



# Strategy (2016-2020) for regulation of public use in Collserola Park (Barcelona): a permanent and constant challenge

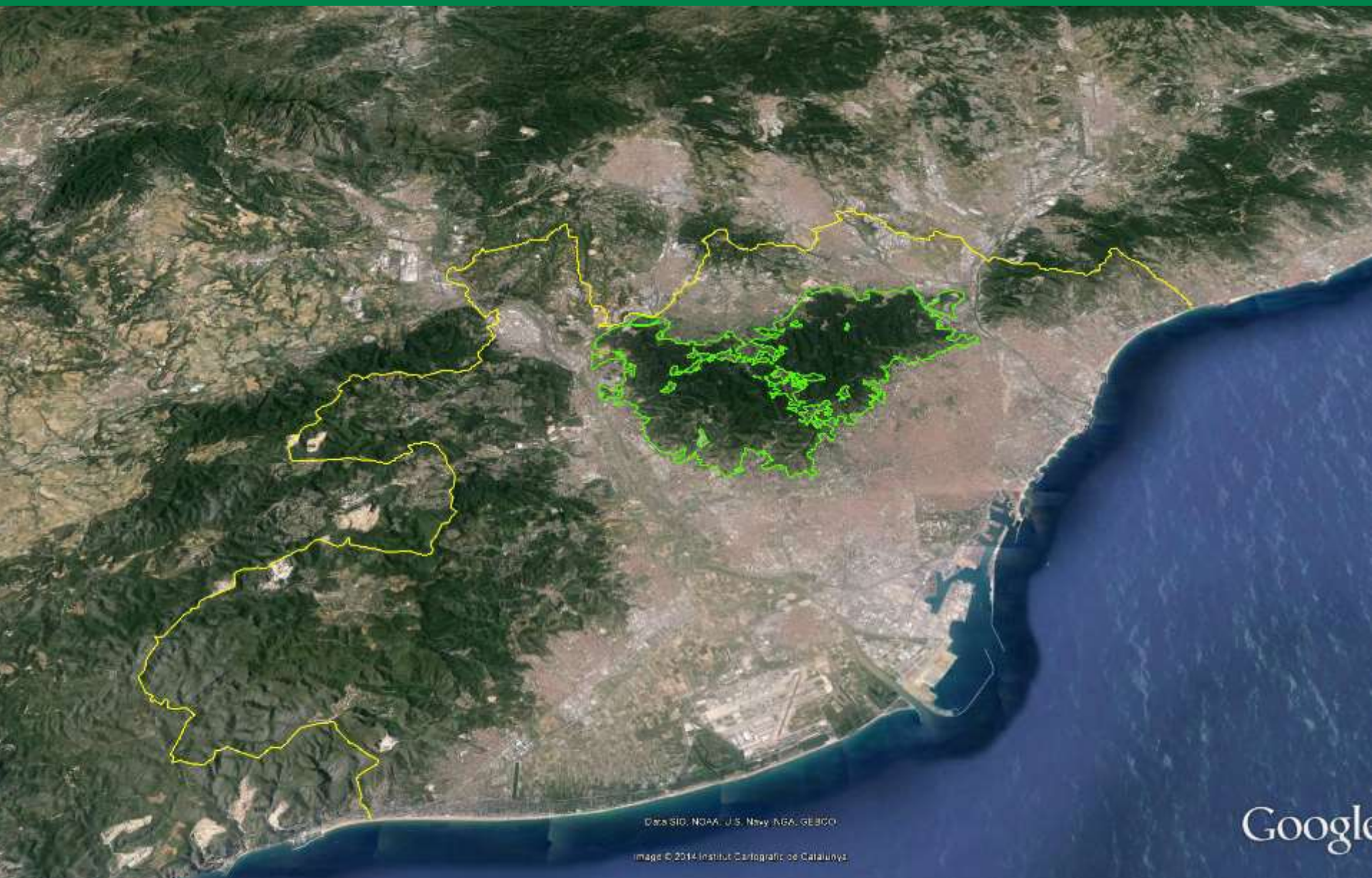
**Consorci del Parc Natural de la Serra de Collserola**



