or in fog, protecting travellers from inclement weather or consolidating road networks. The trees themselves have also been used for forestry purposes and for the planning of new avenues and boulevards used for leisure purposes. These tree-lined roads sometimes perform an important ecological task, as they act as a link between green urban areas and the natural areas around them. Another of the characteristics that defines these historical rows of trees is that since their origin, they have become the guidelines for new urban growth and they have accompanied the main lines of town centre planning, to become green arteries that frame the landscape, highlighting points of interest and

defining and announcing the entry to urban centres. In the Comarques Gironines during the 19th century, numerous examples of cities with tree-lined entry roads and avenues are to be found, such as Girona, Figueres, Olot, Camprodon and Hostalric. Despite the landscape heritage that they currently possess, in recent years many tree-lined roads have disappeared from the Comarques Gironines, due to changes in aesthetic values or for safety reasons. Despite this steady disappearance, the Comarques Gironines still offer fine examples of this legacy, such as the avenues at the entrances to Orfes, Fontanilles, to the north of Ripoll, Maçanet de Cabrenys, Garriguella, to the south of La Bisbal, to the north of Banyoles, to the south of Ribes de Freser, to the north and east of Castelló d'Empúries, in Arbúcies, Sant Hilari Sacalm, and to the east of Girona, among others.



Picture 36. Tree-lined entrance to the village of Orfes.

9. Texts extracted from the landscape catalogues.

The historical landscape of cork (Landscape Catalogue of the Comarques Gironines)

The cork industry began on the Costa Brava in the middle of the 18th century and was of significant importance during the 19th century and the early 20th century. Its high point was reached between 1880 and 1910, a period known as “the Golden Age of the Cork Stopper Makers”. In this period, cork oaks had become the main source of wealth for small coastal towns such as Lloret de Mar and Tossa de Mar, which stand at the foot of the granite massif of the Ardenya. The devel-

opment of the cork industry was responsible for the transformation of many cork oak forests and mixed forests for cork used in the manufacture of cork stoppers for the wine sector. Cork oak forests are found on the granite mountains of the coast and pre-coastal areas: Ardenya, Les Gavarres, the mountains of Begur, on the slopes of the Baix Montseny and the Guilleries around Santa Coloma, and the granite area of the Alt Empordà between Darnius and Requesens.



Picture 37. From the 18th century onwards and, particularly in the 19th century, the cork oak forests spread due to the demand for cork stoppers for the wine-producing industry (Alt Empordà).

Defensive towers (Landscape Catalogue of the Terres de l'Ebre)

Defensive towers are a highly important feature in the Terres de l'Ebre region, especially in the lower reaches of the Ebre, from the Xerta weir onwards, and along the coastline, as well as on some hill ranges, such as the Montsià. Their task was to act as watchtowers, from which to warn of the presence of enemies, whose provenance depended on the historical era. The coastal towers proliferated between the 15th and 17th centuries, in order to prevent pirate attacks, which were highly frequent during this period. The Paisatge fluvial de l'Ebre landscape unit boasts a total of eighteen towers, among which is the Tower of La Carrova,

which stands beside the C-12 (Ebre axis) road between Tortosa and Amposta. It is the most prominent tower on the Ebre, and was constructed on the rock, near the remains of an ancient Roman villa. On the coastline of the Baix Ebre and the Delta de l'Ebre, there are a total of eleven towers, which include the castle-tower of Sant Jordi d'Alfama, which was built in the 13th century and rebuilt in the 18th century. On the hill ranges of Montsià-Godall, especially on the hillsides facing the coast of the Montsià range, a total of ten defensive towers have been identified. Three have been identified on the slopes of Tivenys-Coll de l'Alba.



Picture 38. The Tower of La Carrova, which stands beside the C-12 (Ebre road) between Tortosa and Amposta, is the most emblematic tower of the Ebre.

Unique Gardens (Landscape Catalogue of the Regió Metropolitana de Barcelona)

The urban landscape of historical town centres features both public and private green areas of significant value that are associated with old palaces and summer residences. These areas constitute recreations of landscapes that were created to suit the tastes and manners of the wealthy classes of the 19th and early 20th centuries.

Some of the most important gardens of this type are the Gardens of the University of Barcelona (Barcelona), Parc Güell (Barcelona), Parc de Ca l'Arnús (Badalona), Parc de Torreblanca (Sant Feliu de Llobregat-Sant Joan Despí-Sant Just Desvern), Parc de Terramar (Sitges) and the Gardens of Can Rius (Caldes de Montbui).



Picture 39. The Parc de Ca l'Arnús, in Badalona, houses a garden of great aesthetic and historic value.

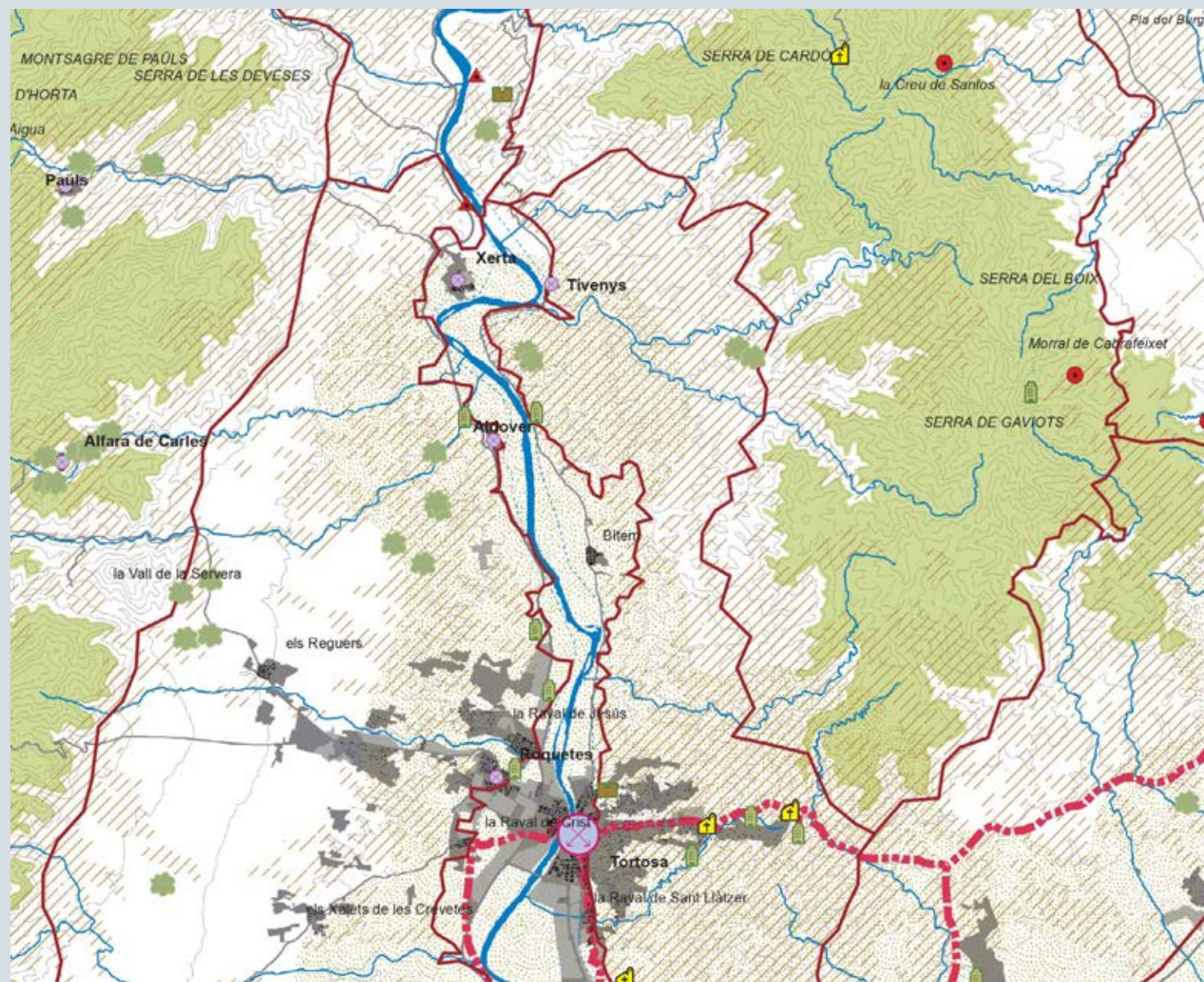
Area with a large number of farmhouses (*masies*) (Landscape Catalogue of the Comarques Centrals)

Traditional Catalan farmhouses (*masies*) are isolated constructions with a presence rooted in the areas where they are located and which were constructed with a profound transformation of the surrounding area. The physical appearance of the natural vegetation and agricultural techniques that characterise these scenes cannot be understood without the presence of these features. They are an important presence because they are features that are located in a precise manner, in accordance with topography and views. These characteristics confer these buildings and the scenes

around them with a significant historical value. The areas where these isolated constructions predominate are El Pla de Bages and La Conca d'Òdena, apart from the area around Igualada, and the areas of Montserrat, Sant Llorenç del Munt i L'Obac-El Cairat and the south of Rubió-Castellat-Pinós – as well as the entire central zone of the area, beginning with Cabrerès-Puigsacalm, including the area dedicated solely to farming of Plana de Vic, and from Lluçanès, the north of Moianès, Replans del Berguedà and Replans del Solsonès, to the south of the Ribera Salada.



Picture 40. The farmhouses (*masies*) are isolated constructions found in most of the landscapes of the Comarques Centrals.



Scenes from the historic memory

- The Battle of the Ebre

Architectural heritage in the urban centre

- Up to 24 features
- Between 25 and 66 features
- More than 66 features

Architectural heritage in the rural area

- Castle
- Watchtower and defence tower
- Religious building
- Abundance of defence towers

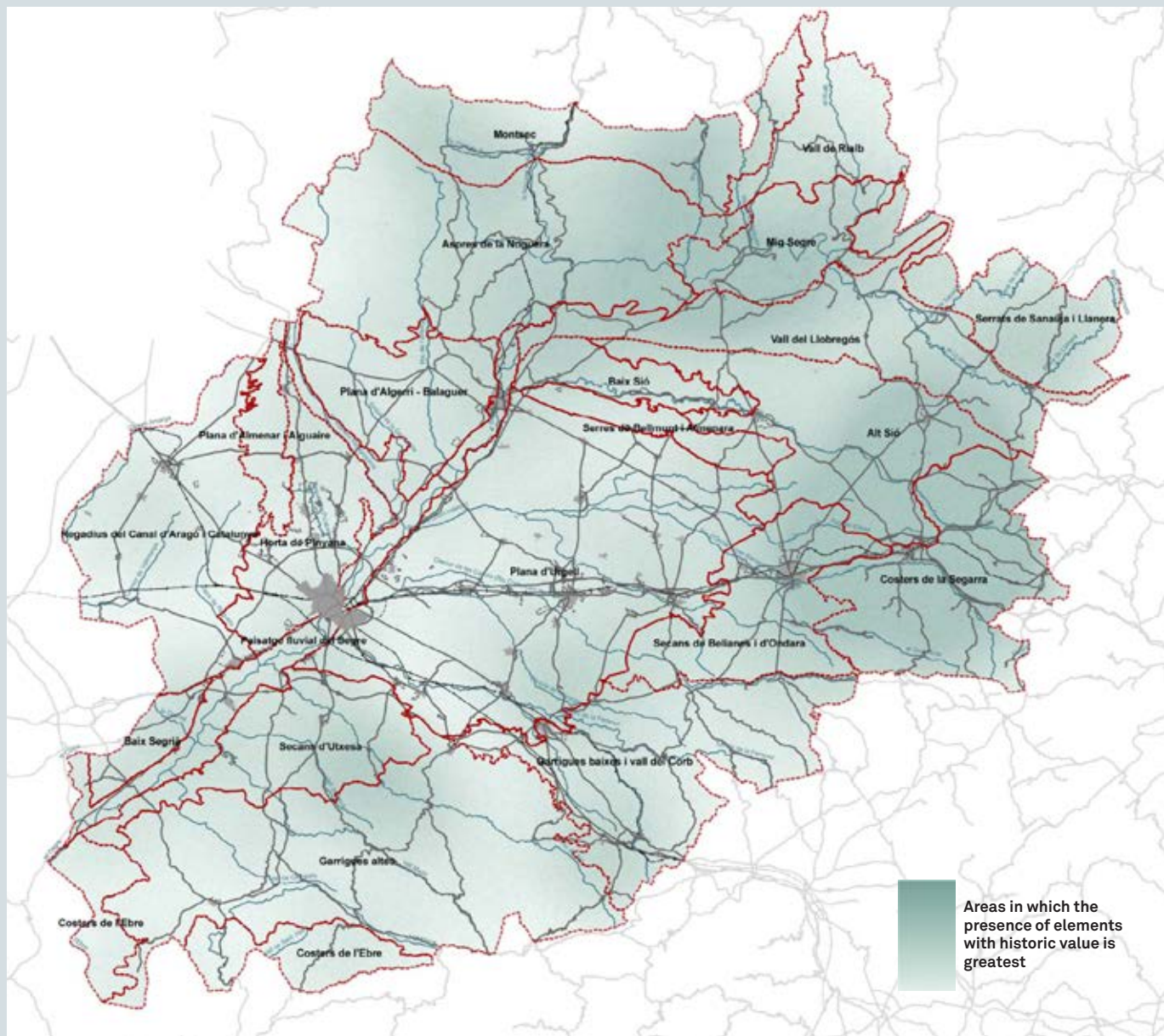
Archaeological heritage

- UNESCO World Heritage
- Archaeological site
- Via Augusta

Rural historic heritage

- Monumental olive trees
- Dry stone wall terracing
- Summer pastures
- Winter pastures

Map 13. Fragment of the map of historic values of the Landscape Catalogue of the Terres de l'Ebre.



Map 14. Map of historic values of the Landscape Catalogue of the Terres de Lleida. This map indicates the areas in which the presence of elements with historic value is greatest.

EXAMPLES OF VALUES OF SOCIAL USE¹⁰

Vegetable gardens (Landscape Catalogue of the Comarques Gironines)

One value of social use, which is especially relevant in cities, are vegetable gardens. These are structures of land divided into plots of vegetable crops that are normally associated with peri-urban areas, although there are also urban gardens that contribute to the formation of an image of quality adapted to local identity and which may provide social benefits of various sorts. In recent years, numerous pilot schemes for the management of existing vegetable gardens have been promoted, and projects for the creation of new vegetable gardens for social and leisure purposes have been undertaken. The most exemplary case in the Comarques Gironines being the gardens of Salt and Santa Eugènia (Girona). Vegetable plots also have a widely-recognised aesthetic appeal that lends character and singularity to the areas and towns where they are located. Noteworthy gardens are those of Salt, Girona, Bescanó, Anglès, Amer, Les Planes d'Hostoles, Olot, Castellfollit de la Roca, Ripoll, Sant Jaume de Llierca, Llançà, Besalú, Vilabertran, Figueres, Cabanes, Peralada, Castelló d'Empúries, Ullà, Torroella de Montgrí, Bisbal d'Empordà, Sant Feliu de Guíxols, Llagostera and Santa Coloma de Farners.



Picture 41. The allotments of Salt and Santa Eugènia, in Girona.

Tree-lined canal paths (Landscape Catalogue of the Terres de Lleida)

The functional paths on the banks of canals are areas for recreation, walking and social interaction for the local population. The trend in recent years, to re-clad the canal structures has caused the disappearance of these landscapes, with their important social interest and the loss of the trees that line these canals.



Picture 42. Séquia Tercera of the Urgell Canal on the outskirts of Mollerusa, with a row of plane trees on the bench terrace.

Coastal landscapes (Landscape Catalogue of the Camp de Tarragona)

Coastal landscapes, despite the high level of artificiality they have suffered, are still today areas with an immense capacity for attracting tourists. Seafront promenades, be they hard or soft, and especially the few natural areas left near the sea, are areas that are highly popular for enjoying activities such as walking, sport, or simply enjoying the view. The busiest coastal landscapes are those nearest to town centres.



Picture 43. The maritime promenades have great social use value.

10. Texts extracted from the landscape catalogues.

Social gatherings and traditional fairs (Landscape Catalogue of the Alt Pirineu i Aran)

An important value of social use that is noteworthy are social gatherings that are held throughout the country and which are linked to shrines and churches with a significant historical value and which are most often found on mountains and hills near towns, a fact that confirms the relationship between towns and their surroundings. Notable social gatherings are those of Montgarri, Sant Joan de Toran, La Mare de Diu d'era Artiga de Lin, Santa Maria d'Arbolò, La Mare de Déu de la Muntanya, La Mare de Déu de Buiro in Ainet de Besan, La Mare de Déu del Soler in Sort, La Mare de Déu de Biuse in Llavorsí, La Mare de Déu d'Esplà in Gerri de la Sal, La Mare de Déu de Boscallt in Ansovell,

La Mare de Déu de la Trobada in Montferrer, La Mare de Déu de Les Peces d'Alàs, Santa Maria de Talló in Bellver de Cerdanya, Sant Marc in Puigcerdà and Sant Salvador del Bosc in Llimiana, among many others that have also been mapped. All of them form part of the wide range of traditional festivals of municipalities and their inhabitants which include, the torch procession, *Les baixades de falles*, in Pallars and Ribagorça, the *Era crema deth Haro* festival in the town of Les, the Catalan sheepdog contest in Pallars or others of a more gastronomic nature, such as the mushroom festival, *El Cep* in Vilaller or that of *El Trinxat* in Puigcerdà.



Picture 44. The festival in Vilaller is one of the many that are held in the villages of Alta Ribagorça and El Pallars and that attract more and more people.

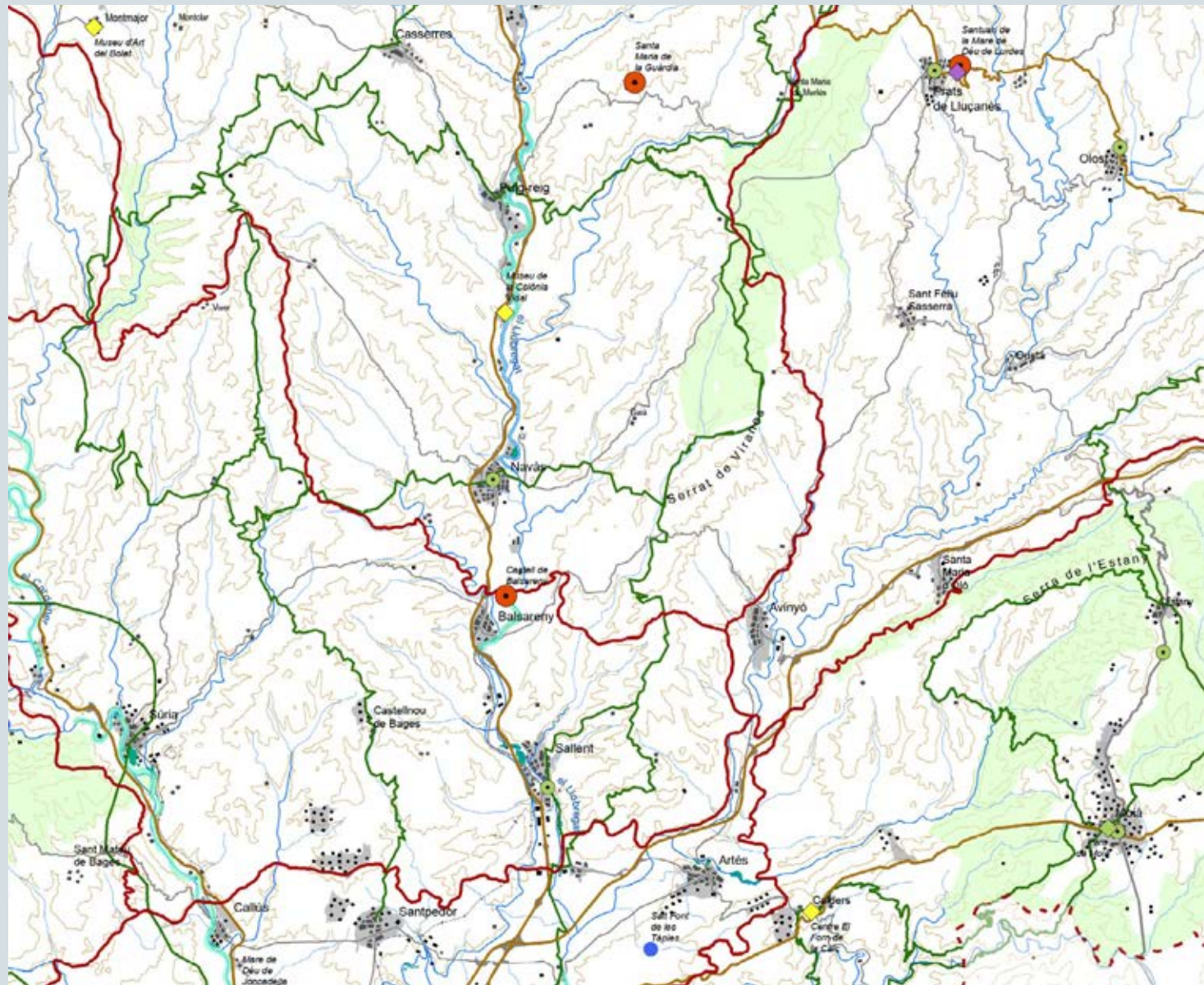
Streets and squares (Landscape Catalogue of the Comarques Centrals)

Public spaces, by being excellent places for meeting up with people and places in which something is always happening, are the settings in which socialisation and interaction processes between citizens take on the greatest intensity. The character of these processes means that the public spaces have a value of social use. The historic value of the types of buildings, the colour of the walls or the quality of the streets and squares are some of the aspects that can transform the urban space into a setting able to host diverse events.

At a territorial level, some streets and squares have a value of social use because they are also meeting places as periodically markets and trade fairs are held in them. For example, weekly markets are held in the following squares: Plaça Major, Plaça del Bisbe and Plaça de la Catedral in Solsona, in the Plaça Viladomat and in the Passeig de la Indústria in Berga as well as the Plaça Major in Vic. In the case of trade fairs, in addition to the previously mentioned spaces, we would also mention the Plaça del Mercadal in Cardona, the Passeig Pere III in Manresa and El Barri del Rec in Igualada.



Picture 45. The streets of the Barri del Rec in Igualada are home to several trade fairs, some of which are linked to the textile and leather tanning industry that historically characterised the district.



Itineraries and viewpoints

- Overall motorised itinerary
- Overall non-motorised itinerary
- Priority consolidation viewpoint
- Waterfall
- Reservoir
- Inland fishing area
- Open space of natural interest (PEIN)
- Urban allotment
- Entrance and tree-lined passage
- ◆ Park, garden and leisure time area
- ◆ Ski resort
- ◆ Chapel in which traditional get-togethers and parades are held
- ◆ Trade fair and market
- ◆ Museum

Map 15. Fragment of the map of social use values of the Landscape Catalogue of the Comarques Centrals.

