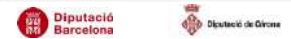




Parcs de Catalunya Xarxa de Parcs Naturals



Parc del Castell de Montesquiu

Espai Natural de les Guilleries-Savassona

PROVÍNCIA DE BARCELONA

Parc Natural de Sant Llorenç del Munt i l'Obac

Parc Natural del Montseny

Parc del Montnegre i el Corredor

Parc Natural de la Muntanya de Montserrat

Parc de la Serralada Litoral

Parc Natural de la Serra de Collserola

Parc de la Serralada de Marina

Parc d'Olèrdola

Parc del Garraf

Parc Agrari del Baix Llobregat

Parc del Foix

Barcelona Metropolitan Area

is one of the areas most populated, urbanized and with high economical activity, within Europe

Parc Natural i Reserva de la Biosfera del Montseny

30.120 ha

51.000 ha

1.700 m

Altitude

200 m

W: 700 l/m²/year
E: 1000 l/m²/year

X: 22°C - 5°C

> 1.000.000 visitors/year

Residents:
In Biosphere Reserve : 51.100 pax.
In Natural Park: 1.350 pax.

CATALONIA

31.89 km² · 7,5 million inhabitants

Density: 234 people / Km²

CONSERVATION PLAN of Montseny

<http://parcs.diba.cat/web/montseny/pladeconservacio>

- ✓ Montseny has a high biodiversity:
 - 164 habitats CORINE
 - > 8.500 taxons
- ✓ 11% habitats & 1.4% species with high conservation interest.



Forest tracks cause erosion and are

carriers.

Good environmental practices **are NOT** applied in forestry management.

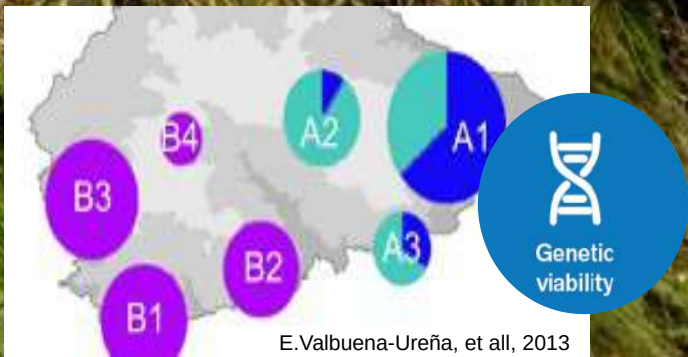


discharge site

> 100 water abstractions not in compliance with current regulations (Art.38 del Decret 1/2017)

Calotriton arnoldi (Montseny newt)

- ✓ Endemic of Montseny mountain)
- ✓ Discovered in 2006, there is still a great lack of knowledge about its biology and ecology.
- ✓ There is not conservation plan.
- ✓ Its distribution area is not stricted protected, and ~ 80% is within a private estate.



<1,500 adults in a **5 km** stretch of stream total area **8 km²** **7** different populations **4 W** **3 E**



The IUCN Red List of Threatened Species™ 2017-3

RED LIST
Building Conservation for 50 Years

ANIMALIA - AMPHIBIA GLOBAL, EUROPE

Calotriton arnoldi

Decreasing **<CR>**

OBJECTIVES



To conserve the Montseny newt
(endemical and critically endangered)

To improve river habitat
(in regression with anthropogenic threats)



OPERATIONAL TARGET



Protection



Dissemination
& Education



Conservation
(in-situ & ex-situ)



Research
& Monitoring



Habitat
management

METHOD

- > 120 people involved in multidisciplinary teams
- 6 Areas of work, with 49 different actions



2.971.276 € (60 % EU)
In reality is x 2



Oct. 2016 / Des. 2022



Protection



Dissemination
& Education



Conservació
(in-situ i ex-situ)