**BCN Metropolitana Area : 636 Km<sup>2</sup>**

**36 municipalities and 3.240.000 inhabitants**

**Collserola Natural Park: 81 Km<sup>2</sup> (8.100 ha) - N2000 network from 2006**

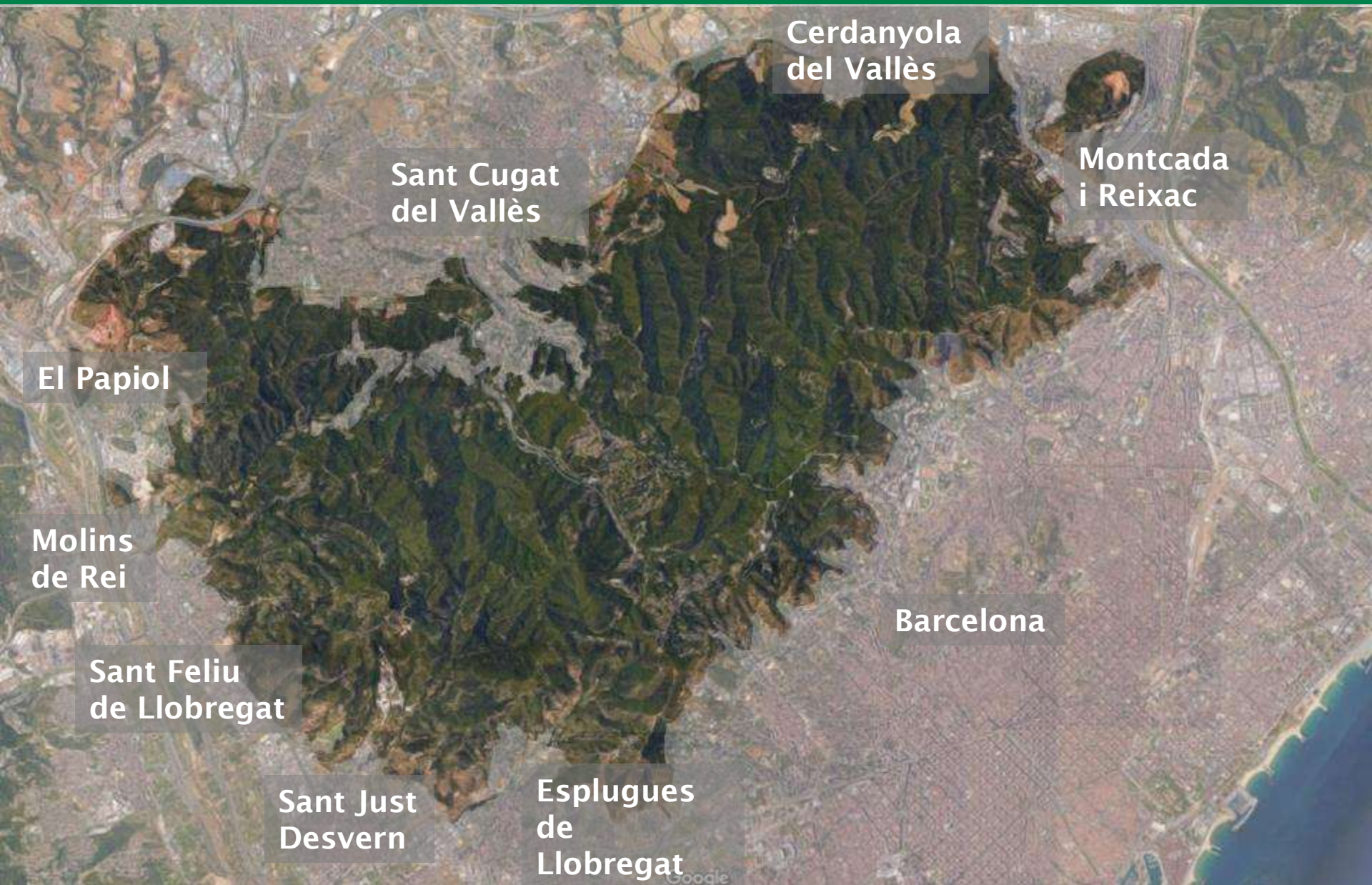


Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Image © 2014 Institut Cartogràfic de Catalunya

Google







# Great diversity of landscapes and habitats

**More than 10 million trees**  
**More than 1,000 species of plants**



**Agricultural areas (14,5%)**



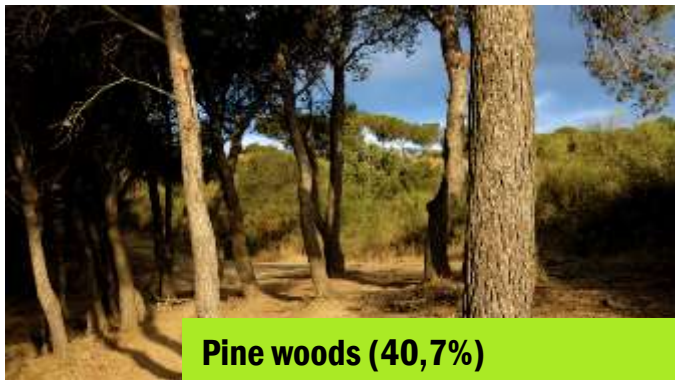
**Scrubs and Shrubs (6,60%)**



**Riversidel woods (3,9%)**



**Holm - oak woods (13,3%)**



**Pine woods (40,7%)**



**Dry grassland and meadows (20,9%)**



# A great biodiversity



**Nearly 3,000  
species of fauna**





# Provider of ecosystem services



**CO<sub>2</sub> Absorption: more than 36.000 MT/year**  
**Carbon Stock: 250.854 MT/year**

Source: CREAM 2017



# Cultural ecosystem services



**Reception area for  
the enjoyment of  
nature, leisure and  
health**



Great demographic concentration around **means** ...





...**Great** pressure on the landscape and habitats





# Challenges of present and future

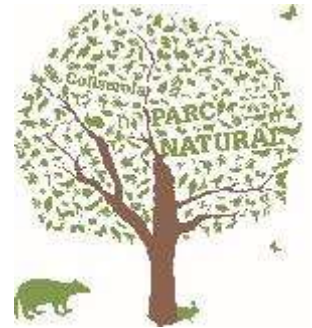
## Uses and leisure activities





# Communication campaign 2013

With a motto "**Collserola takes care of you.**  
**Take care of Collserola!**" ... To show the  
ecological and health benefits that represents live  
near a natural area and the importance of doing  
good practices



Mobile information points



Publications



News of the Parc



Socials networks



Interpretative signposts

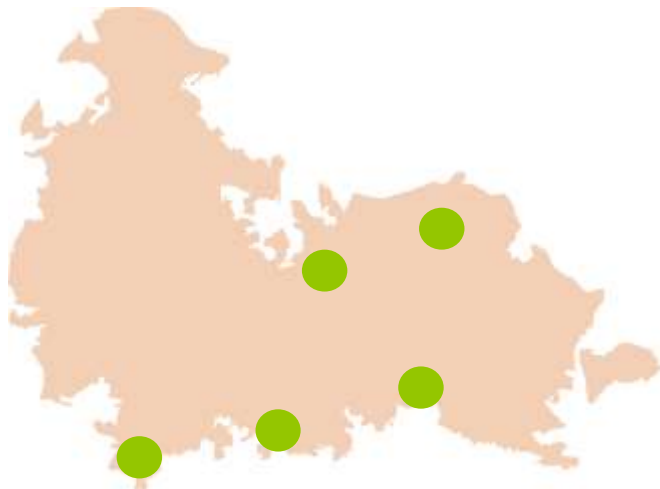


Web site

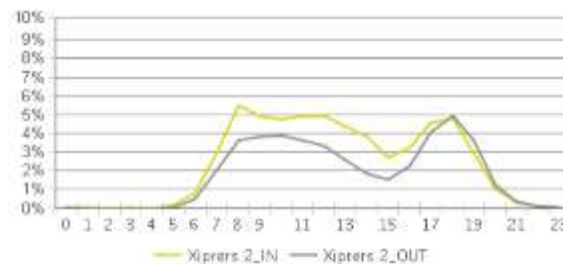


# Regulation and monitoring of activities

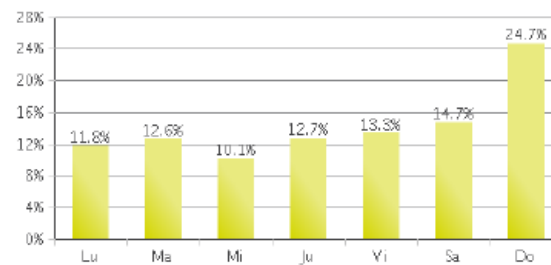
## Monitoring of public use from eco-counters