Quiet valleys (Landscape Catalogue of the Alt Pirineu i Aran)

The Alt Pirineu i Aran area are also identified as an especially quiet place; different points may be considered as quiet valleys, as they are separate from important traffic routes, either because they are in “dead end” areas or in interfluvial areas. They are valleys with a stable population, but with a few people and with small town centres that are largely untransformed, in which it is relatively easy to feel distanced from the city noise. Alt Pallars, some points of the Baisha Val d’Aran, the interfluvial areas of the Segre-Noguera Pallaresa and between the latter and the Noguera Ribagorçana, in addition to some points on the left bank of the Segre basin contain some of the quietest valleys in the entire Alt Pirineu i Aran area.



Picture 46. The aesthetic of the landscape of the Vall Ferrera is pleasant for enjoying a place where, for a long time now, it has been possible to listen to the silence of the valley, as pointed out on some of the noticeboards of Alins Town Council.

Border passes (Landscape Catalogue of the Comarques Gironines)

The borderland zone of the Comarques Gironines, that lies between Spain and France, has seen the accumulation of symbolic values related to the exile which thousands of Catalans and Republicans were forced to suffer as a result of the Civil War. Currently, the great significance attributed to these cols and natural passes of the Pyrenees is still valued as landscapes of a memory that should be extended to the population of the Comarques Gironines and of Catalonia in general. Some examples are the cols of: Belitres, Banyuls, El Pertús, Manrella, Pous, Hostal de la Muga and Ares.



Picture 47. Portbou and the cross-border Belitres Col.

Scenes from historical memory (Landscape Catalogue of the Terres de l’Ebre)

Scenes from historical memory that have a symbolic and identity-giving value for the entire Terres de l’Ebre region are those areas where the Battle of the Ebre took place. The memories of those who experienced this event have been brought to the present day and the entire population of the Ebre region identifies these areas with the harsh and bloody months of the greatest battle of the Spanish Civil War. The outcome and the consequences of the conflict marked the whole population. The most symbolic area is the old town of Corbera d’Ebre, which was destroyed by the bombs of Francoist air force.



Picture 48. The old village of Corbera d’Ebre is one of the most significant places of the Battle of the Ebre.

11. Texts extracted from the landscape catalogues.

Miró Landscapes (Landscape Catalogue of the Camp de Tarragona)

A specific landscape that holds a high symbolic value, especially for the town of Mont-roig del Camp, are the Miró landscapes. The artist Joan Miró spent long periods at Mont-roig del Camp, where he had a farmhouse, Mas Miró, where it is said that the painter worked on the inspiration that other landscapes did not give him. During his stays he painted several pictures that show the farming landscapes around this town in the Baix Camp region.



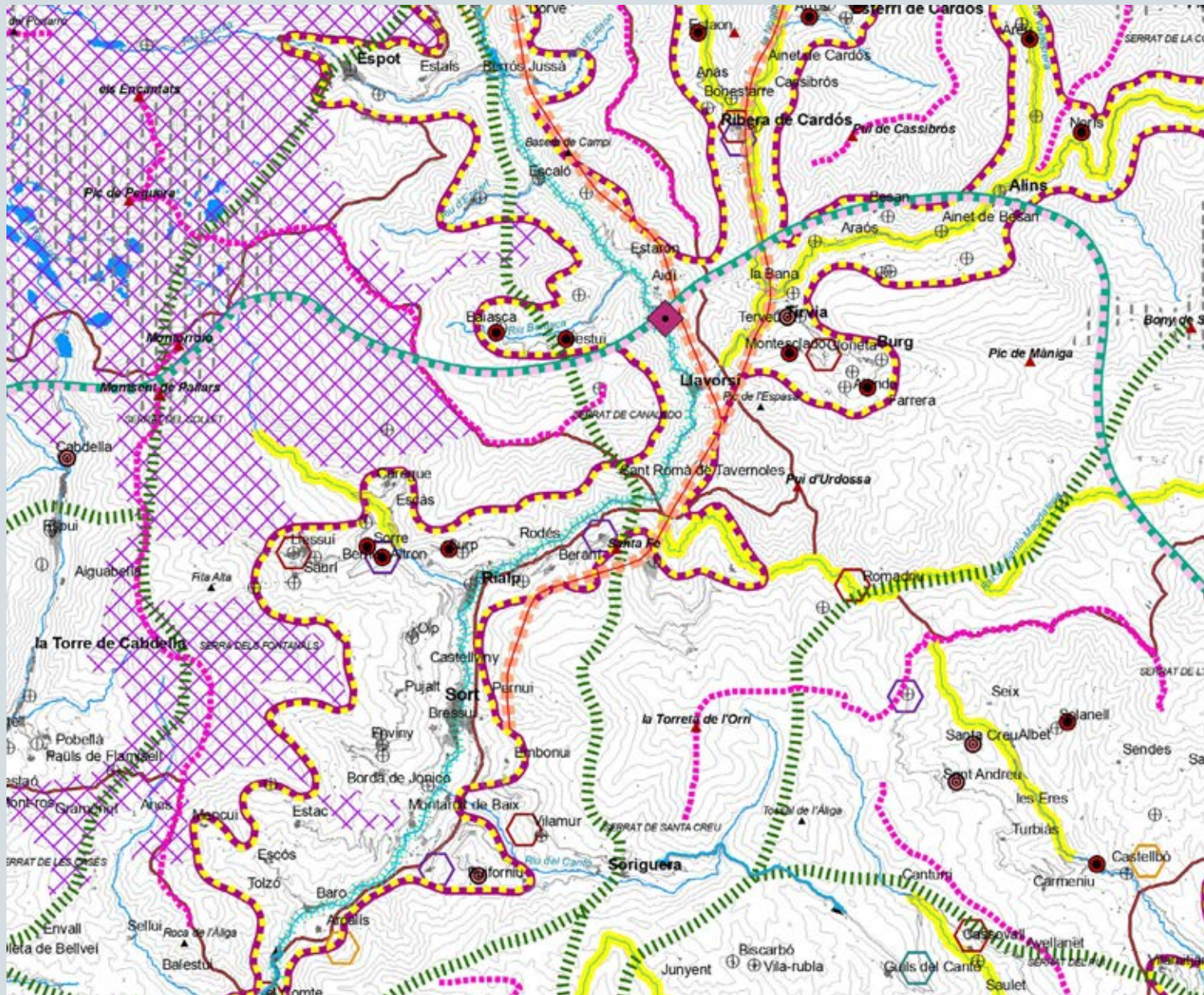
Picture 49. Miró farmhouse (*masia*) in Mont-roig del Camp is part of the landscapes of Miró.

Geomorphological formations and topographical profiles (Landscape Catalogue of the Terres de Lleida)

One of the elements that takes on a symbolic-identity-giving value for the inhabitants of the Terres de Lleida is that of the geomorphological formations and the topographical profiles that mark specific features and the scenic backdrops on which identification with a place is reflected. The area offers several highly valued topographical profiles in this sense. The hill of Montmeneu is a good example; its conical form and striking height, with respect to nearby scenery, makes it an essential reference point for many people in the area of the Baix Segrià and Les Garrigues. In the same manner, the entire hill range of the Montsec mountain range is also noteworthy, this feature can be seen from almost everywhere in Les Terres de Lleida, the same applies to the gorge of Mont-rebei, which has taken on an identity value in the Noguera region, as well as the land further to the south, due to its spectacular beauty.



Picture 50. Topographic profile of El Montsec.



- Symbolic natural elements**
 - ▲ Reference peak
 - ⋯ Emblematic scenic backdrop
 - ⋯ Foehn wind
 - ⋯ Blizzard
- Current symbol areas**
 - Calm Pyrenean valley
 - ⊗ Aiguestortes and Estany de Sant Maurici National Park
 - ▨ World Heritage (Vall de Boi)
 - ▨ Val d'Aran
- Symbolic communicating roads**
 - Inland Pyrenean pass
 - Border pass
 - Entrance to the Pyrenees
 - Livestock path (driveway)
 - Historic wood transport river (raft)
- Religious symbolic area**
 - ⊕ Chapel, church
 - ◇ Urgell Bishopric
- Urban centres**
 - Notable bell tower
 - Nucleus perched on a hill
- Histories and legends**
 - ⬡ Witches
 - ⬡ Mythological and fantastic beings
 - ⬡ Stories of soldiers
 - ⬡ Moors
 - ⬡ *Minairó* scree (tiny mythological being)
 - ⬡ Fire festivals
 - ⬡ Area of the Peïrot Songbook
- Traditional gastronomy**
 - Traditional gastronomy area
 - ◆ Cheese
 - ◆ Girella (type of haggis)
 - ◆ *Olha Aranesa* (traditional soup)
 - ◆ Potatoes from Figols
 - ◆ *Trinxat* de la Cerdanya (chopped cabbage, potato, belly of pork)
 - ◆ *Xolis* (cured sausage)

Map 16. Fragments of the map of symbolic values of the Landscape Catalogue of the Alt Pirineu i Aran.

EXAMPLES OF PRODUCTIVE VALUES¹²

Certificates of food origin and quality (Landscape Catalogue of the Comarques Gironines)

In Comarques Gironines there are products that bear seals of quality that are institutionally and socially recognised for their quality and tradition which are associated with determined characteristic landscapes. Among the most representative products is the Empordà Denomination of Origin (DO), which in recent years has attained a high productive value and which is associated with the vineyard landscapes of the Empordà region, mainly the areas of Peralada, Els Aspres, Cap de Creus and Calonge. The Protected Denomination of Origin certificate (PDO) Oil of the Empordà covers three areas where olive growing predominates. Two Protected Geographical Indications (PGI) also exist: Girona apples, which includes all the apple orch-

ards of the Alt Empordà and the coastal municipalities of the Baix Empordà, in addition to the PGI Beef of the Catalan Pyrenees, which are located in the Ripollès, Garrotxa and Alt Empordà regions, with respect to the area of Girona. Also noteworthy is the “Producte del Ripollès” brand guarantee, which includes several food products from this region. Other products also exist that are well known and widely appreciated by the people of Girona and by Catalans in general, due to their history and gastronomic renown, and which are associated with determined landscapes. Among them the haricot beans (fesols) of Santa Pau, the prawns of Palamós, anchovies from L’Escala, or the rice of Pals.



Picture 51. Vine crops that come under the DO Empordà.

The Delta de l’Ebre (Landscape Catalogue of the Terres de l’Ebre)

The landscape of the delta, from the beaches and the sea to the marshes and the agricultural area, has a highly important productive character. The fact that it is an area so characteristic at a national level in terms of all the values that it holds, has meant that it has a high level of affluence with respect to tourism, especially in recent years. Its products are associated with elements or activities more specific to the area of the delta,

such as the beaches, ornithology, hunting or fishing. Furthermore, in recent years, products from the area have been designed and marketed that are closely linked to rice production; either ecological products or those of integrated production, which are linked to the Protected Denomination of Origin certificate for rice from the Ebre Delta.



Picture 52. The landscape of the delta has a highly important productive character.

Snow tourism (Landscape Catalogue of the Alt Pirineu i Aran)

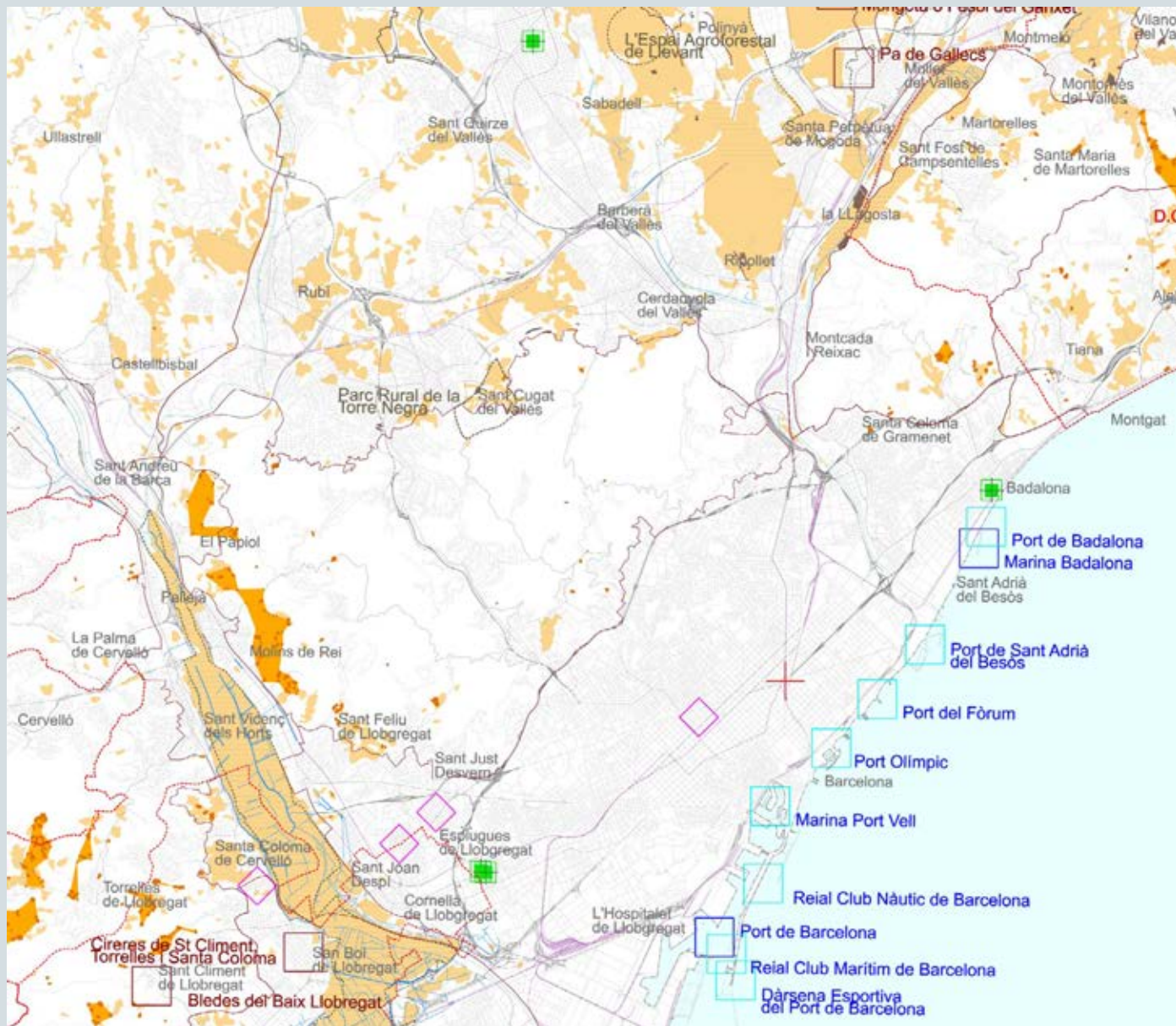
Finally, mention must be made of the productive values of the landscape of the Alt Pirineu i Aran that are associated with tourism and which are highly important for the Pyrenean economy. Ski resorts are worthy of note in this respect; as an economic sector they represent one of the highest GDP providers in the Alt Pirineu i Aran area, especially in the ski areas

of Baquèira-Beret, Boí-Taüll, La Molina-Masella and Port del Comte, although much less in those areas where cross-country skiing takes place, such as Lles or Sant Joan de l’Erm. These areas feature numerous hotel infrastructures and a range of additional services that focus on this economic activity.



Picture 53. The Plan de Beret is part of the skiable domain of Baquèira-Beret ski resort.

12. Texts extracted from the landscape catalogues.



Agricultural character

- Areas of special agronomic interest
 - Recognised by a legal document (Agrarian parks, PE, POUM, etc.)
 - Recognised without legal protection
 - Agronomic value
- Distinctions of origin and agricultural and food quality
 - Recognitions (DO, IDG, DOP)
 - Other quality products
- Elements associated to the productive capacity of the land
 - Rural agriculture dry stone terraces linked to productive use
 - Sluices and irrigation canals
 - Elements of a rural nature (BCIN)

Forest character

- Plantations of poplar trees and plane trees
- Forest

Tourist character

- Ports
 - Main recreational ports
 - Main general ports
 - Main industrial ports
- Tourist destinations
 - Traditional tourist destinations
 - Modernist routes
- Tourist itineraries
 - Wine and cava routes:
 - The plain routes
 - The castle routes
 - El Foix route
 - El Bittles route
 - Livestock parts (official)

Map 17. Fragment of the map of productive values of the Landscape Catalogue of the Regió Metropolitana de Barcelona.

4.2. Artistic expression of the landscape

In the entire process of landscape characterisation, one of the most significant processes is the identification of values, which is dealt with extensively in Section 4.1. One way of identifying those landscape values of a more cultural and perceptive nature (such as aesthetic, symbolic or spiritual aspects) and therefore, to a more subjective evaluation is the exploration of the place's artistic legacy. The explanation lies in the fact that one of the basic manners in which to transform the gaze and the creation of the most outstanding imagination landscapes throughout history has been through artistic perception, the interpretation that artists themselves make of the landscape.

Thus, writers, artists, sculptors, musicians or filmmakers have transmitted landscapes in their works with aesthetic and symbolic attributes and, these landscapes have often themselves been creative driving forces. Even pictorial realism, literary realism, neorealism in the cinema or realist photography do not reflect the land as it is, they interpret it and therefore create a landscape. This constant creation of landscape, created by artistic expressions, may reach the point where it transforms the land itself. This is the case when determined implementations are made, in Land Art, for example and it also occurs to some extent, when determined sites are visited frequently by tourists; visits that are based, not so much on the land being visited, but on the connotative look projected (as transmitted by literary works, films, etc.).

Sometimes it is life that imitates art and not the contrary, and this idea, which still holds true, refers to the link created between art and perception.

The relationship between art and the landscape

Art reveals the underlying glimpse of our culture on to observed reality and it acts as a privileged link that closely connects the individual and his land. The cultural manipulation to which nature has historically been subjected, while becoming a landscape in this way, continues influencing our aesthetic preferences of determined places more or less directly, as well as in the art of contemplation itself. Art, on lending privilege to spaces and determined points of view and ignoring others at the same time, contributes to the formation of mental stereotypes about places and about ways of selecting that which is outstanding in a determined landscape and forgetting about the rest.

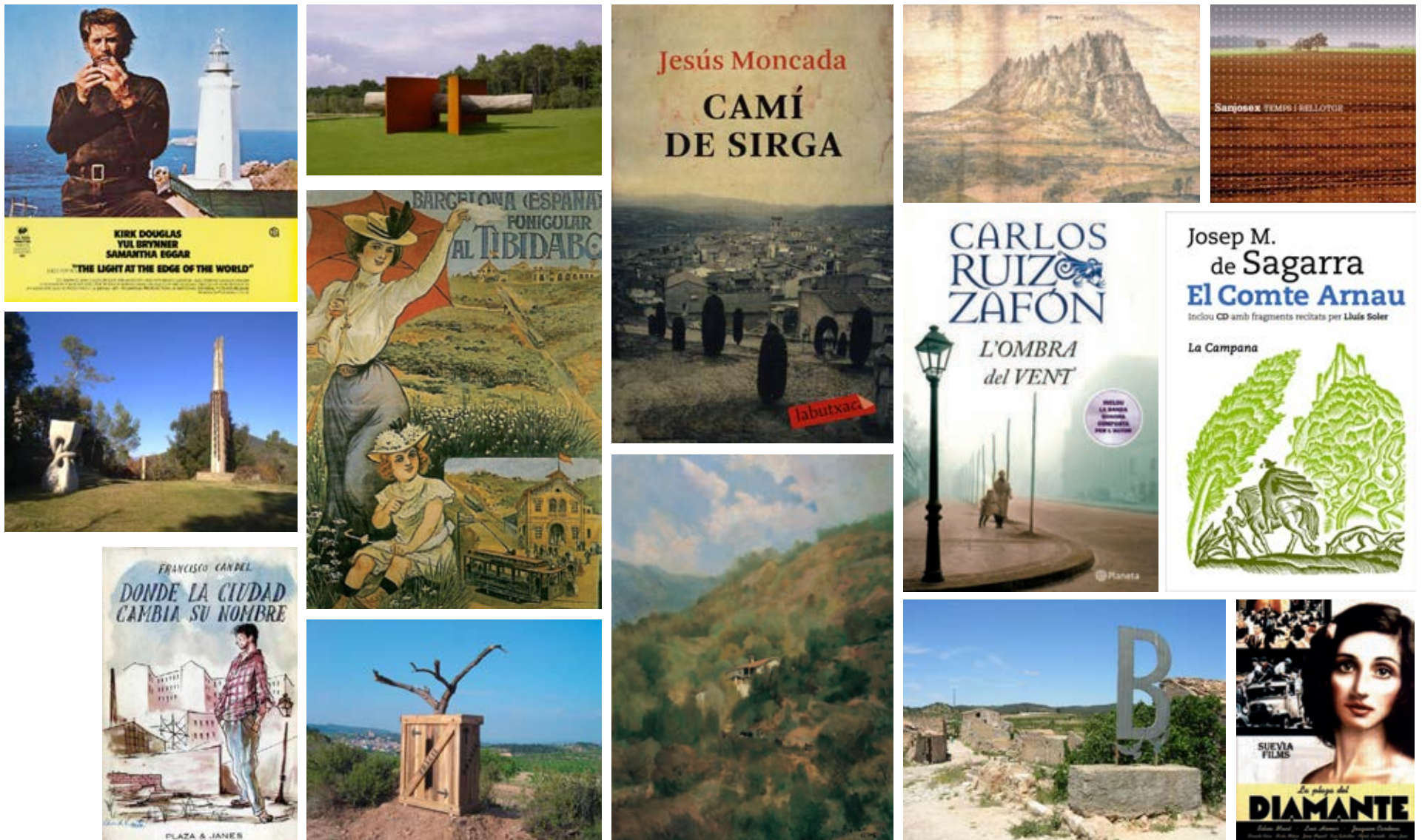
Even though the artistic representation of the landscape dates back to earlier times, the phenomenon of landscape painting in Catalonia is a relatively new one, in which the painter Ramon Maria Alsina (1826-1894) and the Olot School are two of the main references. Mountain landscapes are considered in the tradition of landscape studies as the first landscapes that were viewed as such during the Romantic Movement of the 19th century. Agricultural landscapes and by extension, rural landscapes, are especially noteworthy in first third of the 20th century, coinciding with the Noucentista Movement in the case of Catalonia. Urban landscapes, especially when explained with respect to the city of Barcelona, emerged with strength from the end of the eighteen hundreds, however they became established during the 20th century, with a notable impact on the second half of the century.

The method used in landscape catalogues is therefore based on the study of artistic production (paintings, engravings, texts, songs, films, land art, etc.) and it stems from the idea that these and other representations of the landscape allow us to understand the relationships that exist between society —or a part of it— and the landscape at a determined historical moment, and its influence on the collective imagination. For documentary purposes, a chapter on artistic expression is included for the entire area of each catalogue, as well as a specific chapter for each landscape unit.