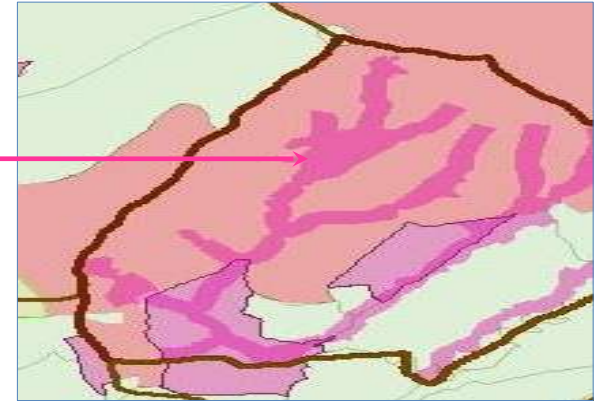
Research &
Monitoring



Habitat
management



- **Conservation Plan** for *Calotriton arnoldi* have been written, and approval is in the administrative process.
- ~ 300 ha of **Supervised riparian habitat management** has been established in private land
- Private forest de has been **acquired** (~80 ha) or has been **swapped** , to protect newt habitat.





Protection



Dissemination
& Education



Conservació
(in-situ i ex-situ)



Research &
Monitoring



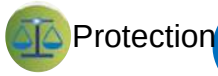
Habitat
management



- **Press, Radio & TV** (> 70 news published)
- **Published articles** publicats (20 tècnicians & 6 científists)
- **Web** (17.606 visitors, 6 quarterly newsletters)
- **Social media** (15.000 Wikipedia, 530 Twitter, 1.400 YouTube)
- **Promotional Material** (16.500 leaflets, 8 information panel, 3.000 leducational netebooks, 3.000 children's book, ·3D newt Video)
- **Networking** (TRivers, LimnoPirineus, PirOs, Hydrology, Freshabit, Wet FlyAmphibia, Alnus, RedBosques)
- **Travelling exhibition** (> 7.500 visites / 16 pobles)
- **Short Documentary** (6 videos)
- **Enviromental education for children shools**



- **Information days** (43 talks)
- **Workshops in breeding centres** (> 125.000)
- **Meetings with landowners** (> 70 meetings / 13 owners of land)



Protection



Dissemination
& Education



Conservació
(in-situ i ex-situ)



Research &
Monitoring



Habitat
management



<https://lifetritomontseny.eu/en/life-trito-montseny>

Videos: <https://www.youtube.com/channel/UCNeR6L7JnNLD4WA07nRqWdw>

SHORT THEMATIC VIDEOS :

- 1 - An amphibian endemic to Montseny
- 2 - The captive breeding of the Montseny brook newt
- 3 - Releasing new individuals
- 4 - The Montseny brook newt, from knowledge to conservation
- 5 - Habitat improvement for the Montseny brook newt
- 6 - Diseases affecting amphibians: prevention and environmental dissemination
- 7 - Environmental education, a fundamental part of "Life Tritó Montseny"
- 8 - A collective challenge for the preservation of a unique species

Video of Photo exhibición

LIFE15 NAT/ES/000757

Project of conservation of an only species to the world

News

Channel Youtube



Protection



Dissemination
& Education



Conservació
(in-situ i ex-situ)



Research &
Monitoring



Habitat
management



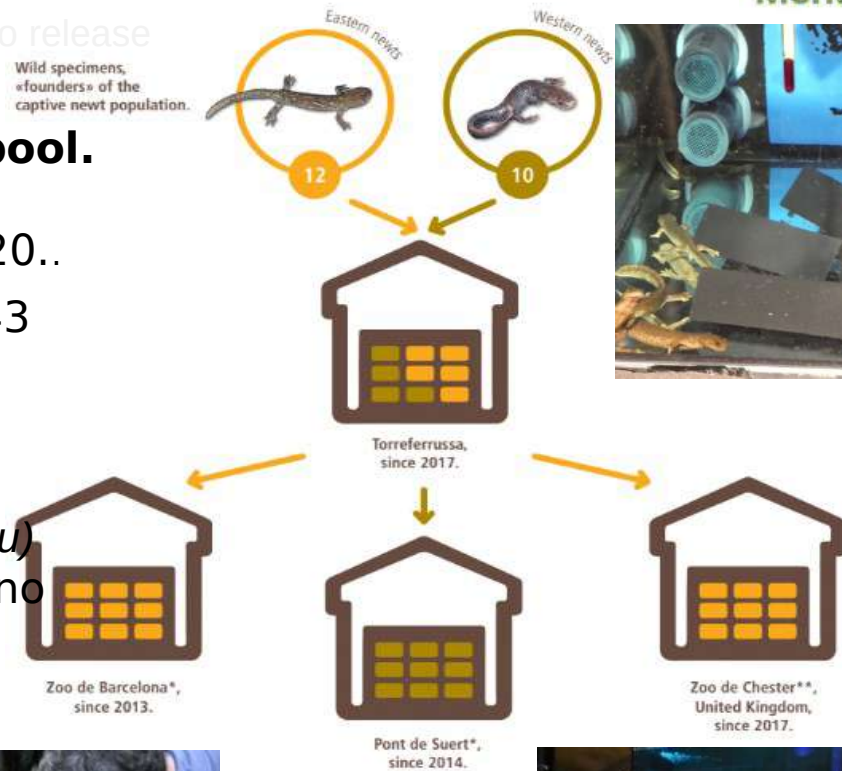
Breeding program : genetic reserve & production to release