Perfil horario entre semana



Perfil semanal



**Estimated  
visitors from  
data eco-  
counters**

**2015**

**3.350.000**

**-**

**3.500.000**

## Regulation of authorized activities





## GOAL

**Consensus on strategic lines and actions for the planning of Public Use**

A word cloud of Catalan terms related to public use planning, including: Caminades, Normativa, Informació, Activitats, Seguretat, Biodiversitat, Capacitat, Cavalls, Zonificació, Salut, Senyalització, Ambiental, Educació, Bicycles, itineraris, Contemplació, Usos, Regulació, Passejades, Impacte, Equipaments, Social, Participació, Lleure, Sostenibilitat, Vigilància, Acol·lida, Esport, and Àrees.

## Permanent table for public use



## Public administrations



## Associations-Entities-Citizenship





# Public use strategy 2016-2020

## First action: regulation of the activities

**Max. number per year**

**Max. number of participants**



**15 bike-races**

**200**



**1 ultra-trail  
2 marathons  
20 races <20 km**

**500**



**50 walks < 10km**

**500**

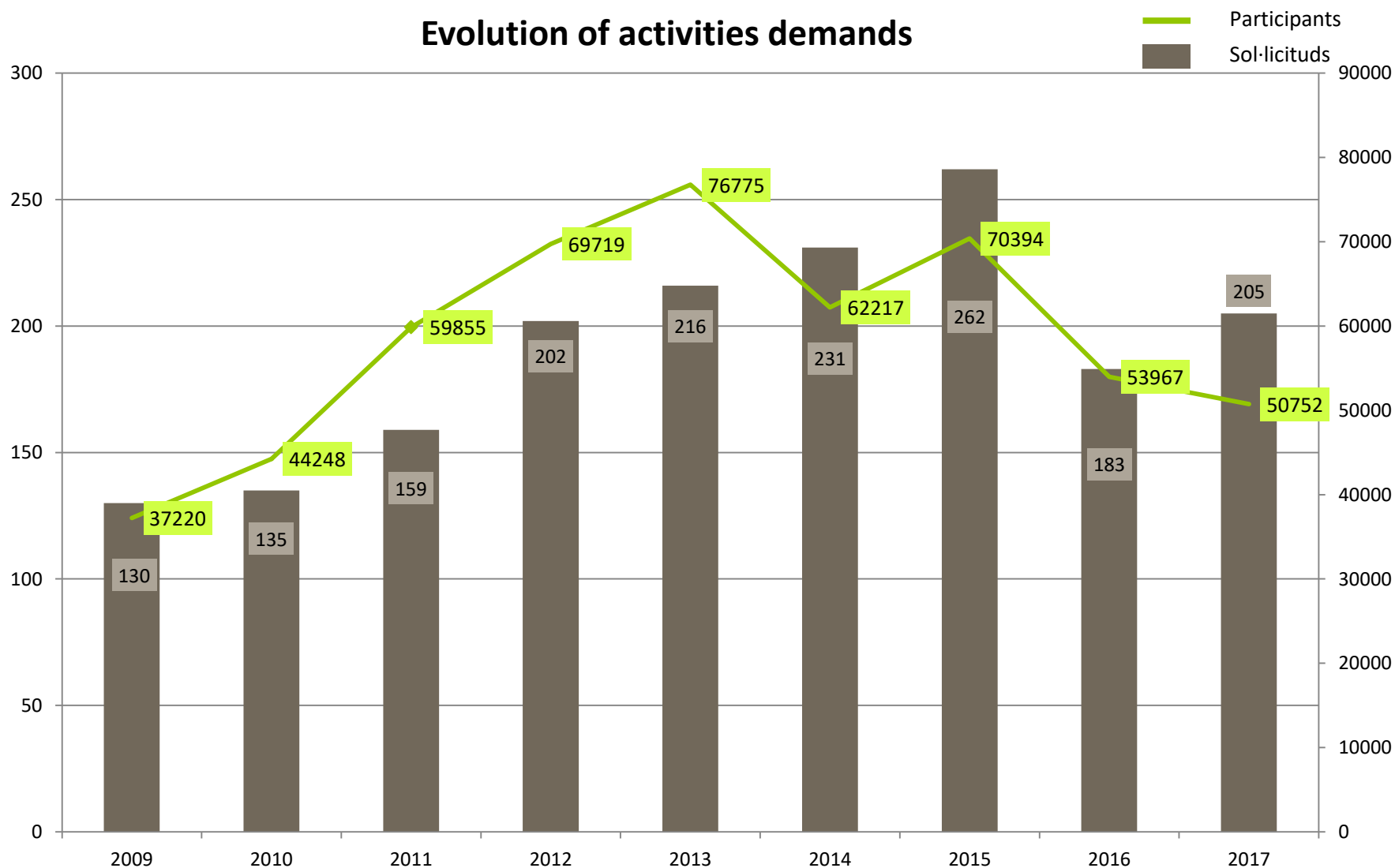


**20 orienteering races**

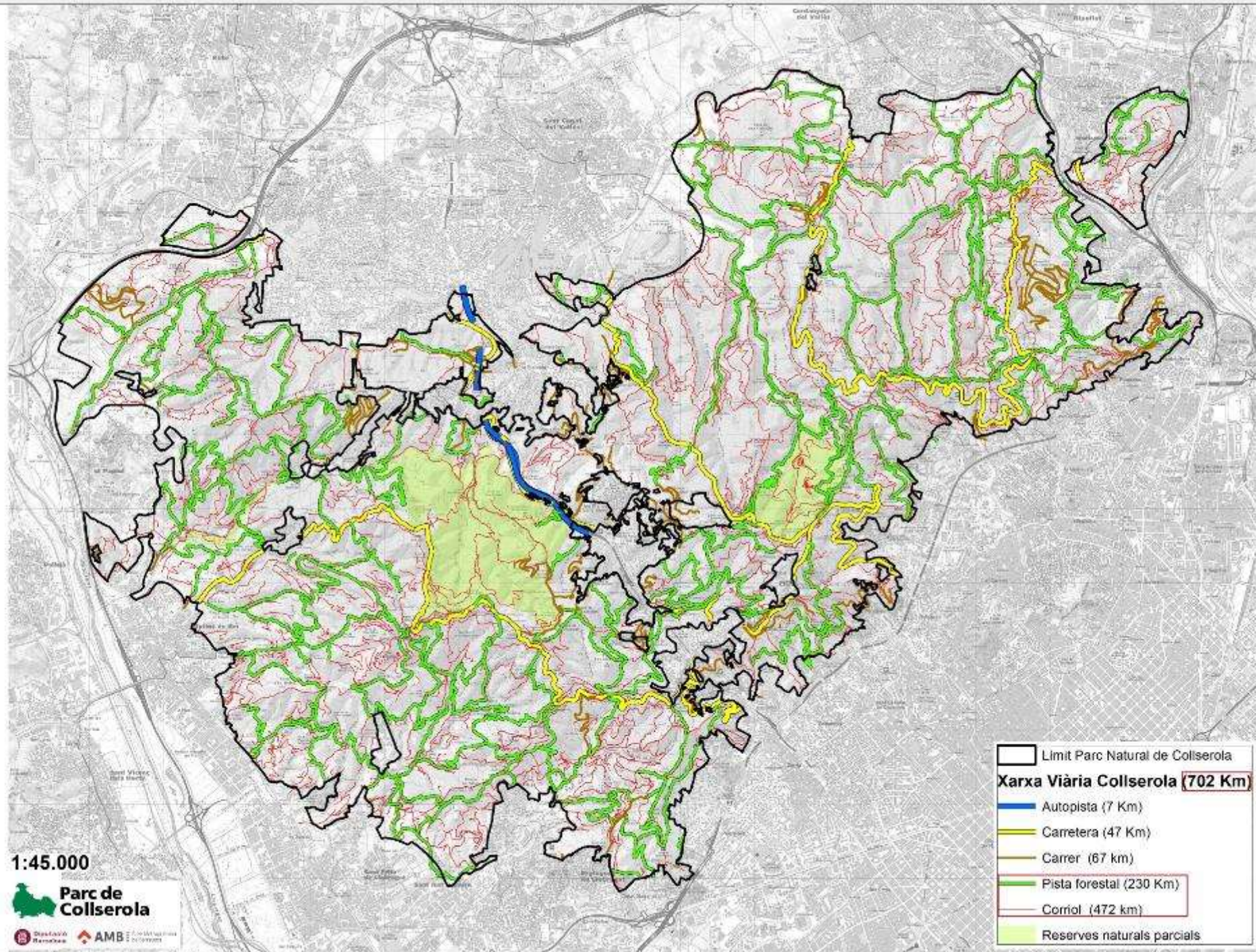
**200**



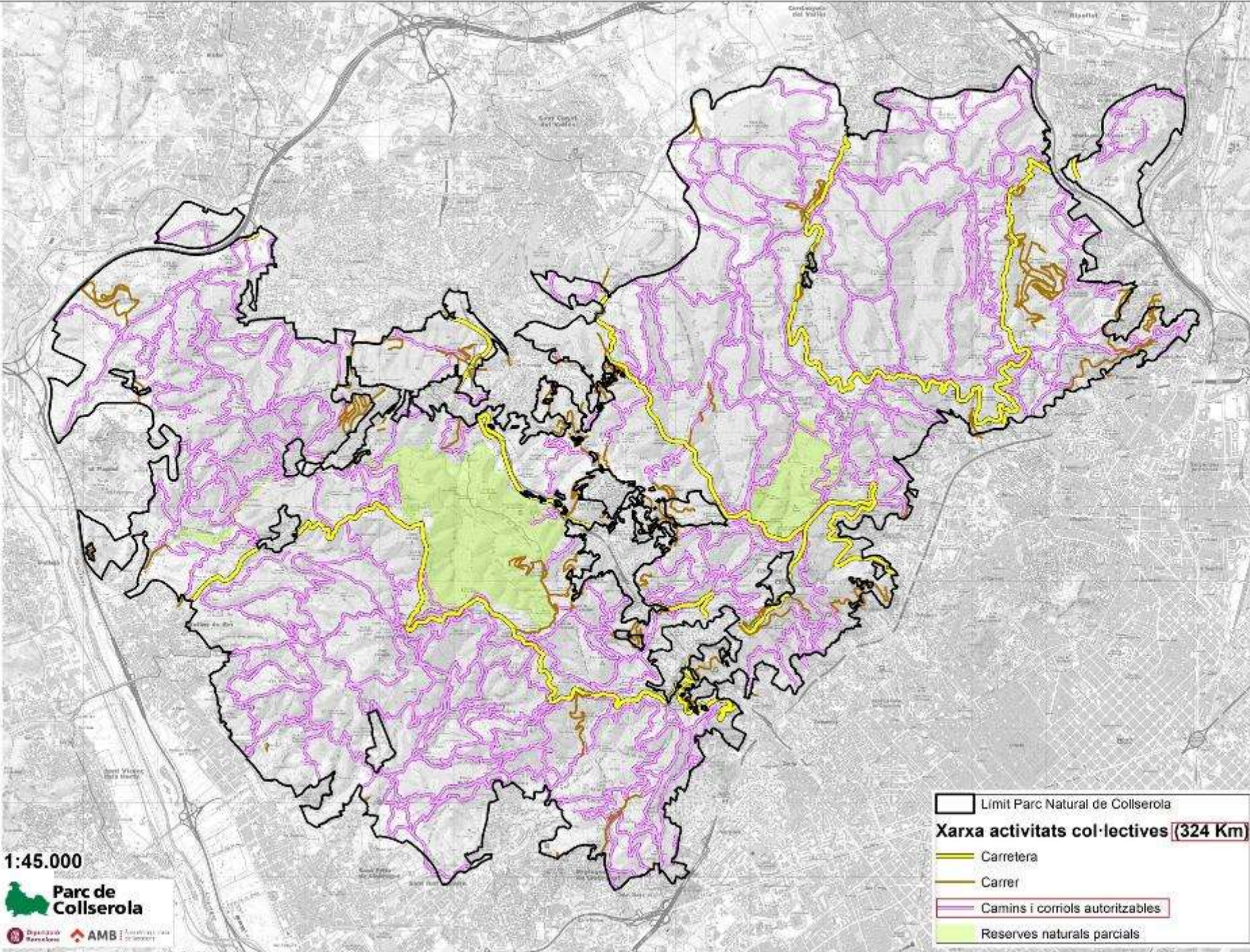
