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EDITORIAL

Worksheet Code: RCC – 13 (EN)

RECREATIONAL CARRYING CAPACITY

1. NAME OF THE SITE OR ELEMENT/S

Name of the site or element/s	
Other names	

2. INSPECTION DATA

Compiler Name		Date and place of data gathering	
Compiler's e-mail address		Compiler's telephone number	

3. SPATIAL ANALYSIS

3.1. Zoning and features of the spatial units

Location of the units			
Spatial Unit (SU)	Coordinates	Type of space[1]	Dimensions
SU01	GEOGRAPHICAL ° ′ ″ ° ′ ″ UTM (10x10)		m^2/km^2: X: Y: Z: Internal elements:
SU02	GEOGRAPHICAL ° ′ ″ ° ′ ″ UTM (10x10)		m^2/km^2: X: Y: Z: Internal elements:
SU03	GEOGRAPHICAL ° ′ ″ ° ′ ″ UTM (10x10)		m^2/km^2: X: Y: Z: Internal elements:
SU04	GEOGRAPHICAL ° ′ ″ ° ′ ″ UTM (10x10)		m^2/km^2: X: Y: Z: Internal elements:
Others			

Comments (describe the features of the unit and of their internal elements)	

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Zoning map of the units	Insert image

[1] **Type of space: a -** Open; **b -** Architectural barriers; **c -** Enclosed; **d -** Confined; **e -** Areal; **f -** Linear; **g -** Others (specify in comments field)

3.2. Surface for Recreational Uses

3.2.1. Useful Surface for the Recreation (USR)[2]

Spatial Unit (m^2/km^2)	Limitations due to conservationist reasons (m^2/km^2)[3]	Limitations due to intrinsic fragility of the element (m^2/km^2)[4]	Limitation due to security reasons (m^2/km^2)[5]	Limitations due to not compatible uses (m^2/km^2)[6]	Limitations due to the internal disposition of the elements (m^2/km^2)[7]	Final USR (m^2/km^2)
SU01						
SU02						
SU03						
SU04						
Others						

Comments	

[2] **Useful Surface for the Recreation (USR):** it is the available surface for recreational activities after excluding those spaces for conservation, security, fragility, not compatible uses or due to internal spatial disposition of the elements.
[3] **Limitations due to conservationist reasons:** estimate the surface that cannot be used for recreational purposes because conservational measures, even whether these measures were or not included in legal frames.
[4] **Limitations due to intrinsic fragility of the territory:** estimate the surface which cannot be used for recreational purposes because its intrinsic fragility (fragility is defined at the attractive file)
[5] **Limitations due to security reasons:** estimate the surface that is subject to certain risk and uncertainties for visitors.
[6] **Limitations due to not compatible uses:** estimate the surface of other productive or social uses which are not compatible with the recreation, also others not compatible recreational uses.
[7] **Limitations due to the internal disposition of the elements:** estimate the surface occupied by the internal elements of the unit (trees, columns, etc.) that reduce available space for recreation purposes.

3.2.2. Suitable Surface for the Recreation (SSR)[8]

Spatial Unit	Suitable Surface for the Recreation (m^2/km^2)
SU01	Recreational activity, facility, etc. 1: Recreational activity, facility, etc. 2: Recreational activity, facility, etc. 3:
SU02	Recreational activity, facility, etc. 1: Recreational activity, facility, etc. 2: Recreational activity, facility, etc. 3:
SU03	Recreational activity, facility, etc. 1: Recreational activity, facility, etc. 2: Recreational activity, facility, etc. 3:
SU04	Recreational activity, facility, etc. 1: Recreational activity, facility, etc. 2: Recreational activity, facility, etc. 3:

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Others	Recreational activity, facility, etc. 1: Recreational activity, facility, etc. 2: Recreational activity, facility, etc. 3:
Comments (specify possible incompatibilities among the activities to perform at the same unit)	

[8] **Suitable Surface for the Recreation (SSR):** it is the surface, which its intrinsic attributes are ideal to perform some recreational activities, to locate facilities and/or to install transit zones. Prioritize the three most suitable activities for each unit. It will be necessary to consult worksheets on natural and cultural heritage elements, landscape, climate, recreational activities and facilities in order to complete the information.

4. TEMPORAL AVAILABILITY OF THE SITE OR ELEMENT

Intrinsic Timing[9]	Seasonality:
	Availability:
	Duration period:

Environmental Timing[10]	Hours of enjoyment (according the season):
	Pick hours:
	Long term closures:
Scheduled Timing[11]	Opening and closing hours:
	Holidays timing:

[9] **Intrinsic Timing:** it refers to frequency, seasons, months and dates of the year in which the resources or elements are available, indicating the length of the period (migratory species, flowering, Northern lights, temporary exhibitions, events, etc.)
[10] **Environmental Timing:** it refers to outdoor sites or elements conditioned by climatic and environmental factors (daylight hours, foggy, rain, etc.). It will be necessary to consult the climate worksheet to complete the information.
[11] **Scheduled Timing:** it refers to the management of the site or element does (museums, monuments, etc.) so that, it must indicate the opening and closing times of the site and/or element.