The main characteristics of the analysis of artistic expression are as follows:

- **The prioritisation of the most significant artistic manifestations of each place.** Catalonia has been the subject of many artistic endeavours for centuries, a fact that requires a superficial and generalised revision to be made, but one that avoids the exclusion of notable creative figures. It also seeks to ensure that the works selected communicate the fundamental characteristics of the landscape and the territorial references that are indisputable. The references for each landscape unit include an extensive registry of artists and greater detail than in the general volume.
- **A selection of samples from numerous artistic works.** This is a varied selection of paintings, engravings and lithographs, postcards, travellers' stories, travel guides, holiday posters, literary texts, photographs, musical genres, land art and other artistic expressions that form intangible landscape values.
- **Interpretation with a view to landscape,** in order to analyse how various artistic expressions have placed certain landscapes “on the map”, such as those represented over the years, landscapes that have influenced artistic expression and those that have influenced the imagination and the gaze of the population.

Picture 54. The variety of artistic statements identified can be found in the compilation of images linked to the artistic expression of the Comarques Gironines, the Terres de l'Ebre and the Regió Metropolitana de Barcelona Catalogues. Writers, sculptors, painters, filmmakers, and so on have transmitted landscapes with aesthetic and symbolic attributes in their works.



Oral and written literature

Emili Rosales explains the role of the Ebre landscape in Catalan literature with this statement: “The landscape of the Ebre has been invisible to the modern Catalan imagination, it has not formed a part of the mythological landscape of Catalan culture over the last century and a half, which, after the Catalan Renaissance, re-founded Catalan identity. This mental landscape has had two main references: on the one hand, the Pyrenees, especially in the 19th century due to the writings of the most representative author of the re-birth of Catalan literature, Jacint Verdaguer, and on the other hand, the Empordà, the raw material of the most influential Catalan writer of the 20th century, Josep Pla. [...] The landscape of the Ebre, the Terres de l'Ebre, therefore were left without an artistic representation that gave it a cultural value, an added value, it has remained invisible for decades in the Catalan collective consciousness. As it is culture that awards value to the landscape, which models the landscape and not vice versa, a landscape with cultural value has a protection lacking in a non-culturalised landscape. And here lies the fragility of the Ebre landscape; despite the evidence of the value of the Ebre delta in ecological terms, this value was not assimilated by Catalan society as a whole” (Rosales, 2008: page 149-150).

Therefore, the Ebre landscapes are one of the great unknowns in Catalan literary culture. However, in the words of Emili Rosales herself: “[...] there has obviously existed a culture that recreates or which begins from the landscape of the Ebre, although its impact on Catalan society as a whole has not been intense enough or perhaps insistent enough” (Rosales, 2008: page 150). The landscapes of the Ebre have inspired literary fragments or entire works by numerous authors. The most recognised, both inside and outside the area of the

Ebre are: Sebastià Juan Arbó (Sant Carles de la Ràpita 1902 — Barcelona 1984), Artur Bladé i Desumvila (Benissanet 1907 — Barcelona 1995), and Jesús Moncada (Mequinensa 1941 — Barcelona 2005).

On the other hand, the landscape of the Terres de l'Ebre is also present in numerous songs; both traditional and contemporary. In the Terres de l'Ebre, especially in the Baix Ebre and Montsià, improvised jota songs are characteristic, with singers accompanied by a group (known as a *rondalla*) with string and wind instruments. The *rondalla* plays in the background with a jota of a fixed melody and a repetitive rhythm, which ends when the singer raises their hand, which is the sign that they have improvised a verse. Between one verse and another, the *rondalla* takes up the jota melody. The topics of the improvised songs, which were studied by Pere Poy reflect the existence of a narrative canon from the Ebre and its relationship with the landscape: “[...] it is a canon that highlights coincidences in themes that are also powerful among writers. Their attitudes towards the River Ebre do vary, but at the same time, they cannot form a literary landscape without an interaction with the real landscape. Their attitudes do vary with respect to a distance from the real landscape, as well as how their experiences vary. However, at the same time, this distancing weakens the memory, while it helps to shape a literary landscape passed through a filter. Their attitudes also vary with respect to the inevitability hidden in distance. However, in parallel, this inevitability, the impossibility to return to the real landscape, emerges in the formulation of the literary landscape.” (Poy, 2007: page 3).

In recent years, various projects have been initiated with respect to literary routes, in order to follow and discover the landscapes described or that inspired their

works. The most successful project is the proposal launched in 2007 by the Artur Bladé i Desumvila Cultural Association on the centenary of the writer's birth. This project consists of a literary route that includes the most representative areas of the author's native town, Benissanet, through the texts of his works, these tasks are requested by the public and they often refer to pleasing or controversial topics, those with a certain level of social criticism, songs of the land, regarding agriculture or the ways of life in an area.

Furthermore, the research activities of the group Quico el Célio, El Noi i El Mut de Ferreries should also be mentioned. The group was created in 1992 in order to recover and spread the use and knowledge of popular and traditional music of the regions in the south of Catalonia. Using music, theatre and irony, they have informed people inside and outside the Ebre area about customs and ways of life with the recreation of characters. They have used the jota as a form of native music, rather than as an influence from the borderlands, as years before, “Tortosa folklore” was not considered to be a part of Catalan culture, as it was considered to come from Valencia and Aragon. Since the publication of Joan Moreira, *El Folklore Tortosí* (1934), Artur Gaya and Jordi Fusté, members of Quico el Célio, El Noi i El Mut de Ferreries, began their research, using numerous documents, such as musical scores, stories, written songs, recordings, crimes sung in the style of the blind, local compilations, etc., from which shows, CDs and books have emerged. Their work includes several songs that deal with the way of life and the landscape of the Terres de l'Ebre, such as: “El Carrilet i el Vaporet”, “Es cantava i es canta”, “Jota de les plegadores d'olives”, “Jota espaïda del pas del vent”, “La font del moro”, “Panxampla” and “De la Terra de l'Ebre D.O.”.

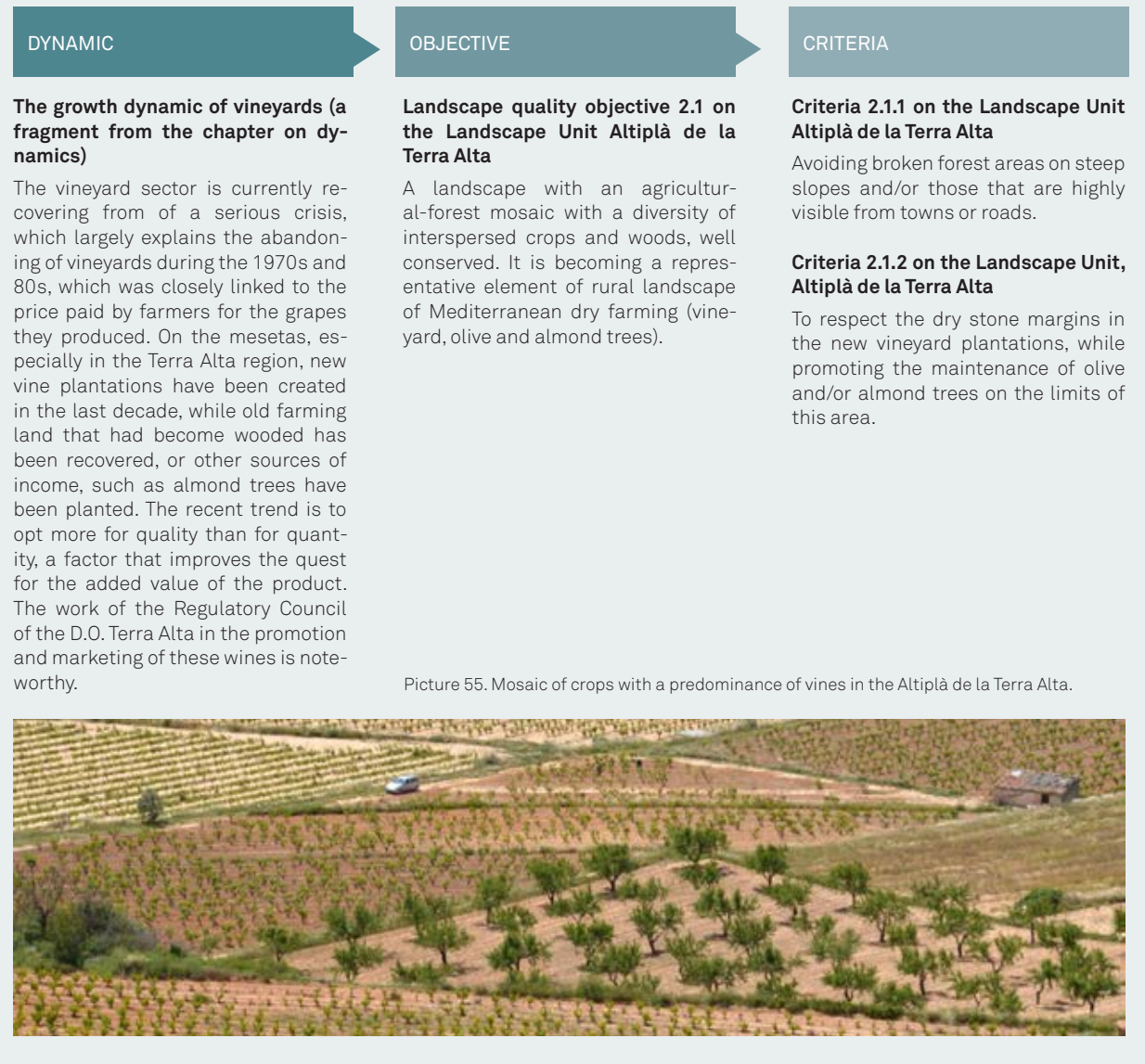
4.3. Dynamics in the landscape

All landscapes are in constant evolution, an evolution that is inherent to the landscapes and which the European Landscape Convention has already included in the definition of landscape itself. Landscape is the result of a dynamic process, through which a territory and the perception that the population has of it are constantly modified. The analysis of dynamics is therefore fundamental, as it helps to trace future lines that will be necessary in political decision making. To put it another way, investigation into dynamics allows us to identify the challenges that a landscape policy needs to bear in mind.

In the catalogue chapter “The Current Landscape and its Dynamics” the dynamics and the processes that have the most influence on shaping current landscapes are described and evaluated, in addition to the main factors that have promoted changes over the course of history, taking the main factors of change (urban planning, tourism, recreational or mining activities) and evaluating the effects they have on the landscape. The possible future development of the landscape as a result of the main activities that affect it are also analysed, as are those that result from the implementation of current regional, urban planning and sector-based policies.

The analysis of dynamics has a highly important role when dealing with the four essential parts of the landscape catalogues: the definition of landscape units, landscape evaluation (strengths, weaknesses, opportunities and threats), the definition of the landscape quality objectives and the criteria and actions required to protect, manage and organise the landscape.

Effect of dynamics on the definition of landscape quality objectives and of criteria and actions (the case of the Landscape Catalogue of the Terres de l'Ebre)



4.3.1. The characterisation of dynamics

Landscape dynamics deal with the evolution or the change of landscapes over time (historical dynamics, both current and future) and space. The factors that define them are:

- **Origin.** Resulting from the natural evolution of the landscapes or derived from human actions.
- **Scale.** There are overall dynamics that generally affect the entire world, there are others that are regional, which are reflected with varying degrees of intensity throughout the land and finally, local dynamics, which are specifically linked to the character of each of the landscapes identified.
- **Frequency and duration.** Changes may be ephemeral, they may be repeated in a periodical or seasonal manner, or they may continue over time.
- **Speed.** Speed can be either rapid or slow. Speed also conditions the perception of change, either positive or negative, by the population. In general terms, when anthropic dynamics are more intense and faster and at a more general scale, especially if compared with natural dynamics, the population finds them more difficult to assimilate.
- **Intensity.** Relevant or hardly perceptible.
- **Effect.** Dynamics may influence the landscape in a direct or indirect manner.

4.3.2. Identification and description of the dynamics

The dynamics were identified from various sources: by observing the evolution levels of the landscapes in situ, through fieldwork; seeking references in books specialising in the historic evolution, documentary sources and archives (cadastre, photography, generations of

stories, etc.), and by comparing maps, aerial photographs and satellite images from different periods, by analysing statistical data and through the contributions of the various public participation processes explained in Chapter 2.11.

The description of the dynamics was divided into two highly differentiated chapters of the catalogues, both in the report of the entire area as well as for each landscape unit: “Historic evolution of the landscape” (this enables the interactions between society and its territory from the past to be understood) and “The current landscape and its dynamics” (this enables the present to be understood based on the signs of the evolution and trends, as well as the future evolution of a landscape based on regulations and the planning system).

Historic evolution of the landscape

The current landscapes are the result of centuries of history. The diverse cultures that at one time or another in history settled in it intervened, in keeping with the knowledge and technical capacities they had available to them, to transform the territory in keeping with their needs. The result was the configuration of unique cultural landscapes. The prints of the past that survive in the territory not only contribute towards understanding the forming of today’s landscapes, to defining the character of a certain landscape and its identity, or to understanding how the social representations of the landscape have evolved, but they also have a great potential when providing relevant information for their future management and planning, as well as being a powerful tool for creating awareness and educating.

The chapter on the historic evolution of the landscape offers a short historic perspective of the transformations that have taken place in the landscape of this territory with the aim of contributing towards the interpretation of today’s landscape (above all, and without undervaluing the previous phases, from the second

half of the 18th century). It also allows what needs to be preserved from a heritage point of view to be identified and to interpret how the social representations of the landscapes have evolved.

In general terms, the historic evolution of the landscape has identified:

- The environmental factors that conditioned the human settlement on the territory and the evolution of the landscape from far-off periods of time (morphology, availability of resources, insalubrity).
- The main events and circumstances that caused changes in the landscape (the development of agriculture and livestock, the development of manufacturing, the expansion of winemaking, phylloxera, industrial development, wars, epidemics, the transformation of dry farming to irrigated land, the assault of tourism in the 20th century, wildfires, the appearance of new means of transport, economies of scale, telecommunications, etc.).
- Agrarian and livestock dynamics from the end of the 18th century onwards (evolution of the trends in the use of agricultural land, the evolution of the agrarian surface area, evolution of livestock and transhumance, etc.).
- Forest dynamics from the 17th century onwards, derived from owners, shepherds, colliers, stonemasons, forest engineers, ecologists, etc.
- Emphasis has also been placed on trying to understand the transformation the Catalan landscape has undergone in the last fifty years in an integrated way and to analyse the causes, among others, based on the aerial photographs of the year 1956.
- Closely linked to the previous point, the urban, periurban and infrastructure dynamics have been analysed: growth and evolution of urban centres, dispersion of activities in land not designated for development, the introduction of industrial areas, the proliferation of infrastructures, etc.

- Finally, the evolution of the social representations. Depending on the era, the population has given a more positive or more negative value to certain uses, dynamics and landscape elements. One of the clearest examples in this respect is the evolution of the perception of wetlands, which were previously perceived as negative because they were a source of diseases which, together with the need to obtain cropland, led to them being dried out, but which are currently positively valued for their aesthetic and natural values, particularly related to their ornithological richness and the wealth of unique vegetation and a semi permanent layer of water. Literature and painting have traditionally contributed towards these changes perception.

The current landscape and its dynamics

This chapter allows us to understand the combination and the interaction of the elements that make up the current structure of landscape and that define its character, based on the signs of evolution and on the trends of the last decades. Specifically, it identifies and analyses:

- The current structure of the landscape, making an analysis of the uses of the land, and a description of the main elements that make up the landscape, emphasising the structure of the main urban nuclei.
- The dynamics, the activities and the processes that have the greatest influence on the configuration of today's landscape, based on the main factors of change (urbanisation, tourism, agricultural and forest activity, recreational or mining activities) and describing their effect on the landscape.
- The dominant and the incipient evolutionary trends in the development of the landscape.
- The influence of human intervention on the landscape, as well as the activities that maintain the landscape in positive terms. Also the reactions or

responses of the administration, organisations, owners, users of the environment, etc. to potentiate the positive dynamics or confront the negative ones.

- The future evolution of the landscape, which tries to outline the future landscape of the territorial area, analysing, in strategic terms, the interrelationship between diverse factors, such as natural dynamics (vegetable succession, climate change), the socio-economic trends (depopulation, ageing, immigration), as well as the results of the introduction of current territorial, urban and sectorial policies, both in Europe as well as in Catalonia (nature, forest, agrarian conservation policies, water planning, the introduction of industry, infrastructures and transport, mining activities, waste, energy, tourism, etc.). This forward-looking analysis helps to define proposals of a preventative nature to improve the quality of the landscape.

It is essential to make an effort to territorialise the landscape dynamics, address the municipal reality and get to know the planning or equipping projects in detail, if we do not wish to simply identify the more general common, dynamics (urban spread, development of infrastructures, mechanisation of agriculture, etc.) and thereby limit the actions that need to be done.

4.3.3. Mapping the dynamics

Mapping the dynamics is essential to understand and help to make the evolution of contemporary landscapes be understood. Mapping the dynamics consists of a DIN-A0 size map of the entire area of each landscape catalogue on which a large part of the dynamics explained in the report are represented (whether natural, agrarian and forestry, urban, industrial or infrastructures).

However, representing the changes in the landscape on a map involves a whole host of challenges. In the

first place, starting with the idea that the landscape is dynamic, it transforms continuously, while a conventional map is a static representation which makes it difficult to express this ongoing change. There is another challenge to go with this one: the difficulty of mapping the evolution of the perception of society with respect to this landscape, as the landscape is not just the physiognomy of a territory, but also the result of the perception the population has of it. In other words: a map of dynamics in the landscape should not just reflect the transformations in the uses of agricultural, forest or urban land or the evolution of the economic sectors, however much data on them are available. This map would be more one of territorial dynamics. A map of dynamics and the landscape should include the emotional and perceptive dimensions of these changes. Dynamics such as the alteration of the traditional physiognomy of the nuclei or the visual modification of entrances to the towns, for example, both of which are represented in Landscape Catalogue of the Alt Pirineu i Aran, compile a collective view of a changing landscape reality.

Nor should we confuse the concept of dynamics and of impact. If it is difficult to decide what is an impact on the landscape, it is even more difficult to represent it. How can someone map —if indeed it can be mapped at all— the perturbation of visual harmony of certain electrical towers and lines, or the isolated construction of farms covered in machinery or naves in places with great landscape quality. To deal with this challenge, the mapping of dynamics of the catalogues in some cases proposes rather unconventional ways of mapping these elements and in other cases, opts for a more classical cartography.

Loss of traditional physiognomy (Landscape Catalogue of the Alt Pirineu i Aran)

The characteristic, defining elements of Pyrenean architecture, whether individually or as a whole, among many others, have been affected by the proliferation of new constructions that have occurred in some towns, represented on the map of dynamics on the landscape, to the extent of losing part of their physiognomy. There has also been a lack of maintenance and investment in

restoring some historic heritage elements (churches, castles, walled towns, historic centres, cobbled streets, small industrial heritage, etc.). These changes, which are usually radical, on the natural and traditional architectural landscape of these towns have caused alterations in the perspectives that their inhabitants have of their settings.



Picture 56. In the Alt Pirineu i Aran, there are villages that have had their physiognomy changed due to the proliferation of new constructions.

Visual modification of the entrances to towns (Landscape Catalogue of the Comarques Gironines)

The landscape of the entrances to numerous towns in the Comarques Gironines has been under a permanent process of transformation for, in particular, the last three decades. In these areas, industries, warehouses and, particularly in recent years, commercial and service activities (from commercial retail surface areas, such as car dealerships, furniture shops or hypermarkets, through to other kinds of activities and services, such as roadside restaurants, car washes or petrol stations) have been introduced which play on the advantage of being along a roadside. This is a complex phenomenon, known as the “shop-window” road, which has its roots in the permissive nature of municipal planning when locating new developments, particularly the introduction of activities on land that is not designated for development. This has therefore

formed a new urban typology of a linear nature, with a sequential layout of buildings and support elements (parking, advertising panels and hoardings) that tend to emulate traditional commercial streets at a peri-urban scale. These new constructions are characterised by a complete lack of coherence with respect to the building types and to the layout of elements with respect to the pre-existing territory, to such a point that they break away from the character of the urban stretch and the image of the places in question. They are entrances that are aesthetically not at all interesting, often lacking minimum urban infrastructure, in which open spaces of little landscape quality are juxtaposed with sets of buildings which are usually not very attractive and with an appearance characterised by strident colours, illuminated signs and/or advertising hoardings.



Picture 57. The landscape of the entrances to numerous towns in the Comarques Gironines has been under a permanent process of transformation. In these areas, industries, warehouses and, particularly in recent years, commercial and service activities have been introduced.

13. Texts extracted from the landscape catalogues.

Replacement of agricultural land with developed land (Landscape Catalogue of the Regió Metropolitana de Barcelona)

The agrarian landscape of the Regió Metropolitana de Barcelona has been suffering from a markedly regressive trend which started at the beginning of the 20th century. In 1955, cropland represented 40% of the surface of the area, while in 2002, this percentage had dropped to 15%. This involves a loss of more than 76,000 ha. This significant regression of cropland is partly explained through the abandoning of agricultural activities that has spread throughout Catalonia, which has specially and significantly transformed the landscape of the Regió Metropolitana de Barcelona. The ceasing of agricultural activity has caused forest expansion, as explained in the previous part, but above all it has been absorbed by the heavy urban pressure around Barcelona. Therefore, one third of agricultural land has become forest land, while the other two thirds have become urban land (continuous urban spaces, developments, industrial and commercial areas and infrastructures). These dynamics of replacing agricultural surface area for developed land have spread throughout practically the entire Regió Metropolitana de Barcelona.



Picture 58. The loss of agricultural surface area is a general phenomenon throughout a great deal of Catalonia.