## Evolution of activities demands



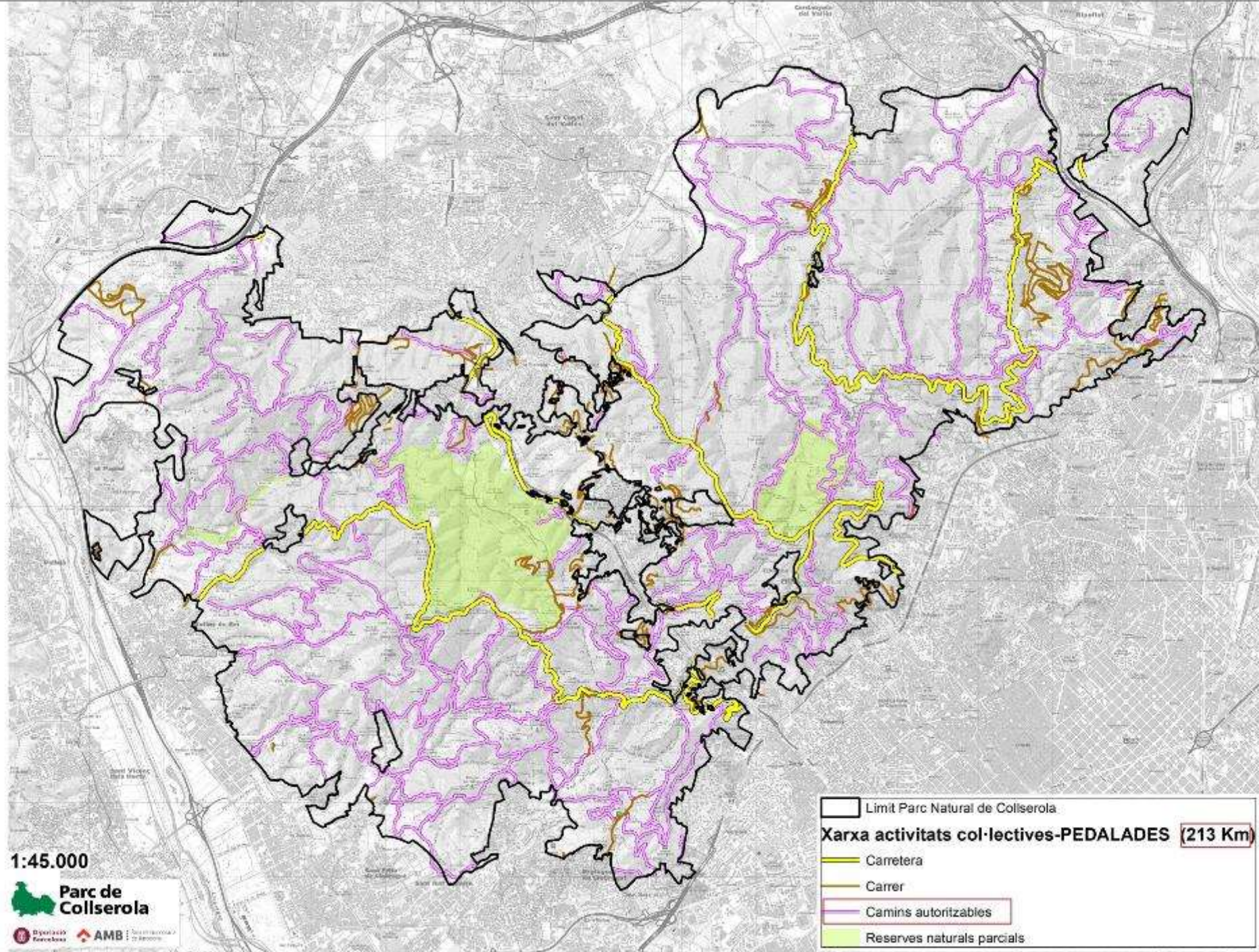














# Public use strategy 2016-2020

## Communication campaign: Vital Territory



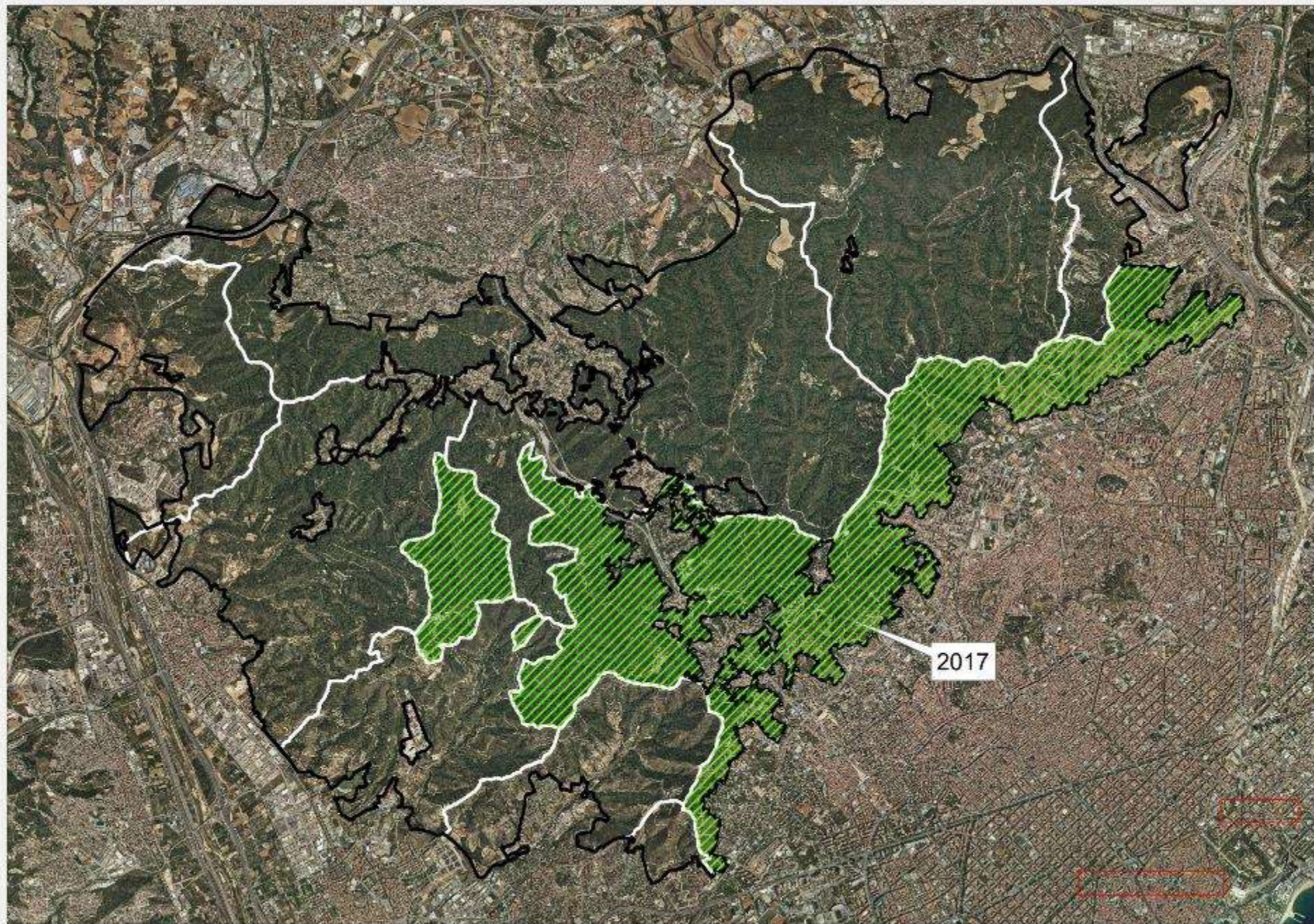
*Campaign materials: posters, brochures, panels at Train stations, web banners and social networks.*



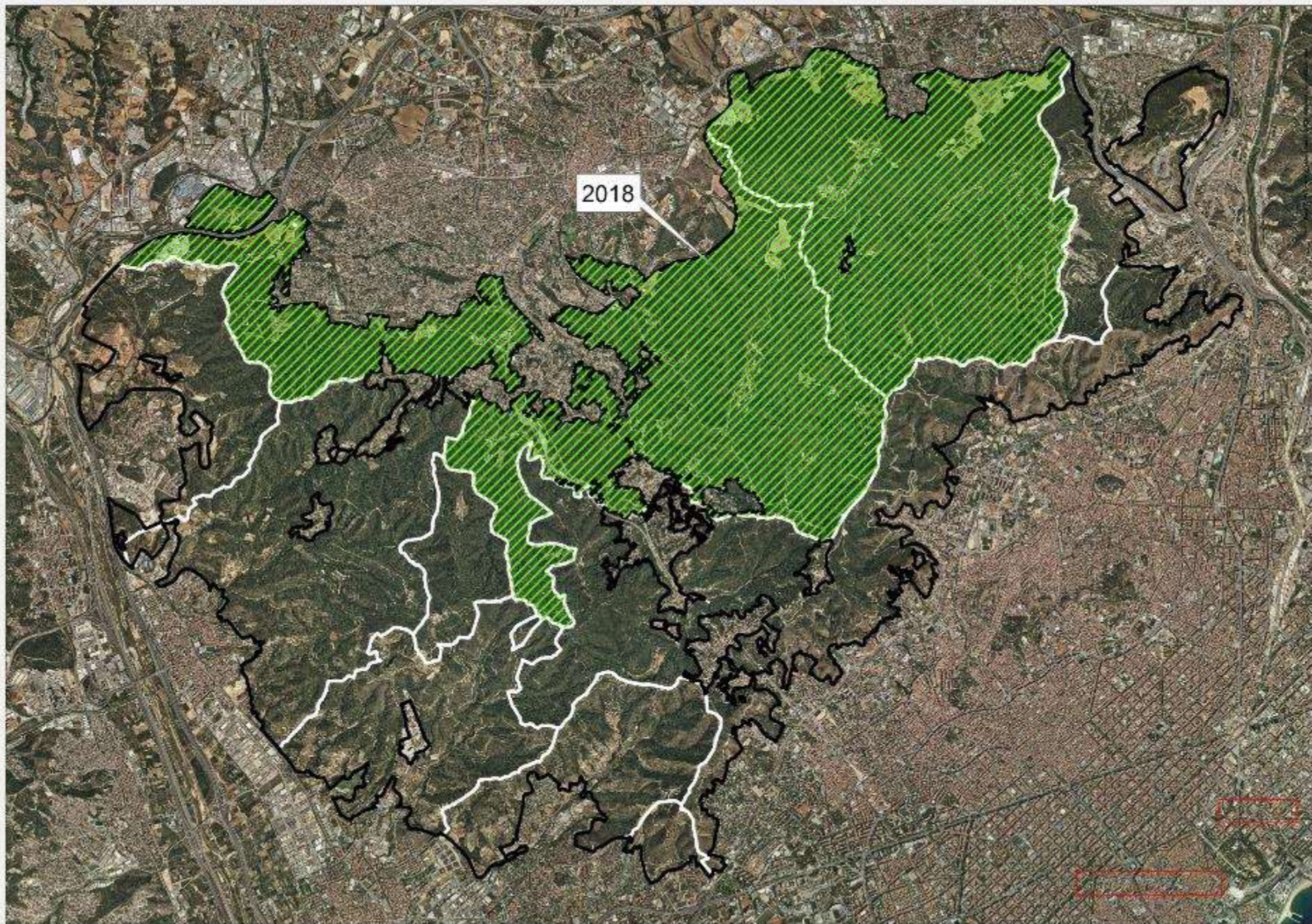
*Mobile informational points of the Park and campaign informants on the ground*