5. SPATIAL NEEDS OF VISITORS

Spatial Standards			
Name of the Recreational Activity	Type of activity[12]	Proxemic standards[13] (m^2/user)	Recreational comfort standards[14] (m^2/user)

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Comments	

[12] **Type of recreational activity:** define the recreational activity according to: **a -** Static recreational activity, in which no movements occur; **b** - Dynamic activity in which there are movements or displacements; **c** - Activities that, in their practices, equipment is required (bicycle, horse, recreational boats, etc.) or they are adapted to special needs.

[13] **Proxemic standards:** it refers to the measurable distance among people who are sharing the same space (interpersonal space of interaction). In applying, them, it is established the number of people which the spatial unit can support at one time doing static activities. See table RCC1 in the introductory text.

[14] **Recreational comfort standards:** it stablishes the space one person need to develop a recreational activity, considering the need of equipment (e.g. in equestrian activities, cycling, nautical activities, etc.), facilities (e.g. pier, trail, etc.), or an adapted activity.

6. DETERMINATION OF RECREATIONAL CARRYING CAPACITY

Number of People at One Time (PAOT) in a spatial unit		$$\text{PAOT} = \frac{\text{SSR}}{\text{Proxemic standard or Recreational Comfort standard}}$$
Number of people developing an activity at the same time		Group size (established according to the type of activity and visitor profile)
		$$\text{Number of groups at one time} = \frac{\text{PAOT}}{\text{Group size}}$$ Reduction of the number of groups by the application of the limiting factors of visitor physical and psychological comfort
Number of people developing an activity along the day		$$\text{Rotation Coefficient} = \frac{\text{Available time}}{\text{Average duration of activity}}$$ Reduction of the number of visitors by the application of the limiting factors of cumulative impact
Daily Recreational Carrying Capacity (daily acceptable number of people)		(Number of groups at one time) x (Rotation coefficient) Reduction of the number of visitors by the application of the limiting factors of visitor physical and psychological comfort and of cumulative impact
Comments		

7. MANAGEMENT OF RECREATIONAL CARRYING CAPACITY

7.1. Management limiting factors

Technical		**a** - Irregularity of the spatial units; **b** - Lack of physical protection for some elements (fences, physical barriers, etc.); **c** - Lack of basic and recreational facilities (trails, signage, parking areas, etc.); **d** - Lack of impact studies; **e** - Lack of preventive and corrective measures; **f** - Inappropriate touring pattern; **g** - Other (specify in comments field)
Budgetary		**a** - Scarce financial resources for public use; **b** - Lack of resources for maintenance and restoration works; **c** - Other (specify in comments field)
Services		**a** - scarce surveillance staff; **b** - Scarce staff for guiding, interpreting and monitoring activities; **c** - Lack of personnel to control access (both on-site and for internet reservations); **d** - Other (specify in comments field)
Administrative		**a** - Lack of management plans; **b** - Lack of rigorous studies on the site's recreational carrying capacity; **c** - Lack of conservation standards and indicators; **d** - Lack of codes of ethics and etiquette; **e** - Other (specify in comments field)
Constructive		**a** - Existence of load limits for infrastructures, facilities and installations (structural safety); **b** - Other (specify in comments field)
Legal		**a** - Restrictions by fire regulations; **b** - Restrictions for accessibility issues; **c** - Restrictions due to incompatibility of uses (priority to conservationist use); **d** - Restrictions established in self-protection plans; **e** - Other (specify in comments field)
Security		**a** - Temporary restrictions due to environmental risk; **b** - Temporary restrictions due to structural risks in buildings and facilities; **c** - Temporary restrictions due to health and hygiene issues; **d** - Temporary restrictions for natural hazards; **e** - Temporary restrictions due to socio-political issues (political crises, institutional visits, scheduled events, etc.); **f** - Other (specify in comments field)
Others (specify in comments field)		
Comments		

7.2. Effective Recreational Carrying Capacity[15]

Maximum number of people that the responsible institution can manage daily (specify causes, applied restrictions and possibilities to overcome the limiting factors)	
Comments (identify suggestions to improve effective recreational carrying capacity management (access control, transport control, design of circular itineraries, etc.)	

[15] **Effective Recreational Carrying Capacity:** it is the result of applying the necessary restrictions derived from the limiting factors associated with the management to the real carrying capacity.

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8. ADDITIONAL COMMENTS

9. BIBLIOGRAPHIC AND DOCUMENTARY REFERENCES

10. GRAPHICAL DOCUMENTS (photographs, maps, plans, etc.)

Insert image

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Insert image

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