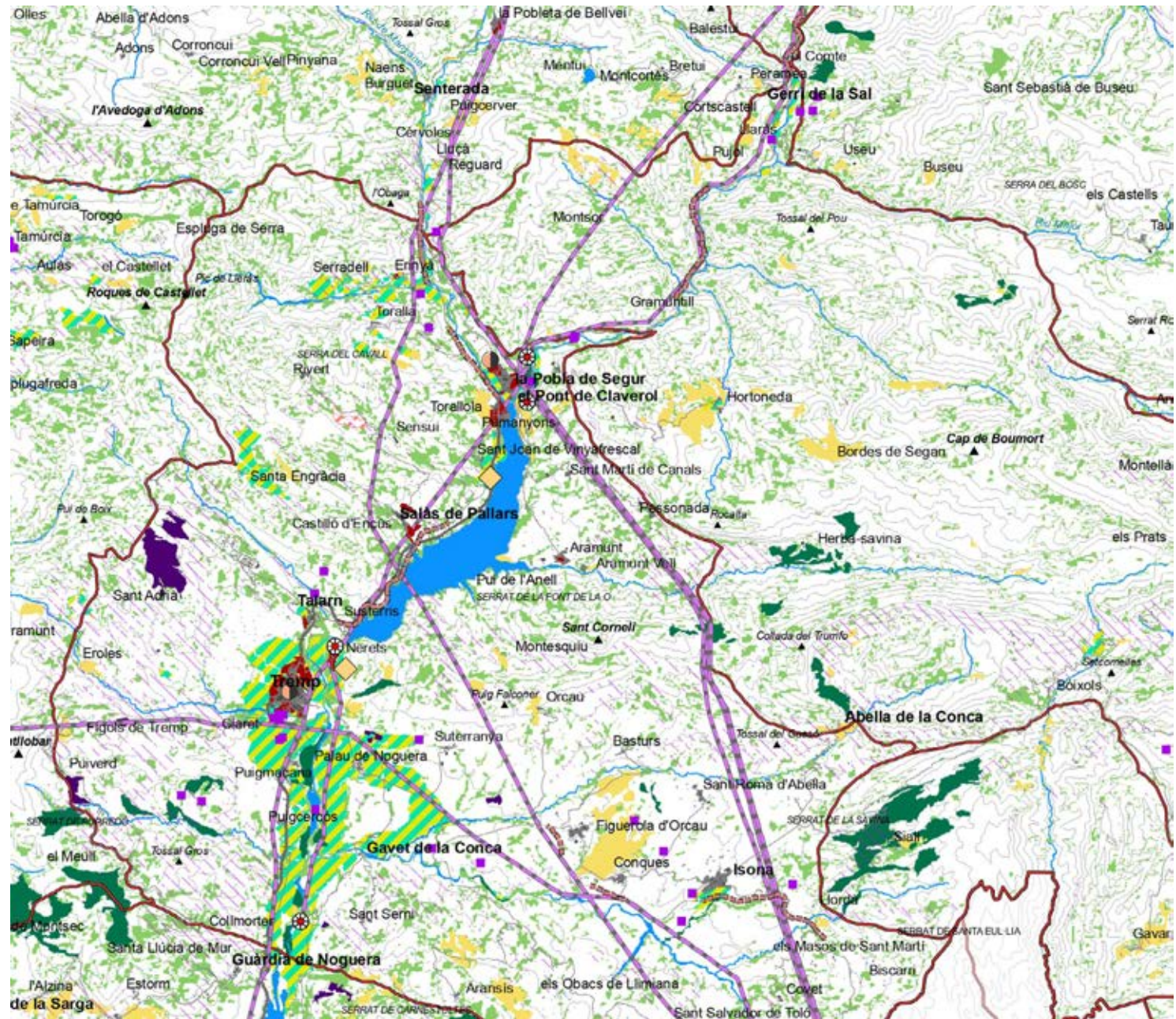
4.3.4. The contribution of public participation

The participation processes of the catalogues allowed the dynamics, the activities and the processes that have the greatest influence on the configuration of today's landscape to be mapped, based on the main factors of change (urbanisation, tourism, agricultural and forest activity, recreational or mining activities) as well as to describe their effect on the landscape.

The participation processes provided new information on landscape dynamics, but above all, they served to corroborate data that the editorial teams already possessed and, in some cases, to specify details of it. Overall, the diverse mechanisms used helped to detect the stakeholders that cause pressure on the landscape (such as urban development processes, tourist dynamics or agricultural and forest policies), the pressures that result from this, the effects on the environment if the current trends are followed, the impacts and risks which, due to the state of degradation or abandonment, or by simply existing, contribute to impoverishing the quality of the landscapes, and finally, the elements which, due to their location, size and shape, fragment the territory and make it difficult for the public to access the environment around them.

For example, during the web consultation of the Landscape Catalogue of the Regió Metropolitana de Barcelona, it was clear that there was concern about dynamics such as the increase in the density of urban developments on the mountainous part of the municipality of Sitges or the Collserola mountain range, the dispersion of industrial areas and of infrastructures in the area of the Delta of the Llobregat or the loss of natural habitats in the streams of the Maresme. Although most of the perceptions regarding changes in the landscape detected in the catalogues were negative, there were also some positive ones. For example, in the interviews given to the landscape stakeholders of the Landscape Catalogue of the Camp de Tarragona, the participants

gave a positive evaluation to the recovery of vine crops in Priorat and its role as a driving force behind sustainable tourism strategies throughout the region.



- Natural**
- Erosion of slopes
- Agroforestry**
- Forest fire (1986-2008)
 - Abandoning of agricultural activity
 - Planting of vines
 - Planting of trees (conifers, plane trees)
 - Replacing unirrigated land with irrigated land
 - Growth of forest and scrub land
- Urban**
- Alteration of the traditional physiognomy of town centres
 - Low-density residential housing
 - Urban growth
 - Visual modification of entrances to town centres
- Activities**
- Industrial area
 - Golf course
 - Mining activity
 - Border commercial dynamics
 - Skiable domain (downhill skiing)
 - Skiable domain (cross-country skiing)
- Infrastructures**
- Airport
 - Telecommunications antenna
 - Hydroelectric power station
 - Hydroelectric power station pipe
 - Dam
 - Channelling of lakes
 - Projected road network
 - High-voltage line

Map 18. Fragments of the map of dynamics of the Landscape Catalogue of the Alt Pirineu i Aran.

4.4. Viewpoints and itineraries

Roads, paths and viewpoints are, today, very powerful routes and places for interaction with contemporary landscapes. To this end, the landscape catalogues have identified the main routes and points for observing and enjoying the landscape. These viewpoints and itineraries also play an important educational role regarding the evolution and the values of the landscapes.

4.4.1. Viewpoints

One of the contemporary ways of contemplating urban and rural landscapes is from viewpoints. We understand viewpoints to be places in a raised position from where citizens can enjoy wide panoramic views and promote values such as contemplation. These wonderful spaces encourage us, stimulate us and obviously, promote a love of the landscapes and, at the same time, are places where one can experience sensations of pleasure, euphoria or peace and quiet. Therefore, this is not merely visual contemplation, but also sensorial, emotional and experiential.

The most strategic viewpoints are usually found in high places, which are accessible, with greater scenic width, and with attractive, varied views that enable all the nuances of the landscape to be captured at different scales, to identify their values, their dynamics and even to interact with them. Throughout history, these viewpoints have been incorporated in the imagination of territories of Catalonia: created for control and security reasons (the dominance of a territory where, today, we can still find the testimony of watchtowers, lighthouses, castles, forts or refuges in wartime); for religious reasons (hermitages or cemeteries); or for leisure time and pleasure reasons. In short, peaks, hills, cliffs, public buildings in cities, squares, city walls, towers, roadside and motorway borders, etc., places that can have a heavy symbolic and emotional significance for



Picture 59. Panoramic view from the Llívia viewpoint. Over time, these viewpoints have become incorporated into the worldview of the territories of Catalonia.

the population at the same time; both because of the importance of the place as well as due to the fact that they become a milestone or are part of an emblematic scenic backdrop.

Some of these viewpoints include explicit means for interpreting landscapes, above all panels, while in other ones, the essence of each landscape and its meaning can be induced through other kinds of more suggestive elements, forming part of thematic routes or, simply, due to the knowledge, perception and gaze of the observer.

Selection criteria

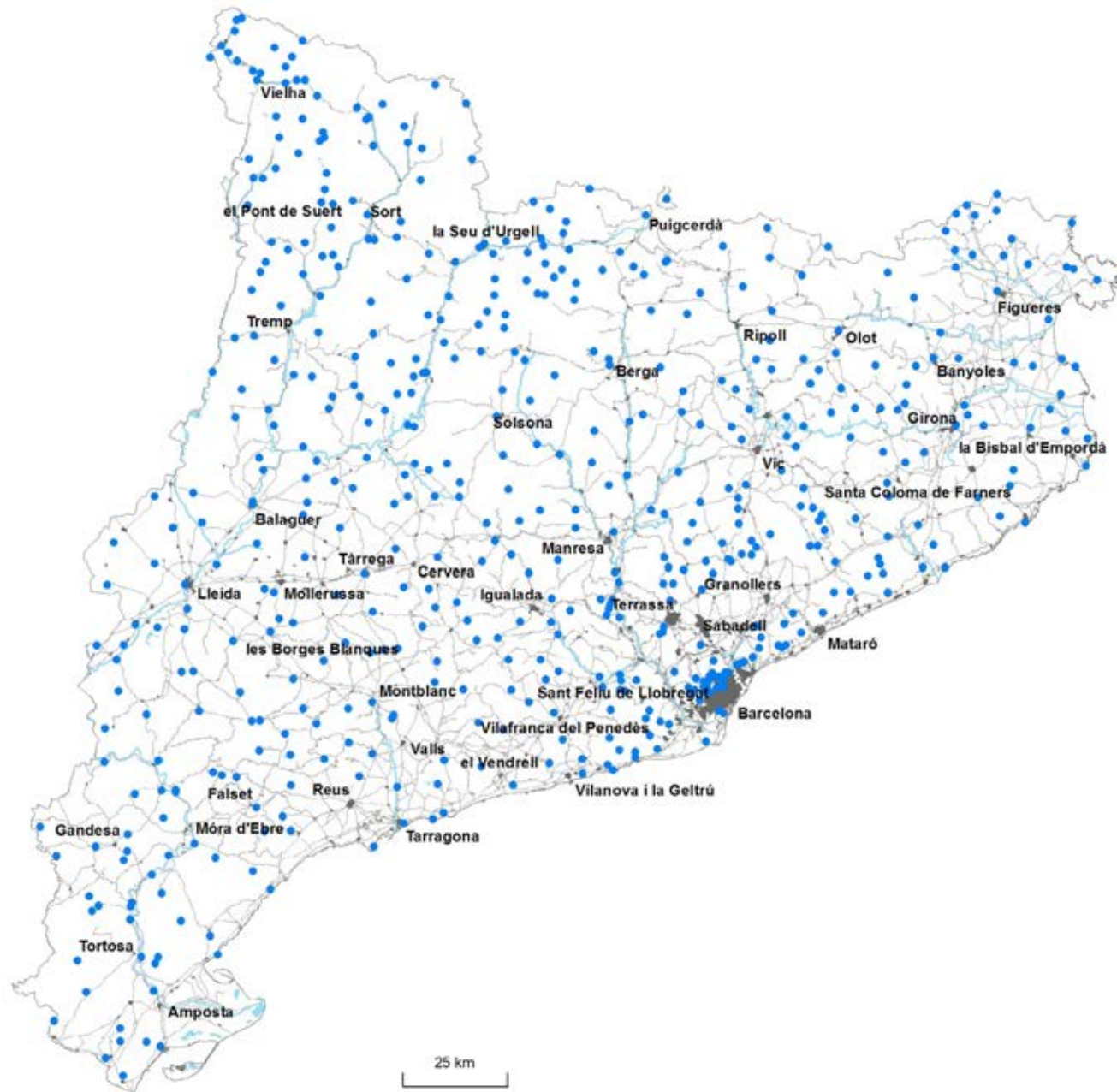
The viewpoints were selected following 10 criteria, although, depending on the characteristics of each viewpoint, some criteria prevail over others.

- **Visibility.** Viewpoints with wide panoramic views (taking into account that often a very extensive panoramic visibility prevents the perception of some details as the distance tends to blur the visible territory).

- **Visual proximity.** Viewpoints from where one can better perceive the elements that characterise a determined landscape (landscape unit).
- **Representativeness.** Viewpoints from which one can capture the richness and diversity of landscapes of Catalonia (landscape units), as well as the variety of landscape components (urban, periurban, coastal, agricultural, mountain and so on landscapes).
- **Diversity.** Viewpoints from where one can perceive the main landscape values (natural, aesthetic, historic, social, symbolic, etc.).
- **Scope.** Viewpoints that are structured in a network, so that as a whole, they permit a suitable perception of the entire Catalan territory, avoiding viewpoints very close to each other.
- **Accessibility.** With the aim of favouring access to the landscape, on the whole, viewpoints that are accessible by car or that do not require more than a 30 minute walk.
- **Variety of locations.** This includes peaks, cols, places in towns (squares and other public areas), notable architectural elements (castles and hermitages) with access to the public, roadside viewpoints, coastal paths, refuges or other symbolic elements designated by the public (places with a local or regional personality and with a heavy symbolic significance).
- **Popularity.** Viewpoints known and valued by the public, identified in the participation processes for the landscape catalogues.
- **Synergy.** Whenever possible, priority should be given to viewpoints with existing accesses and signposting.
- **Complementarity.** Whenever possible, they should form part of landscape itineraries.

More than 540 strategic observation points of the diversity of landscapes in Catalonia and their value

Map 19. Viewpoints identified in the landscape catalogues.



Catalogue	Number of viewpoints
Alt Pirineu i Aran	123
Terres de Lleida	76
Camp de Tarragona	41
Comarques Gironines	77
Terres de l'Ebre	30
Regió Metropolitana de Barcelona	115
Comarques Centrals	82
Total	544

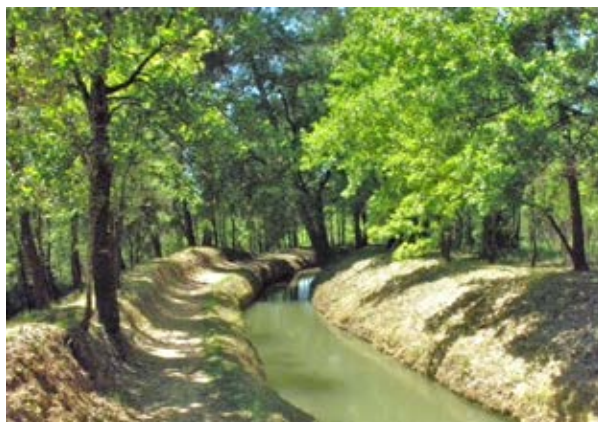
been identified which have excellent educational and awareness creation abilities. Each of these viewpoints has been described briefly and mapped. The description has gone beyond the numbering of the identifiable places from the viewpoints and has tried to reflect the landscape values and their dynamics, placing emphasis on the elements or set of elements that make up each landscape (urban, periurban, agricultural, forest, etc.).

Of all the viewpoints defined, in each catalogue a small number have been highlighted (between 10 and 12 viewpoints per catalogue) considered to be key ones to get a joint vision of the diversity of the landscapes of each area and which, therefore, are also worthy of priority attention with respect to meeting the proposals of criteria and actions defined in the catalogues, mainly aimed at their maintenance and promotion.

4.4.2. Itineraries

Using the same philosophy as for the viewpoints, a network of itineraries for wheeled vehicles (accessible in motorised vehicles) and other itineraries (accessible on foot or non-motorised vehicles) which run through the landscapes or landscape elements that are most valued by the population; but also the landscapes that are least valued, above all the most degraded ones, to get to know and interpret the great diversity of landscapes of Catalonia. These itineraries are often complemented with the presence of the viewpoints defined in the catalogues, or more local ones.

The network of itineraries connects the difference kinds of landscapes in Catalonia based on the routes that are officially recognised (defined and, in some cases, prepared by town councils, county councils, groups of excursionists or other administrations or public and private entities) or that are significant for the population. The itineraries also offer the limiting land-



Picture 60. Non-vehicular itinerary that follows the Manresa irrigation canal.

scape units so people can grasp the transition between the diverse landscapes identified.

Selection criteria

Itineraries for motorised vehicles and for non-motorised vehicles were selected by means of 10 criteria so that, depending on the characteristics of each itinerary, some criteria prevail over others.

- **Representativeness.** Itineraries which allow the richness and diversity of landscape components to be grasped (urban, periurban, coastal, agricultural mountain and so on landscapes), as well as the singularities typical of each of the landscape units.
- **Diversity.** Itineraries from which to perceive the main landscape values (natural, aesthetic, historic, social use, symbolic, etc.).
- **Visibility.** Itineraries that have points with great scenic visibility.
- **Scope.** Itineraries with a greater territorial scope, permitting, as a whole, a suitable perception of the entire territorial area.

- **Accessibility.** With the aim of favouring access to the landscape, pedestrian, bicycle touring and motorised (roads) itineraries are included.
 - **Symbolism.** Itineraries with a historic or symbolic meaning for the population (coastal paths, pilgrimages, historic routes, etc.).
 - **Popularity.** Itineraries that are known and valued by the public, identified in the participation processes for the landscape catalogues.
 - **Synergy.** Itineraries with existing accesses and signposting are prioritised. They are sections of institutionalised footpaths (GR or long-distance, greenways, PR or short distance, etc.)
 - **Complementarity.** Priority is given to those which incorporate priority observation points along the way (viewpoints, defined in the landscape catalogues).
 - **Safety.** Itineraries that have easy access and are not very difficult, for enjoying an optimal landscape.
- 470 wheeled and non-wheeled routes were identified and were mapped and briefly described in the report of the entire area of each catalogue as a file of each landscape unit. The description goes beyond the identification of the places through which the itinerary passes and has tried to reflect the landscape values and their dynamics, placing emphasis on the elements or set of elements that make up each landscape (urban, periurban, agricultural, forest, etc.).

Of all the itineraries defined, whether wheeled or non-wheeled, in each catalogue a small number have been highlighted (between 10 and 20 itineraries per catalogue) considered to be key ones to get a joint vision of the diversity of the landscapes of each area and which, therefore, are also worthy of priority attention with respect to compliance with the proposals of criteria and actions defined in the catalogues, mainly aimed at their maintenance and promotion.

Map 20. Itineraries identified in the landscape catalogues.



Catalogue	Number of itineraries
Alt Pirineu i Aran	43
Terres de Lleida	55
Camp de Tarragona	72
Comarques Gironines	135
Terres de l'Ebre	45
Regió Metropolitana de Barcelona	50
Comarques Centrals	78
Total	478

Viewpoint of the Montgrí Castle (Landscape Catalogue of the Comarques Gironines)

Located in the Empordanet-Baix Ter, the landscape icon that the massif and the castle represent for the whole Empordà region is an exceptional viewpoint. The Plana de l'Empordà opens up totally in front of the Pyrenees, from Puigmal (2,910 m.) to Cap Norfeu, with Canigó (2,784 m.) in the background. To the west, Terraprimms, gentle reliefs of agriculture and forest mosaics contrast with the severe agricultural plains of Plana de l'Em-

pordà and Empordanet-Baix Ter, that can be seen to the south, with Torroella de Montgrí in the foreground, and all the elements that characterise this unit: the rice fields of Pals, the Ter Vell meadows, the Pletera sea marshes and the Coll Ponds, the Iberian settlement in Ullastret, the mediaeval nuclei, among others, and in particular, the Medes Isles.



Picture 61. Montgrí Castle is an excellent viewpoint of the Empordanet-Baix Ter.

Motorised itinerary of the plain and the sunny side of Cerdanya (Landscape Catalogue of the Alt Pirineu i Aran)

Circular itinerary through Cerdanya, with a deviation to Llivia, which enables you to discover the two great types of landscape that predominated in this landscape unit: the plain and the sunny side. Taking the Puigcerdà viewpoint as the central point and going in a clockwise direction, it is possible to observe agricultural and livestock landscapes that have not yet suffered from an excess of interference by the urban stain of non-res-

idential dwellings, such as Age or Vilallobent, going through areas with a significant degree of transformation, such as Prats and Sansor. The itinerary enables you to compare the evolution of traditional landscapes in this unit with the new occupations of the territory. The final part of the itinerary climbs up towards Meranges to offer great panoramic views near the Feixa forest refuge.



Picture 62. The motorised itinerary of the plain and the sunny side of Cerdanya goes through the village of Prats.

Non-motorised itinerary along the GR-92 (Landscape Catalogue of the Terres de l'Ebre)

This is an interesting route for observing the various landscapes that make up the coastal sectors of the Terres de l'Ebre. It goes into Catalonia through the Uldecona hollow and after crossing the Montsià mountain range, it goes down towards the fluvial landscapes of the Ebre River, where you can contemplate the vegetable gardens, the irrigation canals, the plantations of citrus fruit, in combination with fragments of riverside plant life maintained by the Ebre River, as well as the proliferation of scattered settlements in the form of dwell-

ings and/or industrial or services activities. The path then goes close to the coastline, and goes through one of the singular landscapes of the Terres de l'Ebre, which is the small cliffs which alternate with little bays that are formed at the estuaries of the gullies and torrents. This coastal stretch allows you to contemplate the agricultural and forest mosaics, shaped by dry stone low walls with crops of olive trees, scrub and thickets of Aleppo pines right down to the sea.



Picture 63. The GR-92 in the area surrounding Ampolla, in the Litoral del Baix Ebre.

14. Texts extracted from the landscape catalogues.

4.4.3. Mapping of the viewpoints and itineraries

The cartography related to the viewpoints and itineraries consists of an A0 size map of the entire area of the catalogue which shows all the viewpoints, and of another one which identifies all the itineraries, distinguishing between wheeled and non-wheeled ones. In addition, the cartography of each landscape unit contains an A3 map showing all the viewpoints and itineraries.