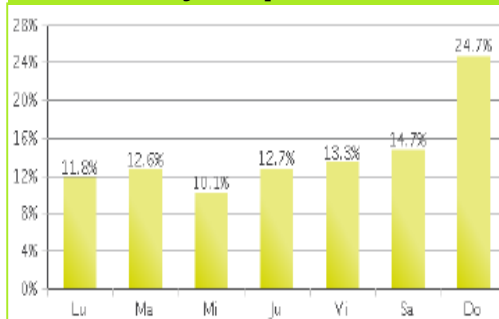






## Frequentation and characterization of users 2017

### Weekly frequentation



### Daily frequentation



### Surveys of motivation, uses and preferences Municipal district of Barcelona, 2017

Study RACC	778
Study INEF	842
Park informants	384
<b>TOTAL</b>	<b>1.226</b>



Activities	Uses/visits	Users/visitors	Average use/visit
Walking, stroll	1.217.643	<b>272.263</b>	4,47
Hiking	724.341	137.881	5,25
Running	867.961	75.398	11,51
Mountain Bike	<b>1.504.875</b>	108.255	13,9
Bicycle high speed descent	38.835	1.011	38,4
Others	139.704	24.444	--
<b>Total</b>	<b>4.493.359</b>	<b>619.252</b>	<b>7,2</b>

Affluence, frequentation and characterization study of users in the municipal district of Barcelona.  
INEF from Lleida University, 2017





## Second action: regulation bike use

### Actions undertaken in 2017

- **New studies on environmental impacts of public use**
- **New regulation of bicycle use: approval of a bicycle ordinance with a sanctioning framework**





### Study of soil erosion in paths and trails

- \* Four out of every ten paths analyzed suffer from a very high or high degradation.
- \* The average floor loss is 44.62 m<sup>3</sup> / Km, a high value compared to studies carried out elsewhere.
- \* The drainage of the path defines significantly the loss of soil, is a factor to consider in the measures of improvement.
- \* Visitors' frequentation can become an explanatory variable of soil loss mechanisms.
- \* The paths located in wooded and shrubed areas suffer from erosion higher than those located in areas where the scrub is predominant.



Analysis and assessment of the state of the paths of the municipal district of Barcelona. Guim Ursul Colomé, 2017



# Strong impact on the ground





## Regulation of the use of the bicycle, 2018



- **Approval and publication of the Cyclist Use Map.**
- **New regulatory ordinances on the use of bicycles with a sanctioning framework.**
- **Implement a surveillance and security device**









**The ordinance that we are processing for its approval proposes, in summary form, the following:**

**Minor infractions (Penalty up to € 100):**

**Do not carry a bell**

**Do not carry reflective elements or lighting**

**Do not carry identification**

**Serious infractions (Penalty up to € 200):**

**Circular outside the signposted streets**

**Circular on trails, streams or cross-country**

**Circular at a speed higher than 20 Km / h**

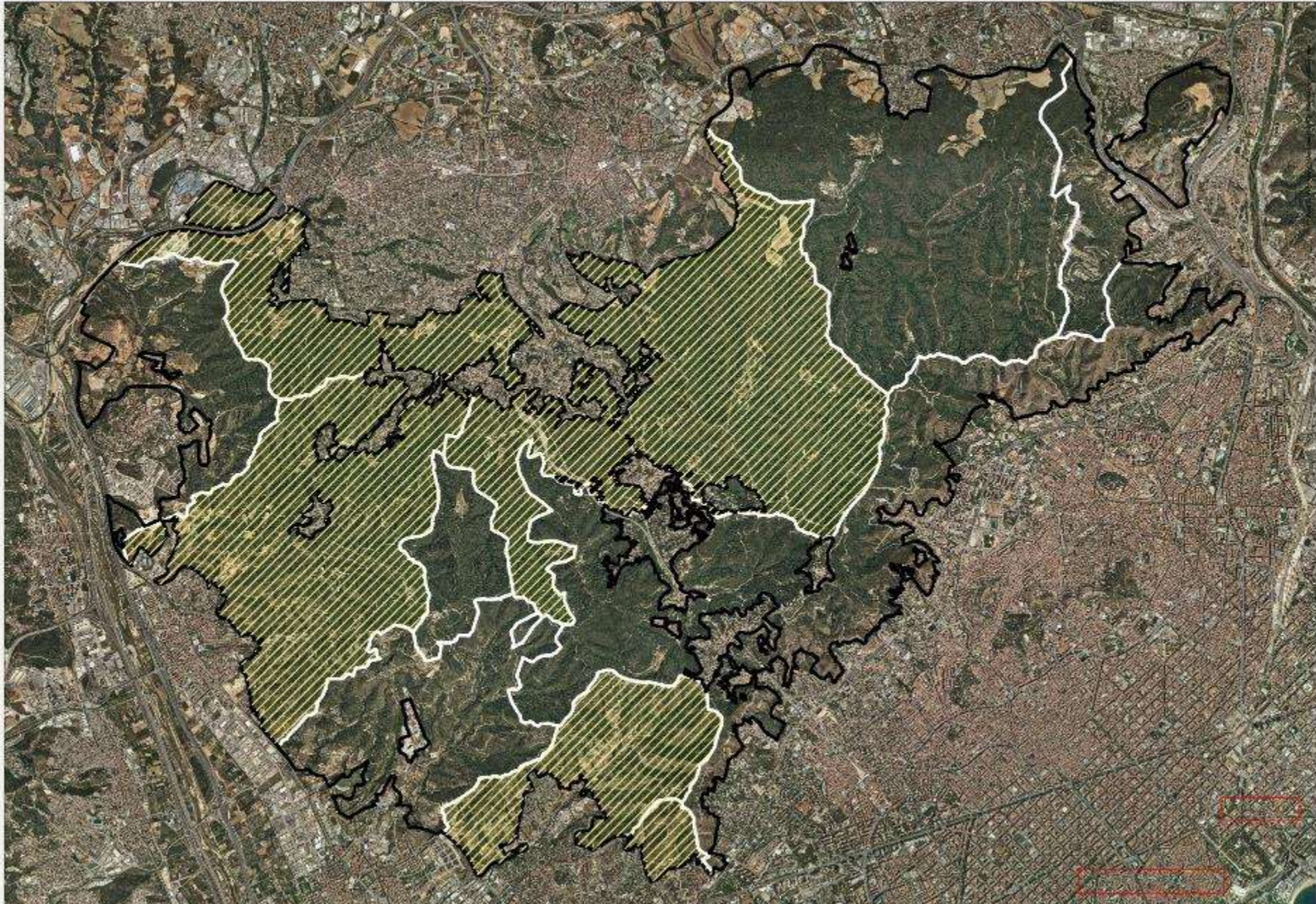
**Very serious infractions (Penalty up to € 500):**