 Viewpoints

16- Xaragalls del Vallès

- 56- Els Quatre Vents
- 57- La Creu dels Tres Batlles
- 58- Castellnou/Ullastret

17- Plana del Vallès

- 59- Turó de Sant Pau
- 60- Les Tres Creus

18- Baix Montseny

- 61- Castell de Fluvià
- 62- Castell de Montclús
- 63- Mare de Deu del Puig del Bellver

19- Collserola

- 64- Turó de la Magarola
- 65- Forat del Vent
- 66- Tibidabo
- 67- Torre de Collserola
- 68- L'Arrabassada
- 69- Sant Pere Màrtir
- 70- Santa Creu d'Olorda
- 71- Mirador d'Horta
- 72- Puig de la Guàrdia
- 73- Mirador de Cerdanyola
- 74- Turó del Fumet
- 75- Mirador de Font Grogà
- 76- Turó Rodó
- 77- Turó Merlès
- 78- Puig Madrona

79- Turó d'en Segarra

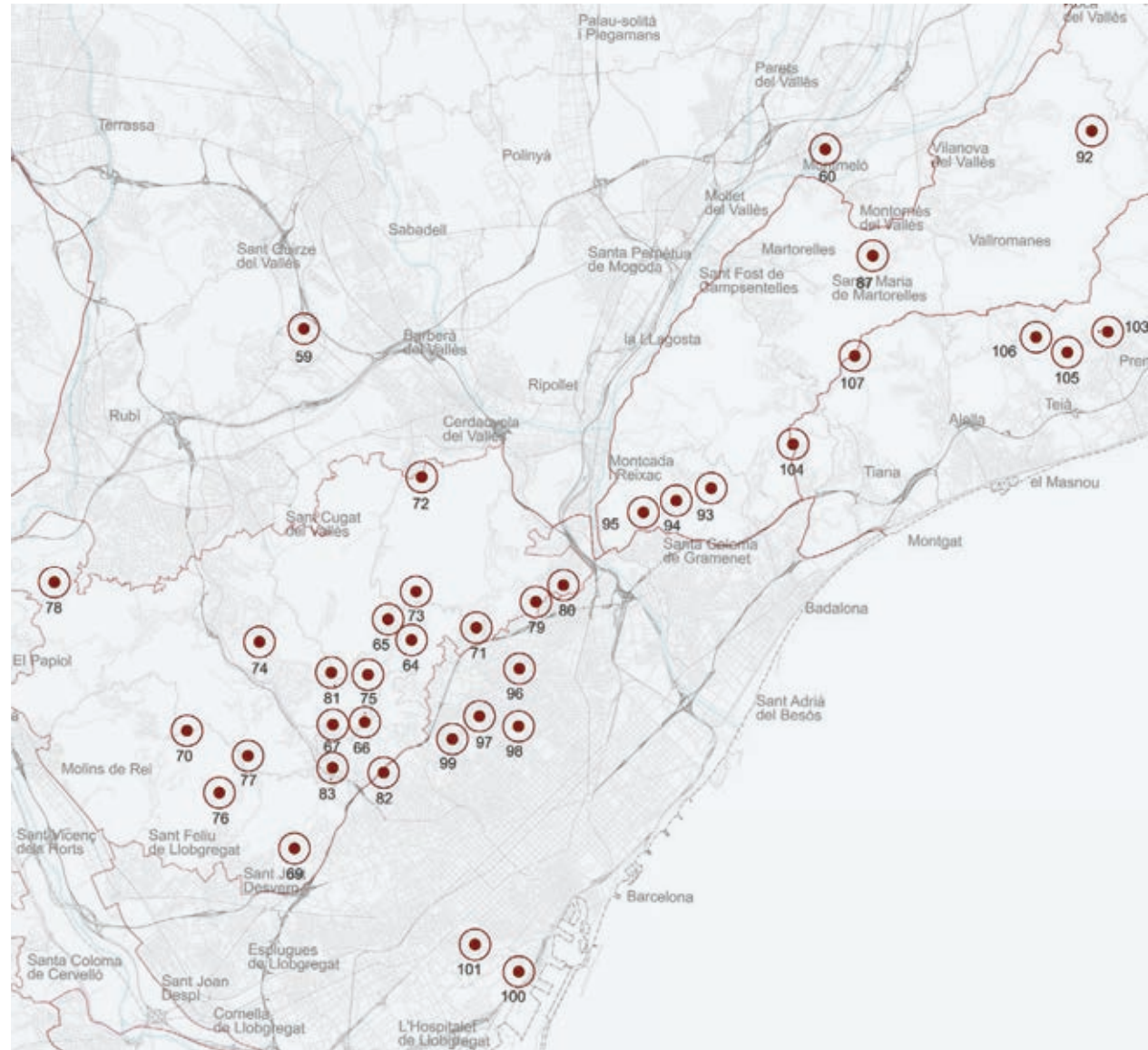
- 80- Turó de les Roquetes
- 81- Turó del Puig
- 82- Bellesguard
- 83- Mirador de Sarrià

20- Serra de Marina

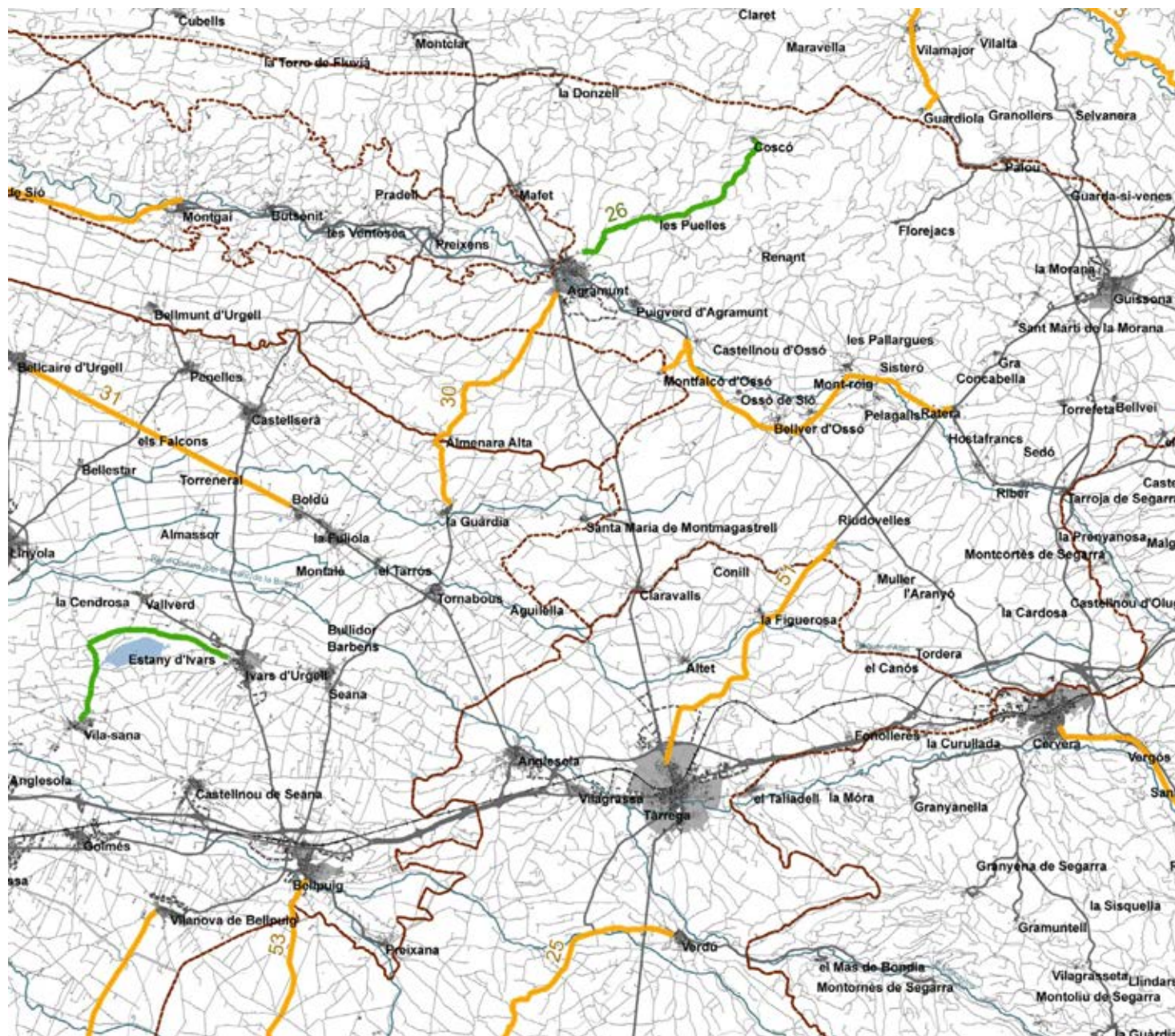
- 84- Hortsavinyà
- 85- Turó Gros
- 86- El Rocatell
- 87- Castell de Sant Miquel
- 88- Collsacreu
- 89- El Corredor
- 90- Can Bruguera
- 91- Coll de Parpers
- 92- Cèllec
- 93- Ermita de Sant Onofre
- 94- Ermita de Sant Climent
- 95- Puig Castellar

21- Pla de Barcelona

- 96- Turó de la Peira
- 97- El Carmel
- 98- Turó de la Rovira
- 99- Parc Güell
- 100- Castell de Montjuïc
- 101- Mirador de Torre Baró
- 115- Museu Nacional d'Art de Catalunya



Map 21. Fragment of the map of viewpoints of the Landscape Catalogue of the Regió Metropolitana de Barcelona.



Mostly along secondary roads, forest tracks or paths

- 2, Almatret - Hu Ebre
- 3, L'Albagüé - Juncosa - Els Torres
- 10, Bellmunt - Civit
- 16, Antena de Segre - Vernet - Alta de Balaguer
- 17, Castelló de Farfanya - Os de Balaguer
- 19, Agulló - Corçà - Pas de Mont-rebei
- 20, L'Argentera - Vilanova de Meià - Pas Nou
- 22, Aspa - Albes
- 23, Sudanel - Sarroca de Lleida - Ubesa
- 26, Agramunt - Cosco
- 32, Ivars d'Urgell - Vila sana (estany d'Ivars - Vila sana)
- 34, Alcanós - Vallmanya
- 37, Toró - Llobserola
- 40, Aiguairó - Almacelles
- 42, Gimenezs - Almacelles
- 45, L'Espuga Cabra - Fuleta - Tarrés
- 47, Serós - Massalcoreig
- 48, Albesa - Algeri
- 49, Tudela de Segre - Seró - Coldebat
- 50, Terrers - Menérguens - Belvis
- 55, Cervà de les Garrigues - La Pobla de Cervolés

Mostly along main roads

- 1, La Granadella - Bovera
- 4, El Solerís - Granyena - Cògol (enllaç C-233)
- 5, Masals - Almatret
- 6, La Floresta - l'Espuga Cabra
- 7, Guimerà - Naleó
- 8, Coners - Els Hostalets - Talavera
- 9, Les Oluges - Sant Gum de Freser
- 11, Portell - Ivorra - Torà
- 12, Cubells - Murovós
- 13, Biscós - Camats
- 14, Tartaró - Àger
- 15, Sant Llorenç de Montgai - Camarasa - Baronia Sant Omer
- 18, Algeri - Castelló de Farfanya
- 21, Baronia Sant Omer - Terralets
- 24, Serós - Altona - Granja d'Escarp (límit demarcació de Lleida)
- 25, Sant Martí de Maldà - Verdú
- 27, Concabella - Montfalcó d'Ossó
- 28, Menérguens - Balaguer
- 29, L'Abi - El Vicoel
- 30, La Guàrdia d'Urgell - Almenara Alta - Agramunt
- 33, Raimat - Almacelles
- 35, Torresserona - La Portella
- 36, Montgai - La Sentiu de Sió
- 38, Gualter - Folguer
- 39, Anyà - Montmagastre
- 41, Rosselló - Aferrià
- 43, La Granadella - Torrebasses (enllaç C-12)
- 44, Bellaguarda - Ullersmolins
- 46, Mollerussa - Torregrossa - Juneda
- 51, Tàrraga - Roldovelles
- 52, Guardiola - Cabanovós - Vilanova de l'Àguila
- 53, Bellpuig - Belianes
- 54, Vilanova de Bellpuig - Les Borges Blanques (enllaç C-233)

Map 22. Fragment of the map of itineraries of the Landscape Catalogue of the Terres de Lleida.

4.4.4. The contribution of public participation

Participation has allowed the points and itineraries that are most significant for the population to be identified, which must be taken into consideration by the technical teams and incorporated into the network of viewpoints and itineraries of the catalogue when considered opportune, taking into account the previous criteria. The interviews with the landscape stakeholders, the open workshops and the website survey were extremely useful instruments for identifying them.

In the website consultation of the last catalogues, those corresponding to the Comarques Centrals and to the Regió Metropolitana de Barcelona, the participants were explicitly asked to propose viewpoints from where to get a panoramic view of the landscape of the unit and itineraries of landscape interest. The landscape catalogues of Catalonia include a selection of the most notable set of viewpoints and itineraries compiled during the participation processes. This is the case, for example, of the Mola, Castellsapera and

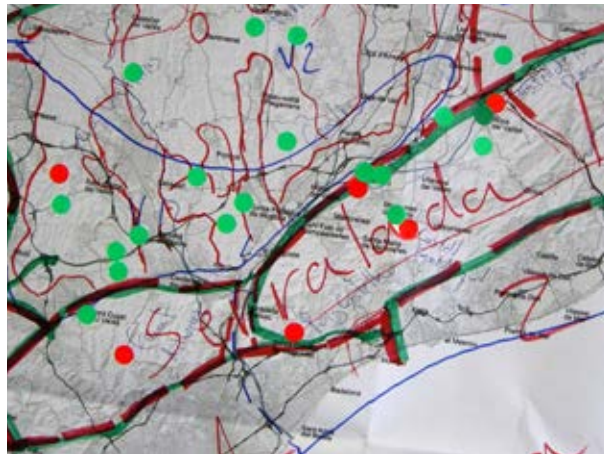


Figure 16. Map resulting from the open workshops of the Landscape Catalogue of the Regió Metropolitana de Barcelona where you can see the viewpoints identified by the participants (green and red circles).

Turó de Roques Blanques, in the Sant Llorenç del Munt i l'Obac-El Cairat unit, or those of Park Güell, Turó de la Rovira.

4.5. Landscape evaluation

The landscape evaluation was carried out by means of the identification of the strengths, weaknesses, opportunities and threats to the landscape (SWOT methodology), in terms of sustainability, for the area as a whole, as well as for each of the landscape units. The SWOT analysis had its origin in strategic planning in the business area, and over time it has become a tool that is also employed in territorial, environmental and landscape planning. In essence, the methodology consists of a synthesis of the strong and weak points, differentiating whether they are internal or external to the territory that is being evaluated:

Strengths: Internal or attributed dynamics with determined values that make the language unique or give it consistency in the face of possible changes.

Weaknesses: Internal or attributed dynamics that impoverish the future quality of the landscape in the view of the changes that are taking place or that are envisaged.

Opportunities: Dynamics external to the system or that come from the revaluing of new values that can favour the obtaining of landscape quality objectives that are being sought.

Threats: External dynamics that can distort or impoverish the quality of the landscape.

Three key aspects were used to carry out this evaluation: in the first place, the characterisation of the current landscape and its historic, present and future dynamics, along with all the factors involved; in second place, the identification of the landscape values (natural, aesthetic, historic, social use, symbolic and

productive); and, finally, public participation also facilitated this task by contributing values based on the citizens' experience of the landscapes. This analysis was extremely useful for defining landscape quality objectives and for making the proposal of measures and actions to achieve them.

Therefore, the general picture of the state of the landscape obtained from the characterisation of the current landscape and its historic, present and future dynamics was used to diagnose weaknesses and threats as well as strengths and opportunities. On the other hand, the characterisation of the values has had a greater influence on the strengths of the landscape which had not yet been recognised or were not very well recognised and, at the same time, came up with new opportunities to positively encourage these landscapes. The role of the participation was more transversal, making one-off contributions and generally focusing on specific landscapes.

For documentary purposes, the evaluation of the landscape was done for the entire area of the landscape catalogue as well as specifically for each landscape unit, trying to synthesise the strengths, weaknesses, opportunities and threats in the form of points and avoiding long documents that could make it difficult to understand these key aspects.

EXAMPLE OF THE **LANDSCAPE EVALUATION** (Plana de la Selva. Landscape Catalogue of the Comarques Gironines)

	Negative aspects	Positive aspects
Internal origin	<p>Weaknesses</p> <p>A visual structure of the fragile, fragmented landscape, the product of the continuous, unconnected alternation of different elements.</p> <p>The presence of developments with low-density housing not well integrated into the agricultural and forest landscape of the setting and with a lack of relationship with the existing urban nuclei.</p>	<p>Strengths</p> <p>The figures to protect the spaces with greater natural values such as Sils Lake, the Santa Coloma stream and the volcanic buildings.</p> <p>The existence of some sectors with agricultural patterns in which different types of crop alternate in a careful, harmonious form, particularly in the western half of the landscape unit.</p> <p>The management of Sils Lake by the NGO <i>Acció Natura</i> and Sils Town Council contributes towards the revaluing of these spaces, improving them from an ecological point of view and developing activities to inform about this wetland area in a town in the Comarques Gironines.</p>
External origin	<p>Threats</p> <p>The proliferation and extension of longitudinal road and railway lines (AP-7, A-2/N-II, high-speed train and the railway line from Barcelona-Portbou) and transversal ones (the main road, C-35 and C-63). Without suitable corrective measures, the landscape impact from a visual point of view and a functional point of view could be very high.</p> <p>The progressive, careless installation of economic activities and equipment along the main communication roads, in particular the N-II/A-2, increasing the fragmentation of the landscape.</p>	<p>Opportunities</p> <p>The sectors on the plain that are maintained with a less altered and better preserved landscape, such as Sant Andreu Salou and its surrounding area, could be centres for initiatives to promote activities related to rural tourism.</p> <p>The great number of spaces with natural and cultural values are an important resource for local development and for environmental education tasks.</p> <p>The new Common Agricultural Policy (CAP), based on the application of environmental measures and integrated, quality production, offers an opportunity to redirect the agricultural activity and to put a stop to the main processes of homogenisation of the landscape of the agricultural plain.</p>



Picture 64. The dispersed urban growth is one of the weaknesses of the landscape in Plana de la Selva.



Picture 65. Sils Lake is one of the strengths of the landscape of Plana de la Selva.

4.6. Special attention landscapes

The landscape catalogues define the figure of special attention landscapes for the sectors of the territory with unique features or those that are the object of great transformations with significant landscape repercussions. They are landscape items that have a given heterogeneity, complexity or singularity from the point of view of landscape management and planning (for example, periurban areas under transformation or other places with an intense, fast transformation of their uses) in which it becomes necessary to define specific criteria for the preservation, management and planning at a more detailed scale than in the rest of the territory.

The special attention landscapes are delimited, on the premises that they must use the territorial planning instruments, urban planning (the decisions made in the urban area are, in fact, those that end up having the greatest influence on the landscape, or at least those that are easier to perceive for the population) and all the decisions of action and intervention on the territory derived from the implementation of the sectorial policies (on infrastructures, agriculture, forest, tourism, and so on). In fact, because they allow precision to be made on specific values or dynamics of the landscape, the role of special attention landscapes in the catalogues is essential for proposing other planning objectives that are not merely territorial, such as the case of the sectorial ones (agriculture, tourism, cultural, etc.).

The general criteria of definition and delimitation of special attention landscapes are the following:

- Sectors with unique features or those that are the object of great transformation of the territory with significant landscape repercussions.
- Landscapes that show a certain heterogeneity, complexity or singularity from the landscape management and planning point of view.

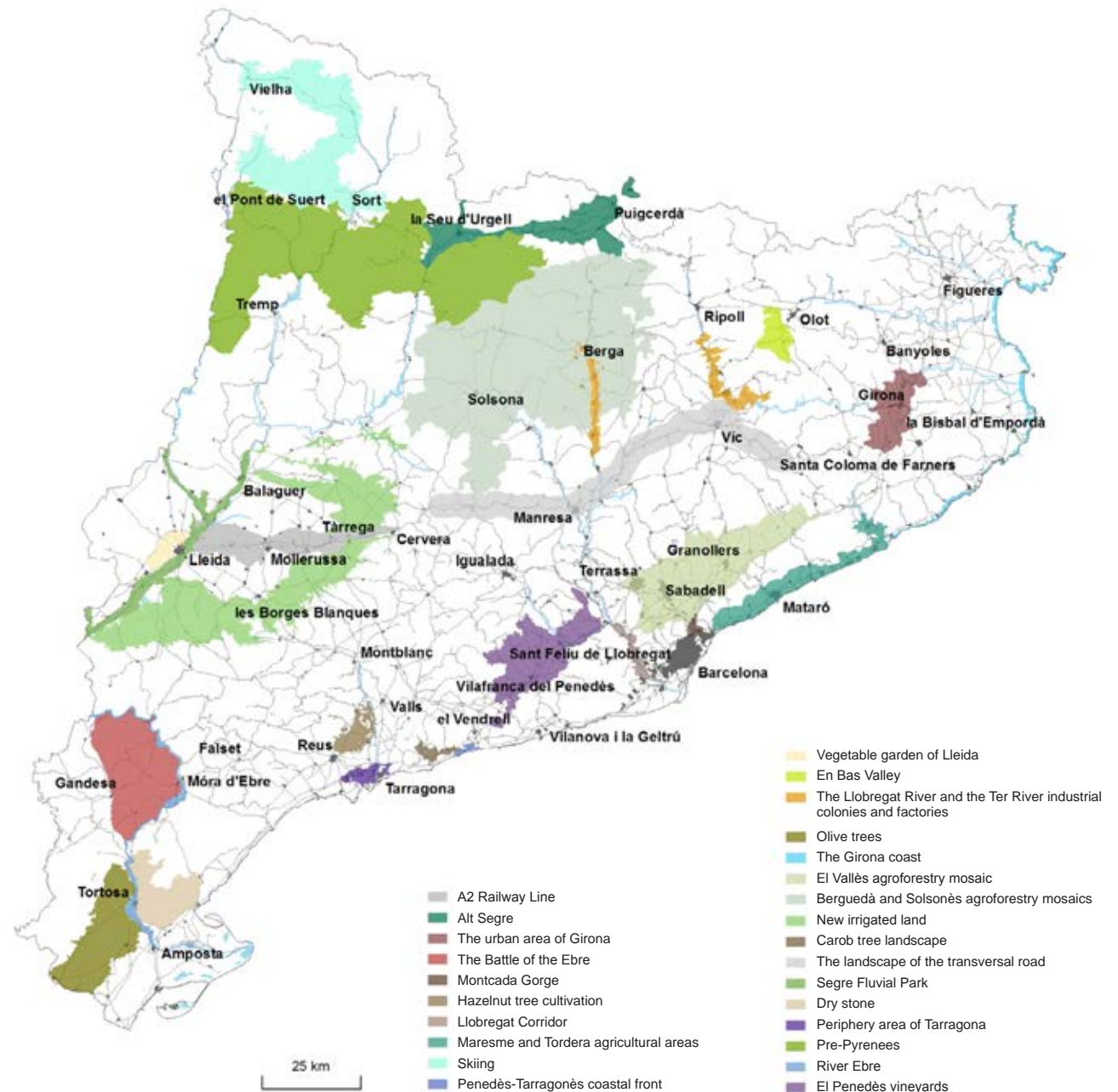
- In some cases, they play an exemplifying role of analysis or planning from certain dynamics or specific values for other places in Catalonia that are repeated.
- Public participation (see part 2.1.1) has contributed to the decision on which the special attention landscapes should be.
- The *raison d'être* of the special attention landscapes goes beyond the features that define a landscape unit (see Chapter 3), as they can be centred on elements (dry stone, agriculture and forest mosaic, etc.) or un-specific dynamics of the landscape (proliferation of infrastructures and services, changes from dry farming to irrigation crops) and, therefore, can belong to parts of the landscape unit, to a complete landscape unit or to more landscape units.
- The scale of work ranges from 1:50,000 to 1:25,000. In this case, the analysis of the landscape elements (structure of crops, terraces, infrastructures, etc.) is more exhaustive than in the rest of the catalogue.
- Special attention landscape is continuous and is focused on a specific sector, even though there may be other similar sectors in other parts of Catalonia, as indicated in third point.

Overall, the chapter on special attention landscapes consists of:

- The map of special attention landscape (available in DIN-A0 size and also in a schematic way at the beginning of the chapter).
- Justification of the definition of special attention landscape.
- Values and dynamics in special attention landscape.
- Strategies for development in special attention landscapes, as well as a proposal for criteria and actions. The strategies defined for each of the special attention landscapes are complementary to the landscape quality objectives and the proposal of measures and actions described in chapter 5.

Special Attention Landscape	Main units that make up part of the Special Attention Landscape
Alt Pirineu i Aran	
Skiing	Era Nauta Val d'Aran, Altes Nogueres, Valls d'Aneu, Cims i Estanys d'Aigüestortes i St. Maurici, Pastures de l'Alt Pirineu i Massís de l'Orri-Valls de Castellbò i d'Aguilar
Alt Segre	Plana de l'Urgellet, Cadí i Vall Cerdana
Pre-Pyrenees	La Vansa, Cadí, Plana de l'Urgellet, Pastures de l'Alt Pirineu, Massís de l'Orri-Valls de Castellbò i d'Aguilar, Sant Gervàs-Montcortès, La Terreta, Boumort-Collegats, Montsec, Conca de Tremp i Congost del Segre
Terres de Lleida	
A2 Railway Line	Paisatge fluvial del Segre, Plana d'Urgell i Secans de Belianes i d'Ondara
Vegetable garden of Lleida	Horta de Pinyana
New irrigated land	Garrigues Altes, Secans d'Utxesa, Garrigues Baixes i Vall del Corb, Secans de Belianes i d'Ondara, Alt Sió, Serres de Bellmunt i Almenara i Vall del Llobregós
Segre Fluvial Park	Paisatge fluvial del Segre
Camp de Tarragona	
Carob tree landscape	Baix Gaià
Periphery area of Tarragona	Reus-Tarragona i Baix Gaià
Hazelnut tree cultivation	Camps del Francolí i Conca d'Alforja-Vilaplana
Penedès-Tarragonès coastal front	Litoral del Penedès
Comarques Gironines	
En Bas Valley	Valls d'Olot i Cabrerès-Puigsacalm
The urban area of Girona	Pla de Girona, Rocacorba, Gavarres i Plana de la Selva
The Girona coast	Baixa Tordera, Ardenya-Cadiretes, Gavarres Marítimes, Empordanet-Baix Ter, Plana de l'Empordà i Cap de Creus

Special Attention Landscape	Main units that make up part of the Special Attention Landscape
Terres de l'Ebre	
The Battle of the Ebre	Altiplà de la Terra Alta, Serra de Pàndols-Cavalls, Serra del Tormo, Cubeta de Móra, Barrufemes, Costers de l'Ebre
River Ebre	Costers de l'Ebre, Serra del Tormo, Cubeta de Móra, Barrufemes, Paisatge fluvial de l'Ebre i Delta de l'Ebre
Dry stone	Vessants de Tivenys-Coll de l'Alba, Litoral del Baix Ebre i Serres de Cardó-Boix
Olive trees	Plana del Baix Ebre-Montsià
Regió Metropolitana de Barcelona	
El Vallès agroforestry mosaic	Plana del Vallès i Baix Montseny
El Penedès vineyards	Plana del Penedès i Valls de l'Anoia
Maresme and Tordera agricultural areas	Alt Maresme, Baix Maresme, Baixa Tordera
Montcada Gorge	Plana del Vallès, Pla de Barcelona, Collserola i Serra de Marina
Llobregat Corridor	Vall Baixa del Llobregat, Delta del Llobregat
Comarques Centrals	
Berguedà and Solsonès agroforestry mosaics	Ribera Salada, Port del Comte-Vall de Lord, Capçaleres del Llobregat, Replans del Solsonès, Serrats de Sanaüja i Llanera, Replans del Berguedà, Rubió-Castellat-Pinós, Vall del Llobregós i Cadí
The Llobregat River and the Ter River industrial colonies and factories	Alt Ter, Plana de Vic, Cabrerès-Puigscalm, Replans del Berguedà i Conca Salina
The landscape of the transversal road	Costers de la Segarra, Rubió-Castellat-Pinós, Pla de Bages, Conca Salina, Lluçanès, Moianès, Plana de Vic i Guilleries



Map 23. Special attention landscapes identified in the landscape catalogues.

EXAMPLES OF THE SPECIAL ATTENTION LANDSCAPES¹⁵

Congost de Montcada (Regió Metropolitana de Barcelona)

The landscape of Congost de Montcada makes up one of the most important communication and mobility flow hubs in the Regió Metropolitana de Barcelona. It is a very dynamic, highly fragmented peripheral landscape precisely due to the variety of road, railway and energy infrastructures, the industrial areas, cemeteries and dispersed urban growth, which make up a space with very little landscape quality.



Picture 66. Montcada gorge is one of the main entrances to the city of Barcelona.

Carob tree (Camp de Tarragona)

The carob tree landscape offers singular features. It is a traditional landscape undergoing heavy regression, which brings together the typical values of Mediterranean agricultural landscapes with a high identity-giving meaning, with the notable existence of the carob trees and their historic productive value, with respect to the fruit as well as the seed, the walls and other dry stone constructions used by farmers for many centuries, as well as the contrast of colours between the bright green of the carob tree foliage and the reddish colour of the clay. It is the landscape that is found in the peripheral area of Tarragona and on the coastal facade of the Tarragonès-Penedès, with very intense territorial dynamics of transformation, which mean that it needs special protection.



Picture 67. Fields of carob trees near Roda de Berà.

Landscape of the Battle of the Ebre (Terres de l'Ebre)

The Battle of the Ebre took place between the 25th of July and the 16th of November 1938 in the context of the Spanish Civil War (1936-1939). The place where the two armies (Republican and Francoist) confronted each other in the area of the Ebre River has left numerous architectural remains (trenches, foxholes, case-mates, refuges, etc.) and archaeological remains and memories for the inhabitants of this place, meaning that this landscape is becoming increasingly integrated into the collective imagination of the population of the Terres de l'Ebre.




Picture 68. The trenches of the Barrancs, in the municipality of Vilalba dels Arcs, are one of the historic spaces recovered by the Memorial Consortium of Spaces of the Battle of the Ebre.

15. Texts extracted from the landscape catalogues.


4.6.1. Cartography


The cartography consists of a DIN-A0 map of the entire area with the delimitation of the special attention landscapes. In some catalogues, specific DIN-A3 maps are enclosed of each special attention landscape which identify the most significant elements and spaces. The Landscape Catalogue of the Regió Metropolitana de Barcelona is an example of this.


Visual Reference Landscapes

 Treatment of scenic backdrops (SNU)


Recovery of degraded areas:


 Restoration of stone quarry and its environment


 Regularisation and landscape integration of buildings on land without planning permission

 Treatment of irregular vegetable gardens


Treatment of plant cover:

 Favouring riverside plant life


 Recovering scrub and garrigue

 Reforesting

El Congost landscape


 Conditioning the potential fluvial area

Conditioning the urban environments:

 Preparation of leisure time areas on urban limits


 Recovery of interstice areas as leisure time areas

Conservation of unique agricultural pieces:

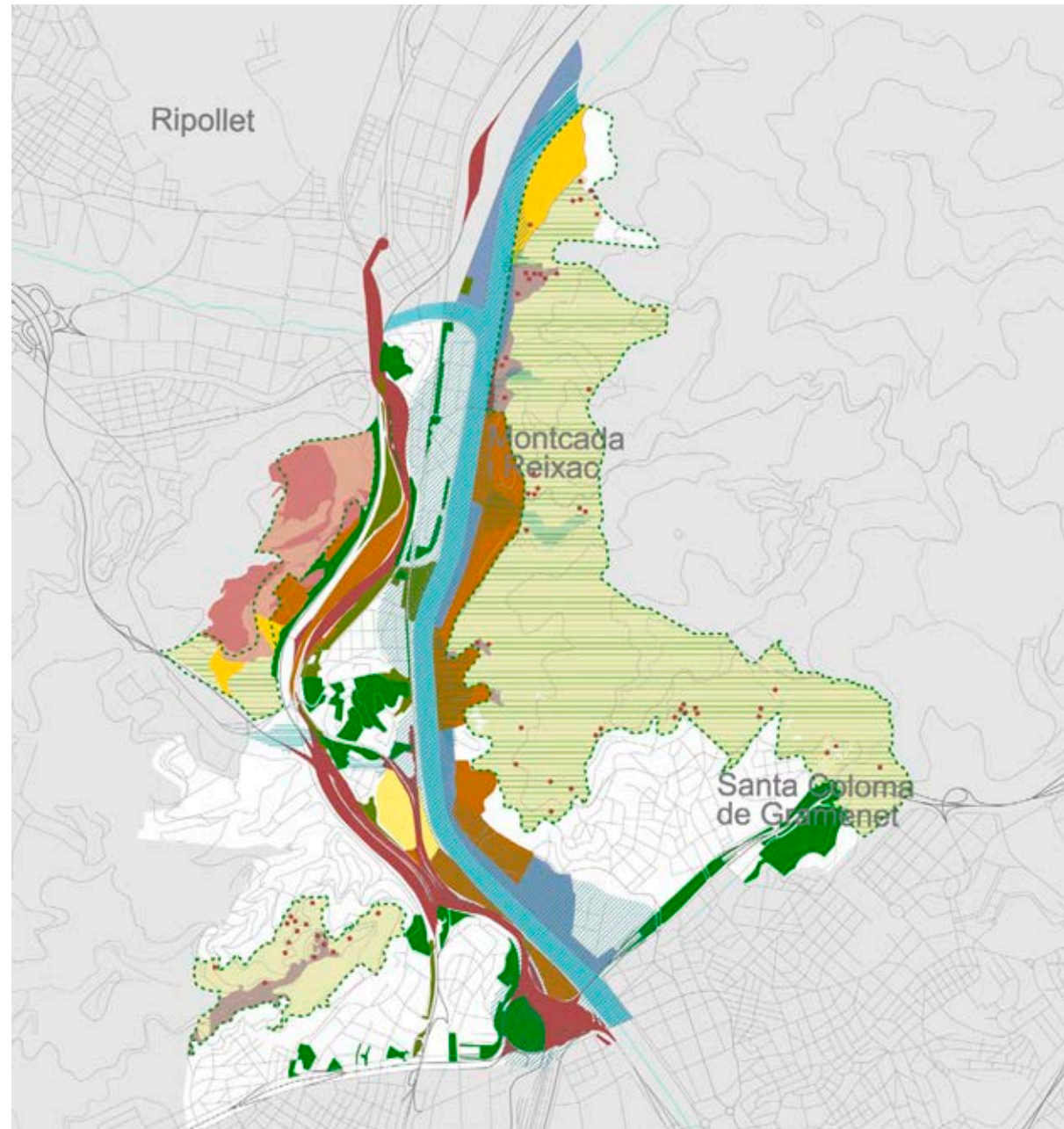
 Vegetable garden of La Ponderosa

Landscape integration of communication roads

Treatment of residual and interstice areas:

 Revegetation of banks and bare areas

 Integration of facilities



Map 24. Fragment of the map corresponding to the Special Attention Landscape of the Montcada Gorge.

Strategy and associated proposals by the Special Attention Landscape of Montcada (Landscape Catalogue of the Regió Metropolitana de Barcelona)

Strategy: To restore and favour the dominant landscapes that act as a limit, a visual reference and a scenic backdrop to the gorge

The area going through it is clearly delimited by the Serra de Marina on the north-east side and the Serra de Collserola on the south-west side. Although they are landscapes with well-known values, they have been affected by the diverse dynamics of transformation previously mentioned, particularly in the slopes closest to the corridor.

On rustic land and land that is not designated for development, actions are proposed aimed at restoring the areas degraded due to activities or illegal building or with a notable associated impact. In this case, we refer to:

- The stone quarry on the Turó de Montcada.
- The illegal vegetable gardens near Can Cuiàs and in Sant Pere de Reixac.
- Areas with isolated illegal and/or marginal buildings.

The recovery of the potential plant life and the improvement of the existing plant communities is also proposed, particularly in areas with a risk of erosion:

- Riverside vegetation along the small torrents.
- Coniferous forests, of Aleppo pine and stone pine, as an improvement to the landscape image, with reasonable density, in keeping with the proximity to constructed spaces and the gradient.
- Scrub and garrigue, to stabilise the land in these places of light sandy soil or other situations in which trees are not ideal due to the risk posed to installations and houses.

Finally, the limits between land that is not designated for development and land that is urban or designated for development need to be drawn, ensuring the continuity of open spaces and the contention/restriction of uses or buildings on rustic land, as well as the suitable treatment and management of the plant life with a view to minimising the risk of the impact of any wildfires. All the installations or buildings found on urban land in the foothills of the mountain ranges should have a landscape integration project.

Proposals:

- To draw up a restoration project for the stone quarry on the Turó de Montcada, establishing phases of action that go beyond merely closing down the activity.
- To prepare a project to reforest the slopes that delimit the gorge, in keeping with the management of the Network of Natural Parks of the Regional Council and of the protected open spaces of Collserola and Serra de Marina.
- To envisage a programme of landscape integration actions on the communication channels, as well as the urban fronts and other isolated buildings on rustic land (detached houses). In the case of the urban fronts, priority is giving to organising the facade and the fabric of the Torre Baró neighbourhood and nearby areas, based on public open space projects or landscaped areas.
- To envisage a programme of landscape integration actions on the installations and infrastructures with high visual impact, previously defining the priority areas to be dealt with. In any case, new introductions of infrastructures or installations that have an impact on the area should be restricted.
- To promote local initiatives addressed at the environmental and landscape treatment of the area of the Besòs River and affluents, in keeping with the measures adopted in the environmental recovery of the final stretch of the river.
- To prepare a catalogue of rural and historic heritage of landscape interest existing in the area: the Rec Comtal Canal, farmhouses (*masies*), agricultural areas (La Ponderosa), etc., defining measures to protect and manage with respect to their context with the aim of preventing their degradation or disappearance.
- To recover agricultural plots that are in a state of degradation. Priority will be given to the landscape conditioning of illegal vegetable gardens and the provision and management of urban vegetable gardens in abandoned plots facing nuclei.
- To qualify the residual and/or marginal spaces that are in continuity with existing green areas or places between a fast road and a nucleus as systems of free spaces.
- To set up measures to restore the bare and/or eroded zones around mobility infrastructures, using environmental and landscape criteria.

5. From characterisation to action: landscape quality objectives, criteria and actions

The following development phase of the catalogues consists of defining the landscape quality objectives. The main challenge of this phase is to equip citizens and landscape stakeholders with the means to express their aspirations and wishes with respect to the landscape. Once the landscape quality objectives are formulated, the catalogues lay down a long list of criteria (or measures, to use the terminology of the Landscape Act) and actions to meet the previously defined landscape quality objectives.

In developing the landscape catalogues, a clear conceptual diagram of the formulation levels of the landscape quality objectives has been formalised, in addition to the criteria and actions (figure 17). This approach has produced a correspondence of scales with the partial territorial plans in order for the planning system (see Chapter 2) to remain coherent. The importance of this relationship lies in the fact that some generic, as well as specific, landscape directives have been adopted that are based on some of the landscape quality objectives for the entire Catalan territory and take the idiosyncrasies of the landscape of each territorial area and landscape unit into account).

This phase of the catalogue is particularly crucial because, as the Landscape Act states, both the landscape quality objectives and the proposal for criteria and ac-

tions (see Chapter 2) must mainly serve to define the landscape directives (see Chapter 2) that the Ministry of the Territory and Sustainability must set out for inclusion as regulations in the territorial and urban planning.

5.1. What the landscape quality objectives are

Article 6 of the European Landscape Convention urges the different European societies to set out some landscape quality objectives, which are defined in article 1 as “the formulation by the competent public authorities of the aspirations of the public with regard to the landscape features of their surroundings”. As a meeting point between citizens’ aspirations, expert opinion and public policies regarding the landscape, the landscape quality objectives, after an intense consultation and public participation process, reliably depict the greatest challenge a society can set itself in terms

of improving its landscapes. Therefore, the landscape quality objectives have a strategic aspect and they mark a path towards a new culture for territorial management and planning that demands enormous sensitivity to the landscape by all the intervening stakeholders and society in general.

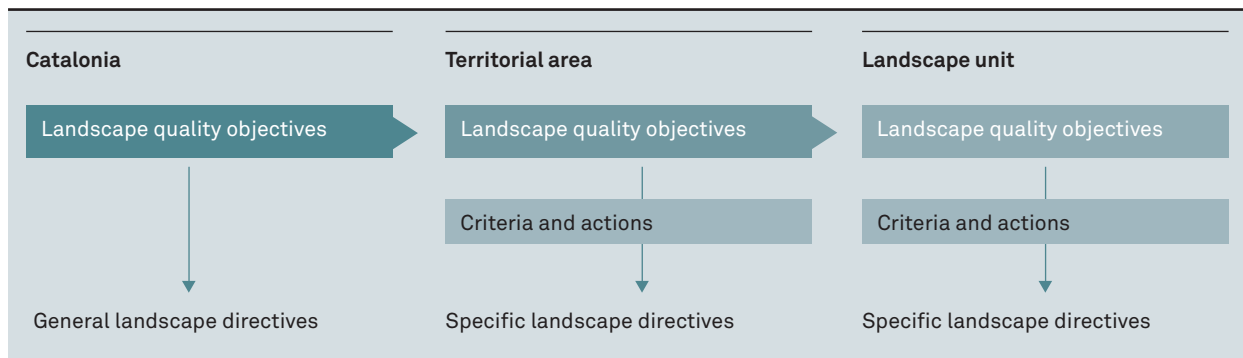
The landscape quality objectives are, therefore, a society’s statement of its landscape preferences once its state is known and the valuation of the specific reality of each territory, values and dynamics. Thus, the objectives are formulated from knowledge about the character of the landscape (see Chapter 3), its values (see Chapter 4), its dynamics (see Chapter 4.3) and the SWOT analysis (see Chapter 4.3). In other words, the objectives become a first order reference for land and sectoral policies, organisations and society in general to continue evolving towards a territory with better landscapes that have positive effects on citizens’ quality of life.

The landscape quality objectives answer the simple yet endlessly complex question, “What landscape do we want for the future?”. The same question verifies that the definition of the landscape quality objectives cannot be based solely on the opinion of specialists who are in possession of merely subjective knowledge. The landscape quality objectives must also reflect citizens’ aspirations and wishes, beginning with their perception (see section 5.4).

The landscape quality objectives should be taken into consideration when formulating the directives of the partial territorial plans, the urban plans and other local plans, landscape charters, special plans, protection figures and acquisition of public land and heritage policies, etc.

Beyond the influence they have on territorial, urban and sectoral planning instruments, and for all kinds of municipal and supramunicipal initiatives, the landscape quality objectives also have a strong pedagogical

Figure 17. Formulation diagram of the landscape quality objectives, the criteria, actions and landscape directives according to scale.



component, in addition to the task of increasing citizen awareness about the landscape. They must act as a guide and a reference framework not only for all levels of public administration, but also for the general public, in both the area generally understood to be civil society as well as the individual himself. To this end, the contributions made by the social, economic and academic organisations of each territory towards the protection, management and planning of the landscape have been taken into account.

5.1.1. Landscape quality objectives in Catalonia

From the long and varied list of landscape quality objectives set out in the seven landscape catalogues, ten emerge for both the seven regions and for each landscape unit that refer to aspects which are common to most of Catalonia. These are the landscape quality objectives for Catalonia. The Landscape Observatory of Catalonia has collated these common desires for Catalan landscapes and made them the basis of some of the general landscape quality objectives for all of Catalonia.

The landscape quality objectives for Catalonia have a strategic aspect. It is not a plan of actions to improve the landscapes of Catalonia. Neither are some of the objectives presented achievable only through compliance with specific regulations, drawing up a list of actions or managing a specific territory in a certain way. For many of them, what is needed is progress towards a new culture for land management and planning that requires enormous sensitivity to the landscape by all of the intervening stakeholders and society in general.

The landscape quality objectives for Catalonia aspire to becoming a veritable transversal and agreed reference that assists the Government of Catalonia and its sectorial policies, as well as public administrations, organisations and society in general in their task of continuing to carve a path towards a region with better quality landscapes and a global vision which, in the long

General landscape quality objectives for Catalonia.

1. Well preserved, planned and managed landscapes, independently of their type (urban, suburban, rural or natural) and their character.
2. Lively and dynamic landscapes – those existing and those newly created by intervention – capable of absorbing the inevitable territorial transformations without losing their individuality.
3. Heterogeneous landscapes, reflecting the rich diversity of Catalan landscape and avoiding homogenisation.
4. Orderly and harmonious landscapes, avoiding disruption and fragmentation.
5. Unique landscapes, anything but mundane.
6. Landscapes which retain and reinforce their references and values, both tangible and intangible (ecological, historical, aesthetic, social use, productive, symbolic and identity-based).
7. Landscapes which are always respectful of the legacy of the past.
8. Landscapes which transmit tranquility, free of dissonant elements, discordant sounds and light or odour pollution.
9. Landscapes which can be enjoyed without endangering their heritage and individuality.
10. Landscapes which take social diversity into account and contribute to the individual and social welfare of the population.

term, have a positive effect on citizens' quality of life. The European Landscape Convention states as much: "the landscape is an important part of the quality of life for people everywhere: in urban areas and in the countryside, in degraded areas as well as in areas of high quality, in areas recognised as being of outstanding beauty as well as everyday areas (Council of Europe, 2000: preamble).



Picture 69. The landscape quality objectives of Catalonia refer to aspects that are common to most of Catalonia.

5.1.2. Landscape quality objectives for a territorial area

The objectives formulated for an entire territorial area consider the aspects related to landscape that are most significant for the whole territory or that are applicable to more than one landscape unit, all in cohesion with the general landscape quality objectives set out by the Landscape Observatory for all of Catalonia.

These types of objectives are described in detail when rendered into the technical document, specifying wherever possible the spaces and elements that require particular consideration. They are accompanied by a photograph in positive terms to facilitate the understanding of each objective.

EXAMPLE OF THE **LANDSCAPE QUALITY OBJECTIVES** (Landscape Catalogue of the Terres de l'Ebre)

1. Urban sites with ordered growth that respects their singularity, with clear boundaries and sized in accordance with their real needs, which do not compromise the agrarian character of the surrounding spaces.
2. Neat residential areas equipped with landscape quality elements.
3. Integrally managed coastal landscapes with interventions designed to improve their quality and provide them with new identities and at the same time making them more accessible for social use, while respecting their natural and aesthetic value.
4. Well-conserved natural landscapes with landscape quality that balances crop and livestock farming, natural resource extraction, tourism and leisure pursuits.
5. Scattered sites with isolated constructions (farmhouses, agricultural stores, farms, tool sheds, etc.) linked to the feasibility of agrarian exploitations.
6. Linear infrastructure (road and rail networks, gas and power lines, etc.) that is integrated with the landscape and does not compromise the landscape and social continuity of the territory.
7. More ordered peri-urban spaces that bring new elements of interest to the landscape and contribute to improving the access routes to urban centres.
8. Specialist areas (industrial, logistic, commercial, energy production, treatment plants, waste disposal, etc.) located in non-preferential or little-known visual zones and designed (or redesigned) taking the treatment of façades and building typologies into account.
9. Wind farms and solar parks contemplated on a regional scale and placed in harmony with the elements of the landscape.
10. Quality scenic backdrops that conserve the characteristic visual elements that identify the Terres de l'Ebre.
11. A network of viewpoints and countryside itineraries that draw attention to the most important scenic views and provide opportunities for interaction with the diversity and nuances of the different landscapes of the Terres de l'Ebre.
12. Landscapes of the fluvial, urban and natural surroundings of the Ebre River, the rest of the Terres de l'Ebre rivers and the ravines and streams that conserve their values and are accessible for respectful leisure activities.
13. An Ebre Delta landscape linked to the conservation, management and revaluation of rice crops, the network of paths, canals and ditches and the architectonic heritage, in addition to the other natural, historic, aesthetic and symbolic values of this space.
14. A landscape made up of dry stone and agroforestry and agrarian mosaics that are productive and conserved as aesthetic points of reference that identify the Terres de l'Ebre.
15. Architecture linked to dryland and traditional irrigation farming and defensive and religious constructions, which gives them content and a territorial and landscape significance.