**Carry out bicycle races**

**Circulate through natural reserves**



# Municipalities in which the approval of bicycle ordinances is being processed



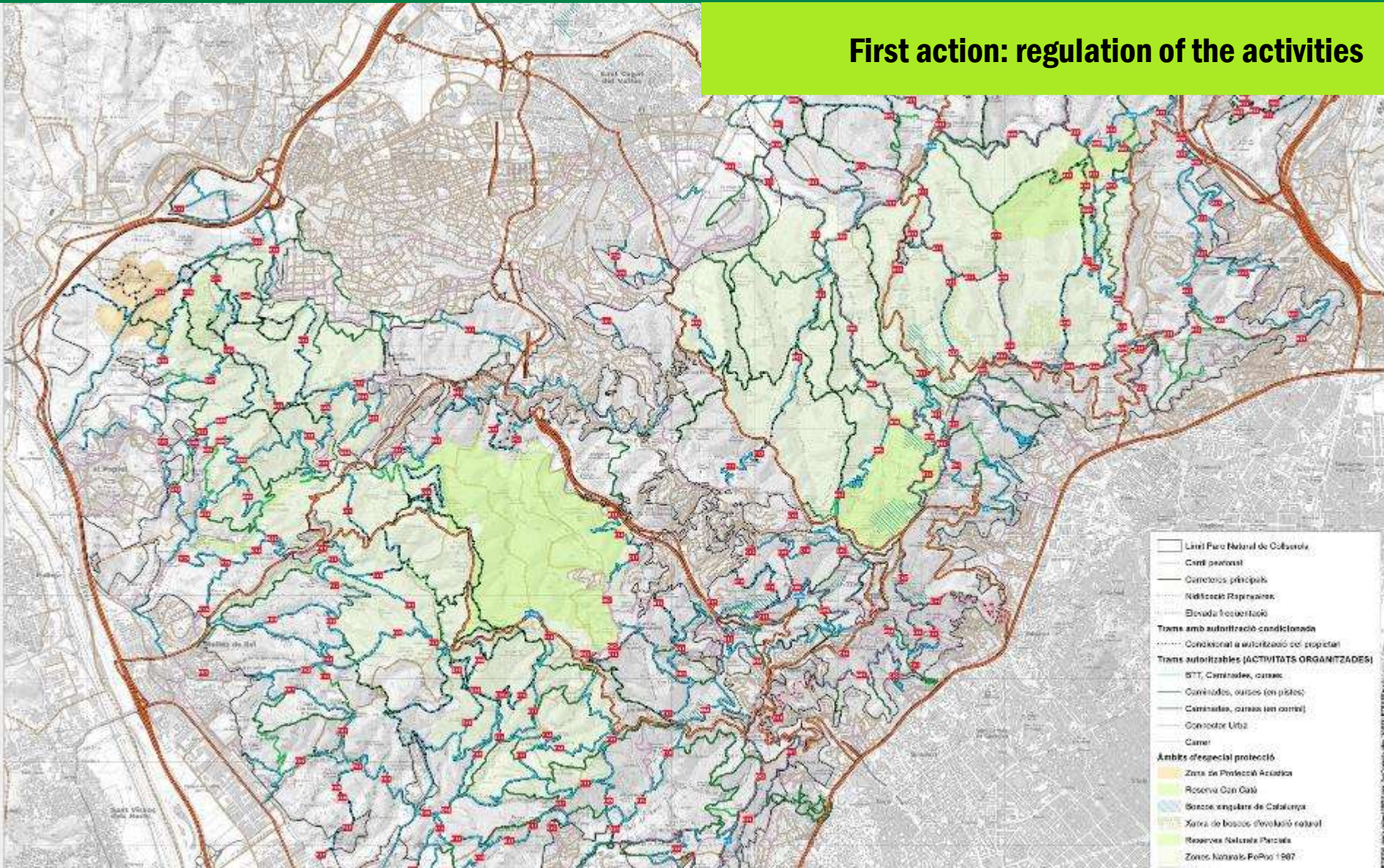




**Thank you very much**



## First action: regulation of the activities



Map of roads and trails for public use

<http://www.parcnaturalcollserola.cat/pages/autoritzacions-d-activitats>

XARXA CAMINS ACTIVITATS ORGANITZADES  
versió Novembre 2016

Parc de  
Collserola

1:20.000

Data: 24/06/2017