Picture 70. The need to have organised urbanisations equipped with landscape quality elements is reason for the landscape quality object 2 of the Landscape Catalogue of the Terres de l'Ebre.

5.1.3. Landscape quality objectives of landscape units

The landscape quality objectives of the landscape units are formulated by first selecting the most important general objectives for each landscape unit and then contemplating the specificities and landscape characteristic (both positive and negative) peculiar to each landscape unit, adding toponymical references to specify as accurately as possible the spaces included in each landscape quality objective. They are also in coherence with the landscape quality objectives set out for the whole territorial area and for Catalonia and, where possible, a short, clear, succinct statement in accordance with the territory attempts to explain them. In some cases, a brief explanation is also included to illustrate the point.

EXAMPLE

Landscape quality objectives of the landscape unit Litoral del Baix Ebre (Landscape Catalogue of the Terres de l'Ebre)

17.1. A quality coastal façade, where natural and cultural heritage elements are integrated with new constructions that facilitate the social use and enjoyment to be gained from the landscape.

This landscape unit includes a strip of coastline that is relatively narrow as a result of the infrastructures that run from north to south and which harbours much of the natural, historic and social use value, despite the large number of buildings that have sprung up there over the last few decades. The ecological importance of the gullies and streams, particularly the Sant Jordi Gully and the gullies of the Pi and Estany torrents must be highlighted. The ecological importance of the Open Space of Natural Interest of Cap de Santes Creus must also be pointed out. Furthermore, the remains of historical heritage constructions can still be found along this coastal façade. Even though this zone has much else to offer, the Baix Ebre coastline from Ampolla to Calafat is still very much linked to sun and sand tourism.



Picture 72. The correct management of the agroforestry landscape of the interior of the Litoral del Baix Ebre justifies objective 17.2.

17.2. A coastal plain agroforestry landscape that conserves its rural character, remains on the fringes of new constructions and installations and serves as a space for social use with a network of paths to maximise enjoyment.

This coastal plain is characterised by many aesthetically important agricultural spaces. There are olive and carob tree groves which, along with the orography of the terrain which is characterised by an abundance of ravines and elements of dry stone rural heritage, form very harmonious visual ensembles that must be conserved. The farmhouses (*masies*) and traditional houses that remain must also be highlighted. The agroforestry mosaics of olive and carob tree groves. Aleppo pine woods and Mediterranean undergrowth can be found along the entire length of the western part from the AP-7 motorway. These mosaics act as a landscape transition zone between the more forested spaces to the extreme west of the unit and the urbanised coastal spaces in the more central part.

17.3. An area of large communications infrastructures (AP-7, N-340 and rail networks), urban centres and residential areas, which are well-managed and with carefully treated landscape façades.

Along the Baix Ebre coastline, enormous spaces, such as the Tres Cales and Calafat sector, the area north of Ametlla de Mar; Port de l'Estany and Roques Daurades, and in the south of the same municipality Oliveres, Perelló and the area from Cap Roig to Ampolla, are occupied by residential areas. The growth of new residential areas in coastal spaces that are as yet unoccupied could cause landscape homogenisation and the subsequent loss of diversity and landscape quality.

5.2. Criteria and actions

Once the landscape quality objectives are established, all of the criteria and specific actions that the competent public administrations and citizens must carry out to meet these objectives must be set out. These criteria and actions are especially directed at land, urban and sectorial policies (tourism, agriculture, culture, nature conservation, etc.) In neither case is this an exhaustive list of criteria and actions, due to the fact that meeting the landscape quality objective often depends on dynamics that do not fall within the area of action of the landscape catalogues.

In practice, the aim of the criteria and actions proposal is to translate the landscape quality objectives into guidelines, directives, recommendations and projects that allow them to be met. Based on the values that inhabitants attribute to the landscapes and citizen dynamics and participation, the proposals aim to improve landscapes in the wider sense; in other words, they go beyond direct intervention in a space to also include a strong pedagogical and citizen awareness component.

The criteria and actions included in the catalogues, therefore, have the following characteristics:

- They combine the collective perception of the landscape (obtained from the results of consultation and participatory processes) and ethical and technical factors determined by the work team and based on general interest.
- They go beyond conservation proposals and they harmonise future actions, emphasising the most important landscape elements, forms and characteristics of each landscape unit (based on the character of the landscape).
- They emerge from the values, dynamics and challenges identified in the landscapes of Catalonia.

- They are directed at both land and sectorial policies and at all levels of public administration and society.
- They aspire to having a strong pedagogical and citizen awareness component.
- They emphasise the key elements to be taken into account in land and urban planning and in granting licenses for land not designated for development (they serve as the basis for impact and landscape integration reports).
- They constitute the working framework to explain the agreements reached in the landscape charters and to define the proposals for other municipal and supramunicipal initiatives (landscape strategies, landscape planning, etc.).

The criteria and actions are formulated for each of the territorial areas of Catalonia and for each landscape unit identified in the catalogues, in coherence with and complementing each other.

5.2.1. Criteria and actions of territorial areas

The proposal for criteria and actions for a specific territorial area is formulated by determining which aspects related to the landscape are most significant for the whole territory and are applicable to more than one landscape unit.

The proposal is divided into criteria and actions, but special emphasis is placed on the criteria section because the main aim of the catalogues is to make recommendations for land, urban and sectorial policies. Some actions, however, are also defined that are considered indispensable for meeting the landscape quality objectives.

Criteria

The criteria are general measures, recommendations and aspects to be taken into account that contribute to meeting the territorial area landscape quality objectives. Apart from making recommendations about good landscape management and planning, they also make detailed proposals directed at land and urban planning instruments and at sectorial strategies carried out by the municipalities, the county councils, the regional councils and the Generalitat itself, as well as other institutions and organisations of all kinds.

Actions

The actions correspond to interventions, projects and initiatives which, following the previously established criteria, also help the landscape quality objectives defined to be met. They detail specific sectors and areas of action and they specify which stakeholders promote or should promote each action.

Also included at the end of the chapter are transversal criteria and actions that go beyond the landscape quality objectives of the area as a whole.

Example of the criteria and actions of the landscape quality objectives of the territorial area (Landscape Catalogue of the Terres de l’Ebre)

Objective 5 Disseminated sites with isolated construction (farmhouses, agricultural stores, farms, tool sheds, etc.) linked to the feasibility of agrarian exploitations

Criteria

- To guarantee that on agricultural land that is specially protected because of its landscape or agrarian value, the partial territorial plan only allows new buildings linked to agriculture to be constructed.
- To restrict the location of rural constructions in prominent places such as the highest summits and peaks of the territory, where the projection of the silhouette of the building on the line of the horizon modifies the perceptible natural profile of the landscape, or in highly fragile or visually exposed places that are identified in the catalogue. Another important variable in deciding to locate buildings on agricultural land is how it is perceived from the network of roads, paths and viewpoints: the sensation of nearness or distance that it creates, its proportions and position in relation to other elements of the agrarian landscape, such as the vegetation and the shape and size of inclines and fences, among others.
- All projects for isolated buildings, constructions and installations should be submitted to an impact and landscape integration report.
- To guarantee the establishment of isolated constructions that comply with the models and building typologies typical of the zone, without simply banally repeating architectonic models.

- The constructions used for housing in the Terres de l’Ebre on land not designated for development must be understood to be an opportunity for landscape management, especially where agrarian activity is on the decrease. In the harmonious crops and singular agrarian crops only residential buildings linked to agrarian exploitations and its support are permitted. Exceptionally, permission to construct public facilities and rural and landscape interpretation centres, paradors and rural tourism houses will be given. These projects must respect traditional style with regard to material, colour and the height of the buildings, which is related to the height of the agrarian landscapes with tree crops, and is established as the height of these crops.

Some criteria that affect structural elements of the landscape and must be taken into account are:

- Network of paths: to ensure they are maintained and improved, balancing agrarian and public uses. New paths must not be opened unless they are justified by reasons linked to the feasibility of agrarian exploitations, and then they must respect the topography and parcelling structure of the space. Artificial treatment of the surface of the land must be avoided.
- Natural drainage network and drainage ditches: to ensure they are maintained and improved, balancing agrarian and public uses. In the case of hydraulic works (mills, diversion dams, sluice gates, irrigation canals and bridges) it is recommended that they be inventoried and included in the Municipal Urban Planning catalogues as protected property. New canals must not be opened unless they are justified by reasons linked to the feasibility of traditional agrarian exploitations, and then they must respect the topography and parcelling structure of the place.

- Topographic separations made of vegetation and fences between crops and parcels: to ensure they are maintained and improved. The materials and/or plant life of the place must be respected if new fences are constructed.
- Parcelling structure: to ensure they are maintained and to avoid intensive fragmentation or concentration processes. Reparcelling must be avoided, except where justified by reasons linked to the feasibility of traditional agrarian exploitations, and then the natural hydraulic network and the network of paths must be respected. Earth movements must be minimised in order to prevent topographic modification and the elimination of vegetation; the boundaries of the pre-existing parcelling structure must be respected and no artificial treatment of the boundaries must be introduced that does not comply with traditional architectonic typologies.
- Dry stone constructions and buildings: to ensure they are maintained and improved and an inventory made of them for inclusion in the Municipal Urban Planning catalogues as protected property. New constructions must not be built unless they are justified by reasons linked to the feasibility of agrarian exploitations, and then they must be used as housing or support for these activities. In this case, they must be located and built in harmony with the materials and tones of the dry stone of the zone.
- To prioritise the strategy of harmonisation for new projects for isolated constructions: in other words, to integrate the element into the landscape with a positive, or at least a neutral, result with regards to the quality of this landscape. The strategies of mimicry and concealment are advisable where an acceptable degree of harmonisation cannot be achieved. Exceptionally, the strategy of monumentalising can be an

option where the high formal quality and singularity of the new element to be built and/or its social significance mean it will become a principal component of the landscape.

- To avoid highly sloping areas in the case of all interventions. Where levelling the ground is unavoidable, earth retaining walls must not be built and land unevenness must be redressed with earth removals or talus slopes that encourage revegetation. In order to minimise their visual impact, buildings must be tiered or comprised of different simple articulated elements, avoiding the creation of large horizontal platforms with obvious differences in the highest points of the two extremes between the natural and the modified terrains.
- To create natural screens made of vegetation, especially trees, using species and plantations typically found in the zone, in addition to isolated trees as a traditional accompanying element, in order to facilitate the buildings' integration into the landscape.
- The previous criteria should be applied where necessary to improve the landscape integration of existing buildings on land that is not designated for development. It is recommended that the landscape suitability of the installations associated with agrarian exploitations should be promoted (stores, farms, sheds for machinery, silos, deposits, etc.).
- To establish regulatory parameters for building on land that is not designated for development in the special urban landscape plans and other urban planning instruments, especially for those occasioned by agrarian and livestock activities. The parameters must be coherent with the agrarian and landscape patterns defined in landscape quality objective 14, which in each case is derived from the existing network of paths, the irrigation system, the topography, the type of crops (herbaceous or arboreal), the natural vegetation and the constructions (farmhouses, sheds, hermitages, defence towers, etc.).

- To prioritise reusing or renovating existing buildings for use as public facilities, paradors, rural tourism houses and rural, natural or landscape interpretation centres. Furthermore, attempts must be made to locate them near to population centres and to concentrate them at strategic points to guarantee that the landscape is minimally impacted.
- To ensure that catalogues of farmhouses (*masies*) and rural houses are produced as Municipal Urban Planning documentation or as special urban plans, in accordance with article 69 of the Urban Planning Act.

Actions

- To develop urban planning instruments and appropriate urban actions that aim to regulate the construction of housing on rustic land on the understanding that this is a peculiarity in part of the territory of the Terres de l'Ebre, as well as an opportunity for landscape management, especially where agrarian activity is decreasing. This peculiarity is especially manifest in the Delta de l'Ebre, the fluvial terraces of the Ebre River, in Vessants de Tivenys-Coll de l'Alba, along the Litoral del Baix Ebre coast and in Burgans. The possibility of allowing these sites could be studied by establishing density criteria according to traditional patterns and incorporating landscape In-

tegration measures in accordance with the building typologies specific for each landscape unit.

- To regulate the installations associated with agrarian exploitations (stores, farms, sheds for machinery, silos, deposits, etc.) and to avoid voluminous constructions when modifying the landscape, encouraging the use of simple typologies and suitable materials with correctly finished constructions and ordered surroundings. This process should take place in parallel with awareness-creation campaigns for the agricultural sector to ensure that the exterior surfaces and sheds of the buildings located on land not designated for development are well-finished and that the owners maintain them aesthetically and in an adequate state of repair.
- To include an annex in the section on regulations for land not designated for development in the Municipal Urban Planning catalogues for new constructions and for extending and renovating buildings that includes the directives of the urban plans reflected in the two previous actions.
- To compile an inventory of the principle constructions on land not designated for development in the Terres de l'Ebre that are no longer in use and have low landscape quality and to specify a new use for each construction (elimination, different ways of reuse, etc.).



Picture 72. The criteria and actions provide guidelines to be able to achieve the landscape quality objectives. The good integration of the isolated constructions plays a leading role in the perception of the clearness of the Terres de l'Ebre landscape.

Example of transversal criteria and actions of the Landscape Catalogue of the Terres de l'Ebre

- To promote the creation of supramunicipal consortiums to assist the different public administrations in reaching agreements on shared measures and actions and to establish joint management mechanisms.
- To develop instruments that allow agreements to be made and consensus to be reached on matters related to the management, planning and protection of the landscape on the part of the different intervening agents in the Terres de l'Ebre (political, economic and social). The landscape charters are an example of the instruments that must be developed.
- To guarantee appropriate mechanisms for citizen participation in future decisions that affect the landscape, as a way of recognising their landscapes. To this end, procedures must be established (surveys, debate forums, etc.) to encourage the population to actively participate. These participation mechanisms should include the presentation of infographic visual information and modelling techniques to facilitate understanding.
- To incorporate the evaluation of intangible landscape elements (symbolic, identity-giving, etc.) into participation procedures on a local scale, as often these elements are more immediately visible to the inhabitants of a territory and its visitors. This evaluation must be promoted to increase identification between these elements and the territory.
- To promote education in landscape values among the population of the Terres de l'Ebre as a way of increasing awareness about the need for landscape

management, planning and protection. It is very important that a society learns to get to know its landscapes and its defining features, to give them greater importance and to recognise when these values may be in danger.

- To protect and give greater importance to the intangible heritage linked to the landscape (traditional techniques for working the land, stories, songs, landscape painting, etc.), which have contributed to the identity of the landscapes.
- To initiate active management of the non-visual landscape, such as the acoustic landscape, and to identify the non-visual characteristics of the landscape (for example, the sound of church bells in zones where the historical Christian dimension forms part of the character of the landscape).

Picture 73. Training and creating awareness in landscape matters is one of the aspects that the transversal criteria of the catalogues deal with.



5.2.2. Criteria and actions of landscape units

The proposal for criteria and actions to meet the landscape quality objectives of the landscape units is developed by first selecting the most important general criteria and actions in each landscape unit and then considering the specific character of each of the landscapes, contributing toponymical references to specify more precisely the places that each criteria or action covers. This proposal is divided into three groups according to whether the proposal is directed mainly at protection, management or planning, in line with the principles of the European Landscape Convention:

Those directed at protection: Actions designed to conserve and maintain the distinguishing characteristics of a landscape and that are justified by their heritage, environmental and economic value, which is either inherent or the consequence of human intervention.

Those directed at management: Actions designed to guide and harmonise the transformations brought about by social, economic and environmental processes.

Those directed at planning: Actions aimed at evaluating, restoring and creating landscapes.

As with the criteria and actions of the territorial area, those of the landscape units must also be more effective.

Criteria and actions of the landscape unit of Estany de Banyoles (Landscape Catalogue of the Comarques Gironines)

Proposals for criteria and actions directed mainly at protection

- The Municipal Urban Planning of the municipalities of this landscape unit should apply measures to protect the land in the following spaces of natural interest: the alluvial plains of the high course of the Fluvià river, Terraprim d'Empordà, the valley of the Ser River, the alluvial plains of the Fluvià River, the Martís de Centenys Plain, the valley of the Rodeja River, the Usall Plain, the alluvial plains of Garrumbert, Terri, Revardit and Remença, the hills of Miànigues, the mountains of Rocacorba and the mountains of Els Sants Metges.
- To include the system of irrigation canals and distribution ditches of the waters of Banyoles Lake in the Municipal Urban Planning property catalogues or other municipal protection systems.

Proposals for criteria and actions directed mainly at management

- To maintain and nurture the vegetation native to the fluvial environment in contact zones with natural reserves and singular zones. To consider the fluvial environments of Estany de Banyoles to be connector zones between the Rocacorba and Plana de l'Empordà units.
- To promote the control and definition of forest zones to reduce the risk of wild fires. To this end, to initiate forest management programmes with herbivores (donkeys, goats, etc.) to manage the forest undergrowth. Productive activities associated with forestry exploitation must also be promoted.
- To initiate a study of the entire historical system of hydraulic canals and infrastructures to evaluate their state of conservation and progressive deterioration in places where agricultural activity is in the process of disappearing. The aim will be to emphasise the importance of this system on the development of the irrigated landscape, to minimise its disappearance from the structural character of the landscape and to preserve its image and maintain the identity of these agricultural landscapes. At the same time, the image of the historical system of water canals and infrastructure must be reinforced as a symbol of identity of the Estany de Banyoles unit by diffusing its values and providing suitable mechanisms for its discovery. The system of irrigation canals must therefore be maintained and preserved as an element of landscape value and singularity of the allotments of Banyoles. The preservation and promotion of horticulture will help to conserve and maintain the entire network of ditches and canals as a common interest property.
- To allocate funds to recover the architectonic elements related to the river (mills, irrigation canals, diversion dams etc.) in order to recover their social and historic value. They must be incorporated into the routes and itineraries linked to the fluvial system as basic elements in the development of current landscapes.
- To conserve the heritage value of the territory's historically important roads, such as the GI-513 between Banyoles and Orriols, the GIV-5132 between Banyoles and Galliners and the GI-524 between Banyoles and Olot passing through Santa Pau, and to equip them with viewpoints that draw attention to the most interesting landscape elements and limit the volume and speed of traffic.
- To avoid, where possible, physical, visual and social fragmentation in the landscapes of the linear infrastructures of the high-speed train and the C-66 so that their growth does not create spaces that are not suitable for current uses.
- To initiate the compilation of impact and landscape integration reports for all new road infrastructure proposals. First, to carry out these studies for the road infrastructure projects that affect the C-66.
- To promote the sectors through active agricultural production, such as in the area around Banyoles Lake and on the Martís Plain, preventing their abandonment and regulating crop substitutions and the amount of agricultural land designated for crops with subsidies, as in the case of sunflowers.
- To maintain and reinforce the plantation structures around Banyoles Lake as associative and defining elements of the image of the lake.

Proposals for criteria and actions directed mainly at planning

- To ensure that the urban sites in the unit are concentrated in the same zone (Banyoles, Cornellà del Terri, Fontcoberta, Serinyà, Camós, Porqueres and local neighbourhoods) and to prevent the appearance of discontinuous edifications that fragment the landscape. To also establish clear, quality boundaries between these urban spaces and the agricultural and natural spaces on the peripheries and to prevent activities and installations that are unsuitable for agricultural land from being located there in order to preserve their quality. At the same time, the degradation of these boundaries must be prevented and transition strips created where necessary, especially in sites located near the C-66 road (Cornellà del Terri, La Banyeta, La Beguda, Pontxetmar, Banyoles, Melianta and Serinyà).
- To ensure the landscape integration of new plots of land and buildings for the industrial and tertiary sectors and also control existing ones, which are largely located along the C-66 and along the access route to Banyoles via the C-150a.
- To establish landscape integration criteria for periurban spaces, preventing new extensions of land from modifying traditional urban figures, profiles and scenes and the proliferation of “shop-window” roads.
- To restore degraded natural riverside environments using native vegetable species. To also establish action criteria for the perimeter of Banyoles Lake and the other small lakes in accordance with predominant structural elements, such as the rows of trees and the water ditches and canals.
- Because of their landscape value, already planned urban developments will be dealt with in a specific way in the municipalities that have a historical system of canals and hydraulic infrastructures. In these cases, possible new extensions will alternate harmoniously with pre-existing structures and will respect their singularity and/or will be integrated as a central element of the urban structure and the system of open spaces. To this end, the actions must be carried out in accordance with the guidelines for pre-existing agrarian landscapes, conserving the civil and landscape architectonic heritage linked to the canals and hydraulic infrastructures and, where possible, respecting their functional continuity. They must remain visible and be given suitable landscape treatment.
- To ensure that the allotments around Banyoles and those within the urban area are conserved, paying special attention to the allotments of Sota Monestir to make sure they are well-integrated and that the materials they are made of respect the elements of the natural environment and comply with the landscape values of the surroundings. To also ensure that this productive activity directed at own consumption can coexist with social, recreational and educational activities.
- To remain free of new elements that are alien to the scenic backdrops of high landscape value that are Rocacorba and Alta Garrotxa (principally Bassegoda and Mare de Déu del Mont) in the areas that are visible from the lake, and to foment their protection as visible zones that lend character to the landscape.
- To promote a network of landscape itineraries and viewpoints that can be accessed on foot or by car, where perception is heightened and interaction with the landscape is more intense. This network, which includes existing viewpoints and paths as well as others yet to be consolidated, should receive the actions needed to recondition, signpost and conserve them, in addition to disseminating information about them in order to promote perception of the landscape values and knowledge of the territory. They are the viewpoints of the Sant Martirià hill and the landscape itineraries of GR-1 for walking and cycling: Banyoles-Les Estunes, Cornellà del Terri-Camós, Banyoles-Rocacorba and Pujals dels Pagesos-Vilavenut-Esponellà, in addition to the motorised itineraries of Banyoles-Esponellà, Banyoles Lake and Cornellà del Terri-Borgonyà.



Picture 74. The path that goes round Banyoles Lake is one of the itineraries that needs to be maintained in good condition.

5.3. Public participation in defining the landscape quality objectives, criteria and actions

The landscape quality objectives were formulated after gathering together the opinions of both citizens and the principal social and economic stakeholders present in each category (obtained from the results of consultation and participation processes) with ethical and technical considerations determined by the work team and based on general interest. Of the different participation tools used, the workshops with experts, the workshops with stakeholders and web consultation were the most useful in defining the landscape quality objectives. However, other mechanisms, such as the open workshops and group discussions—tools that are more oriented towards characterisation and evaluation of the landscape—also made useful contributions (see Chapter 2).

Therefore, due to its complexity and technical component, citizen participation in establishing action criteria and proposals played a rather less important role here than in the other catalogue development phases. Nevertheless, participation processes linked to establishing criteria and actions were carried out, although the tasks for non-experts in this subject had to be simplified.

Even though the main objective of citizen participation was not for participants to define, agree upon and specify the landscape quality objectives due to the technical difficulty inherent in this task, some participatory mechanisms did manage to reach a certain consensus on specific objectives and these were compiled by the editorial teams of the catalogues. A good example are the workshops with landscape stakeholders from the Regió Metropolitana de Barcelona. If the objectives resulting from these workshops are compared with the general quality objectives provisionally proposed by

the editorial team for the Landscape Catalogue of the Regió Metropolitana de Barcelona, the direct influence of the first upon the second can be seen. For example, the workshops talked about the need “for more compact and complex urban sites”, and this is reflected in general objective 7 of the catalogue: “A system of compact cities with ordered growth and varied uses, avoiding isolated growth.” Another of the workshop’s aims makes reference to “a neat urban perimeter”, a concept that is explained more accurately in general objective 10 of the catalogue: “Well-ordered, tidy urban boundaries that ensure their effective landscape integration and the prevention of degraded spaces.” Finally, the aim of the workshop that asked for “fluvial spaces with quality landscapes along their entire course” was translated into general objective 13 of the catalogue in the following way: “Landscapes of the fluvial, urban and natural environments of Besòs, Llobregat and Tordera and the rest of the metropolitan hydraulic courses, with continuity and quality, through habitat improvement and the restoration and assignation of compatible social uses”.

However, in most cases, the participative processes provided varied information that the editorial teams used when they set out the quality objectives. In other words, the teams mainly sifted through and interpreted citizens’ desires in relation to the future of their landscapes. Throughout the process, the values and meanings that the landscape had for society were taken into account and also the description of what they liked and disliked about the landscape, which was in no way an easy task. An example is how the windbreaks and shelterbelts are considered by many contributors to the Landscape Catalogue of the Comarques Gironines (in-depth interviews, consultation via the web and personal workshops) to be characteristic and structural elements of the rural landscape of the Plana de l’Empordà and Empordanet-Baix Ter, which meant that they were included in the landscape quality objectives of the respective catalogues.

The importance of participation in the landscape quality objectives and in the criteria and actions is clearly illustrated by three more examples taken from the Landscape Catalogue of the Comarques Gironines. First, the dissatisfaction expressed throughout the participatory processes of the catalogue about “shop-window” roads in statements like, “The landscape of the N-260 between Figueres and Roses is banal”, or “From Banyoles to Girona there is a mixture of industrial estates, housing areas and farms that give the impression of chaos and disorder”. These comments were translated into landscape quality objective 1 of the Landscape Catalogue of the Comarques Gironines, which expresses the desire for a landscape with “urban sites with ordered growth, respectful of their singularity, with clear perimeters, sized according to real needs and non-compromising with the landscape values of the surrounding spaces”. This objective was later translated into criteria 1.3 of the same catalogue, which establishes that, among other aspects, “urban extensions that negatively affect urban figures, profiles and scenes of landscape interest must be avoided, especially in cases where they could contribute to the appearance of conurbation phenomena, such as the “shop-window” roads or the continuations of the coastal façade.” Some conurbation phenomena that were detected in the participatory processes, such as Girona-Sarrià de Ter-Sant Julià de Ramis, Banyoles-Palol de Revardit and Figueres-Roses, are also cited.

A second example is found in the contributions that the population makes to the catalogues with regards to the road accesses into municipalities, with comments such as, “The large parking areas and industrial areas in La Jonquera look like Tijuana, with plastic, lorries, supermarkets and petrol stations everywhere. It is a landscape (...) that does not suit the Alt Empordà”, or “The road access to Figueres is ugly (...). It is an unfinished zone that constitutes a pseudo-urban, industrial landscape that is untidy and degraded”, or finally “The road access to Girona through Sarrià is ugly.” Com-

Picture 75. The landscape quality objectives were formulated after gathering together the opinions of both citizens and the principal social and economic stakeholders present in each territory.

ments like these served as the basis for defining landscape quality objective 2 of the Landscape Catalogue, which establishes the desire for “road accesses to urban centres that are ordered and projected in relation to the surrounding landscape, with tree-lined avenues that are recovered and restructured as elements that characterise the landscape.” In turn, the quality objective served to define criteria 2.7, which specifies that “the review of all the municipal urban zoning plans of the Comarques Gironines will introduce a specific section on the landscape treatment of road accesses to towns with the aim of guaranteeing ordered access routes to urban centres that ease the transition from open spaces to urban landscapes, while reinforcing the character and identity of the urban centres they are linked to. The criteria introduced will aim to meet the following objectives, among others: (...) to minimise degraded spaces on the peripheries of towns and communication hubs, (...) to integrate “shop-window” type road accesses to municipalities through measures that requalify the space. It is a case of equipping them with minimum infrastructures and acting to minimise their impact through concealment and/or harmonisation strategies with the surrounding environment, (...) and to manage and recover abandoned agricultural spaces and bare zones where no activity takes place.” Some examples of the communication hubs that require reorganisation that are cited include Girona (via Sarrià de Ter and Fornells de la Selva), Figueres (via Vilatenim, Santa Llogaia d’Àlguema and Vilafant), Platja d’Aro (via Castell d’Aro and Sant Feliu de Guíxols), Campdevàrol (via Ripoll), Olot (via Les Tries, the Canya road and the Sant Joan les Abadesses road), Banyoles (via Mata), Cornellà del Terri (via the C-66), Palol de Revardit (via



the C-66), La Jonquera (N-II), Empuriabrava (C-66) and Santa Margarida in Roses (C-68), among others.

A third and last example is related to the descriptions of roads with landscape interest and the desire to conserve them, as expressed by some of those surveyed in comments like, “The road from Cassà to La Bisbal gives a good impression of the landscape of the Gavarres hills,” and “The road from La Jonquera to Roses is where most vineyards can be seen (...). The north-south orientation of the vines creates a really beautiful landscape effect, as do the cypress trees that act as a windbreak for the vines”. These descriptions are reflected in landscape quality objective 3 of the catalogue: “Linear infrastructures (road and rail networks, power

lines, etc.) and telecommunications infrastructures that are integrated into the landscape and improve interconnection in the territory without compromising continuity and ecological and social permeability with respect to their environmental and landscape characteristics” and, in turn, landscape quality objective 3 is summarised in criteria 3.6, which affirms that “the heritage value of the territory’s historically important roads must be conserved, (...) preserving these characteristics and dimensions means that the speed limit on some sections needs to be regulated”. The examples of the GI-664 (between La Bisbal d’Empordà and Cassà de la Selva) and the GI-602 (between Garriguella and Capmany) are cited.

6. Challenges and perspectives

The landscape catalogues are at the interface **between science and management, between knowledge generation and political practice**. They represent the main knowledge generation project on the landscape in recent years in Catalonia and are a clear example that **knowledge is not in the hands of certain specialists, it is the result of the merger between plural, diverse knowledge**.

The fact that the Catalan Landscape Act created the catalogues as an instrument for introducing the landscape in territorial planning in Catalonia, as well as in sectorial policies, through the landscape directives, **for the first time, placed the landscape, from a regulatory point of view, at the vertex of territorial planning in Catalonia** (although the landscape catalogues are also meant to be understood as documents that are valid in their own right as a set of knowledge and of indicative proposals, and a magnificent opportunity for reflecting on the territorial model and the development of Catalonia). **The preparation of the directives was a genuine exercise of innovation in planning**, with very few international references, and this first step ahead requires continuity and firm, decisive consolidation, so as not to disappoint the social expectation generated around it. The catalogues, through the directives, have converted proposals that are binding into references for the general public.

In addition, **the introduction of the landscape directives in sectorial policies has been rather timid and is, as yet, an unresolved question that requires transversal policies** which are not always easy to promote and which often come up against institutional and organisational hurdles. Nevertheless, in recent years, the Government of Catalonia has been promoting some sectorial initiatives that take the information from the catalogues as a basis, such as the guidelines for the correct implantation of wind turbines in Catalonia, the landscape cuisine initiative, that links gastronomy with the landscape, or the educationally innovative

project “City, Territory, Landscape”, aimed at secondary school students.

Another challenge that is as relevant as the previous ones is **the need to specify the instruments that enable the landscape to be transferred from a territorial scale to a municipal scale, to work at multiple scales**, introducing it into the urban planning and building regulations and in urban planning instruments. As the catalogues have been approved, examples of urban plans or plans regulating open spaces have appeared, but there is still a long way to run. However, the fact that the landscape catalogues were designed and prepared for a regional scale, for a territorial planning scale, means that it is not valid just to transfer the information identified and mapped to urban planning catalogues, as this would mean not just a notable loss of information and an impoverishing of the reading of the landscape, but would also involve an incomplete, insufficient leap in the scale. **The local scale requires its own determinations at the corresponding level**.

In this local scale, **the landscape units defined by the landscape catalogues are gradually becoming functional areas of reference valid for moving on from characterisation to action**, from generalisation to specification, and in short, extremely useful for managing and planning the territory. One example of this, among others, is the urbanistic plan for wine tourism in Catalonia, which takes the landscape units as a basis for the future regulation of buildings, activities and infrastructures in the wine-producing landscapes.

Another unexpected result of **the 134 landscape units is that they are a source of inspiration for the birth of new local landscape strategies**, such as the case of the recent Consortium of the Aspres or the Cerdanya cross-border landscape plan. In these experiences, **the catalogues are helping to rethink the territory and its development from the landscape**, at a time at which the local administrations are seek-

ing alternative, imaginative formula for planning and management. Initiatives such as Priorat and Lluçanès Landscape Charters or the Cervera Landscape Plan, in addition to those already mentioned above, are based on information and also—and it is important to mention this—on the landscape quality objectives defined by the landscape catalogues, thereby guaranteeing the coherence of two documents with different scales and objectives. Many of these experiences of a local or supralocal area are based on collective and collaborative work, create new areas for dialogue and consensus between stakeholders, or promote responsibility with the application of the landscape policies and actions.

Communication is a key factor in creating awareness among contemporary societies. We need to make the most of the enormous communicative value of the landscape, a genuine carrier of easily decoded messages for the general public as a whole: the catalogues are very powerful tools to be able to meet this objective. The use that various audiovisual and written mass media have made of them, such as the TV channel *Televisió de Catalunya*, the newspaper *Ara*, the magazine *Descobrir Catalunya* and the weekly publication *El Temps*, among others, has been important in creating awareness about the importance of the landscape. Today, it can therefore be confirmed that **the landscape catalogues are not just being used to integrate the landscape into territorial and urban planning**, which was their main objective established by the Landscape Act, but **also to design tourist** (in which the landscape is a first-class asset) **or cultural strategies, to design awareness creation campaigns, or so that the landscape reaches schools, among other uses**.

The catalogues were conceived as a planning instrument and, at the same time, as an exercise in academic reflection, the result of a coral and interdisciplinary piece of work, that proposed a veritable methodological challenge, at a time at which the landscape culture

of the administration was rather lacking or non-existent. The complex nature of this came from —and, in fact, comes from— for example, focusing on everyday landscapes in which we live on a daily basis, and are a genuine challenge for the 21st-century; from trying to incorporate perceptions and emotions in a document mainly designed for territorial planning; to have a participative basis in all its preparation phases (on a complex, polyhedric concept, with an enormous cultural load, on which it is not easy to reach agreements).

The catalogues also tried out diverse participation mechanisms, some with more success than others. This matter is fundamental, **as the management and planning of the territory and the landscape cannot be separated from the democratic processes that guarantee the interaction between stakeholders and the general public.** We need to continue advancing in the search for effective, valid methods to achieve maximum implication, participation and cooperation between the public and the private spheres and the general public.

The preparation of the landscape catalogues also represents a great effort **in innovation and imagination when identifying and representing —from a cartographic point of view— elements, values and dynamics of the landscapes, when expressing landscape quality objectives on a map,** being fully aware that the final stage has not been reached and that conventional mapping will need to be gradually replaced or complemented by other forms that take into account other representations of the landscape.

In a world in which information and communication technologies have become essential, this innovation and imagination also needs to be applied when presenting and explaining the results of the catalogues. It is not sufficient to make the information of the catalogues available on the website or communicated by mass media, **we need to look for new, more interactive ways that make the information more attractive and allow it to reach all sectors of the population.** The existence of these technologies also generates an opportunity to the previously mentioned participation and cooperation processes, with new possibilities for producing contents through interaction between stakeholders or direct action.

Another unexpected aspect that needs to be taken into consideration is the updating of the catalogues, which is necessary due to the changing nature of the landscape and new European and global challenges. To this end, the advances in information and communication technologies are also creating new possibilities for research, analysis, exchange and dissemination.

Nobody would deny that **the catalogues have marked a before and an after, due to their ability to document and guide public policies, as well as their educational or awareness creating potential for society.** More uses are being found in them than the Landscape Act contemplated. Particularly, serving as a base for territories that are looking for new contents and new responses, and for administrations and organisations that place new ways of reaching agreements and acting on the table, in which the landscape is

increasingly being seen as a common good, as a driving force for its development, and as a way to increase its level of self-esteem, identity, and quality of life for the general public.

The Landscape Act of Catalonia was designed and started out in the context of economic well-being, and also at a time of notable landscape impoverishment as a result of actions that were sometimes rather unfortunate. Twelve years down the line, the context has radically changed. We are struggling to emerge from a very hard economic crisis, a greater protagonist role of society and its stakeholders is being claimed in the governing of the territory and we are attending a growing relevance of local territorial identities, in other words, of the landscape diversity of Catalonia. Taking all this into account, the catalogues have contributed to covering the zero level, in other words, the bases of information and documentation that are essential to be able to advance and move on. **The catalogues should be the basis to include landscape priorities on the political agenda, and for proposing landscape policies that are more aimed at action, more transversal and sectorial, that reinforce public-private consensus and cooperation, that encourage the necessary measures for creating awareness, educating and training, and that establish new forms of participatory democracy in everything related to the government and management of the territory.** These challenges make us realise that we still have a long way to go.

7. Glossary

Aesthetic value of the landscape

A landscape's capacity to transmit a certain feeling of beauty, depending on the significance and cultural appreciation that it has acquired throughout history, also the intrinsic value of the colours, diversity, form, proportions, scale, texture and unity of the elements forming the landscape.

Source: Landscape Observatory of Catalonia

Appreciation of the landscape

The fact of making the environmental, cultural, visual and perceived aspects of landscape valuable.

Source: Landscape Observatory of Catalonia

Communication in the landscape

Transmission of cultural meanings with respect to one or more landscapes by means of the mass media and information technologies.

Source: Landscape Observatory of Catalonia

Everyday landscape

Corresponds to the surrounding areas of most people, which are in constant evolution due to the effects of the social, economic and environmental processes. The values given to them by the public are mainly related to well-being.

Source: Landscape Observatory of Catalonia

Fund for the protection, management and planning of the landscape

A financial instrument of the Government of Catalonia which is to be destined to actions to improve and conserve the landscape, addressed at public bodies, private entities and individuals and legal bodies working towards these objectives.

Source: Catalan Law 8/2005, of 8th of June, on the protection, management and planning of the landscape.

Historical value of the landscape

Tangible or intangible traces of human activity of current relevance to the landscape.

Source: Landscape Observatory of Catalonia

Identity value of the landscape

Element of the landscape or landscapes as a whole with a substantial symbolic or identity-based meaning for local people, who establish relationships of belonging to or identifying with it.

Source: Landscape Observatory of Catalonia

Impact and landscape integration report

Written report with the objective of assessing the suitability and adequacy of the criteria or the measures adopted in the impact and landscape integration studies, in order to integrate the actions, uses, works or activities to be carried out in the landscape.

Source: Decree 343/2006, of 19th of September, developing Catalan Law 8/2005, of 8th of June, on the protection, management and planning of the landscape and regulating impact and landscape integration studies and reports.

Impact and landscape integration study

A technical document aimed at considering the consequences of carrying out actions, work projects or activities have on the landscape and at explaining the criteria adopted for their integration.

Source: Decree 343/2006, of 19th of September, developing Catalan Law 8/2005, of 8th of June, on the protection, management and planning of the landscape and regulating impact and landscape integration studies and reports.

Knowledge about the landscape

The degree of education and landscape recognition that a certain population has and experiences.

Source: Landscape Observatory of Catalonia

Landscape

An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.

Source: European Landscape Convention

Landscape agent

An individual or a public or private entity interested in the landscape, that makes use of or has responsibilities for its management.

Source: Landscape Observatory of Catalonia

Landscape assessment

Process aimed at getting to know the state, dynamics and tendencies of the landscape, at analysing the results obtained and at issuing the relevant judgements.

Source: Landscape Observatory of Catalonia

Landscape banalization

Process by means of which the landscape loses its originality or natural, cultural or symbolic interest.

Source: Landscape Observatory of Catalonia

Landscape catalogue

Documents of a descriptive and prospective nature, applicable to the territorial areas, that determine the type of the landscapes in Catalonia, identify their values and state of conservation and propose the landscape quality objectives they should meet.

Source: Catalan Law 8/2005, of 8th of June, on the protection, management and planning of the landscape.

Landscape character

Set of clearly recognisable features which contribute to making one landscape different from another, neither better nor worse.

Source: The Countryside Agency / Scottish Natural Heritage

Landscape characteristic

Characteristic or combination of characteristics of the landscape that contribute to differentiating its character.

Source: The Countryside Agency / Scottish Natural Heritage

Landscape charter

A tool for agreeing on strategies between public and private stakeholders, applicable at a local, supramunicipal or regional scale, to carry out actions to protect, manage and plan the landscape, the aim of which is to uphold its values.

Source: Catalan Law 8/2005, of 8th of June, on the protection, management and planning of the landscape.

Landscape creation

Intervention on a portion of the territory for the purpose of improving its landscape conditions and of creating a new imagined one in the supposition that the original one has been lost or banalized.

Source: Landscape Observatory of Catalonia

Landscape criteria

Opinion by means of which judgements are issued or decisions are made on the protection, management and planning of the landscape.

Source: Landscape Observatory of Catalonia

Landscape directives

Decisions which, based on the landscape catalogues, specify and incorporate, from a regulatory point of view, the proposed landscape quality objectives in the territorial master plans.

Source: Catalan Law 8/2005, of 8th of June, on the protection, management and planning of the landscape.

Landscape diversity

Richness in landscape configuration and character, either through elements or through the landscape as a whole.

Source: Landscape Observatory of Catalonia

Landscape dynamics

Natural and human activities and processes which affect the present configuration of the landscape.

Source: Landscape Observatory of Catalonia

Landscape education

Training and teaching initiatives with the aim of promoting knowledge of the landscape and awareness about the importance of its values and its quality.

Source: Landscape Observatory of Catalonia

Landscape element

Individual component forming the landscape.

Source: The Countryside Agency / Scottish Natural Heritage

Landscape evolution

Gradual process by which a landscape changes from one state to another.

Source: Landscape Observatory of Catalonia

Landscape fragility

Susceptibility of a landscape to the deterioration of its natural, cultural, visual and perceived values.

Source: Landscape Observatory of Catalonia

Landscape fragmentation

Result of a process of breaking up and shattering the continuity of the landscape and its coherence.

Source: Landscape Observatory of Catalonia

Landscape governance

The way of governing a landscape based on the interrelation of the bodies responsible for the policy management of a territory and civil society, in which power, authority and influence are given to society on the decisions that affect the specific landscape.

Landscape identification

Process of delimiting and naming the landscape units, while specifying what their distinctive features are.

Source: Landscape Observatory of Catalonia

Landscape impact

Perturbation on the landscape caused by a natural phenomenon or by human activity.

Source: Landscape Observatory of Catalonia

Landscape improvement

Evolution of the landscape towards a better state.

Source: Landscape Observatory of Catalonia

Landscape indicator

Quantitative or qualitative element allowing an assessment and regular monitoring of the evolution and state of the landscape, people's satisfaction with their landscape and the effectiveness of public and private initiatives for its improvement.

Source: Landscape Observatory of Catalonia

Landscape management

Action to ensure the regular upkeep of a landscape, so as to guide and harmonise changes which are brought about by social, economic and environmental processes.

Source: European Landscape Convention

Landscape perception

The appreciation shown by an individual or collective of the values of the landscape, as well as its state of conservation.

Source: Landscape Observatory of Catalonia

Landscape planning

Actions that have a strong forward-looking character to enhance, restore or create landscapes.

Source: European Landscape Convention

Landscape policy

Expression by the competent public authorities of general principles, strategies and guidelines that permit the taking of specific measures aimed at the protection, management and planning of landscapes.

Source: European Landscape Convention

Landscape protection

Actions to conserve and maintain the significant or characteristic features of the landscape, justified by its heritage value derived from its natural configuration and/or from human activity.

Source: European Landscape Convention

Landscape quality objective

For a specific landscape, the formulation by the competent public authorities of the aspirations of the public with regard to the landscape features of their surroundings.

Source: European Landscape Convention

Landscape restoration

Mechanisms aimed at stopping the degradation or disappearance of an element or set of elements of a landscape and at restoring them to their original conditions, while ensuring their survival in the future.

Source: Landscape Observatory of Catalonia

Landscape satisfaction

Expression of the degree of contentment or lack of contentment of the population who live in a certain territorial area with their landscape, caused by diverse factors.

Source: Landscape Observatory of Catalonia

Landscape transformation

Change in the natural or cultural characteristics of the landscape tending to modify its values or its appearance.

Source: Landscape Observatory of Catalonia

Landscape unit

Portion of the territory characterised by a specific combination of landscape components of an environmental, cultural, perceptive and symbolic nature, as well as with clearly recognisable dynamics that give it an idiosyncrasy that is different from the rest of the territory.

Source: Landscape Observatory of Catalonia

Measure of landscape integration

Action aimed at decreasing the landscape impact of a work project or infrastructure.

Source: Landscape Observatory of Catalonia

Productive value of the landscape

The ability of a landscape to provide economic benefits, by converting its elements into resources.

Source: Landscape Observatory of Catalonia

Social value of the landscape

Regarding the use that an individual or collective makes of the landscape with an interest for the collective.

Source: Landscape Observatory of Catalonia

Special attention landscape

A sector of landscape with a given heterogeneity, complexity or uniqueness from a landscape point of view that requires specific directives and criteria to be protected, managed and planned.

Source: Landscape Observatory of Catalonia

Spiritual value of the landscape

Feature of the landscape or landscapes as a whole related with religious and spiritual practices and beliefs.

Source: Landscape Observatory of Catalonia

State of the landscape

Set of natural, cultural and symbolic characteristics found in or shown by a specific landscape.

Source: Landscape Observatory of Catalonia

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