- **4 Breeding centres and gene pool.**

1814 newts (1235 Western, 578 Eastern) have been born, until 2020..

- **Reintroductions.** :371 newts (243 Western, 128 Eastern) have been released in 5 different locations (survival > 19 %).

- **Biosafety** protocols (*ex situ* & *in situ*) and **sanitary analysis** . To date, no amphibian infections (Bsal, Bd, Ranavirus) have been detected





Protection



Dissemination
& Education



Conservació
(in-situ i ex-situ)



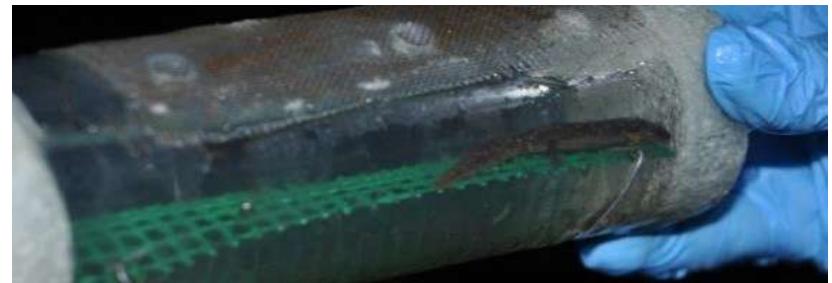
Research &
Monitoring



Habitat
management



- **Commission of experts** (> 100 technician and scientific, are implicated in projects or consultancy)
- **Abiotic monitoring stations** (15 meteorology, 40 hydrology, 2 erosion)
- **Monitoring of newt populations** (10 stations, 3 field teams)
- **12 Research programmes** (diet, thermopreference, metabolism, demography, habitat modelling, habitat geology, hydrology, genetics, environmental DNA, ...)





Protection



Dissemination
& Education



Conservació
(in-situ i ex-situ)



Research &
Monitoring



Habitat
management



The Montseny brook newt

Video3D_Biologia TritoMontseny_OMasana

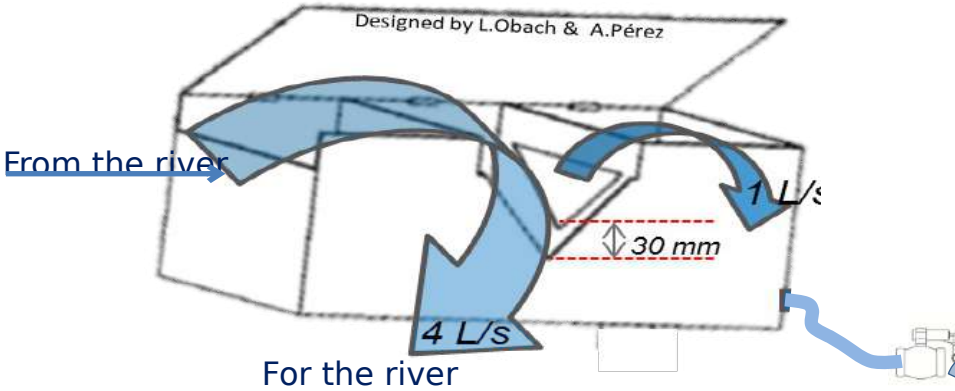
0:00:03

0:02:14

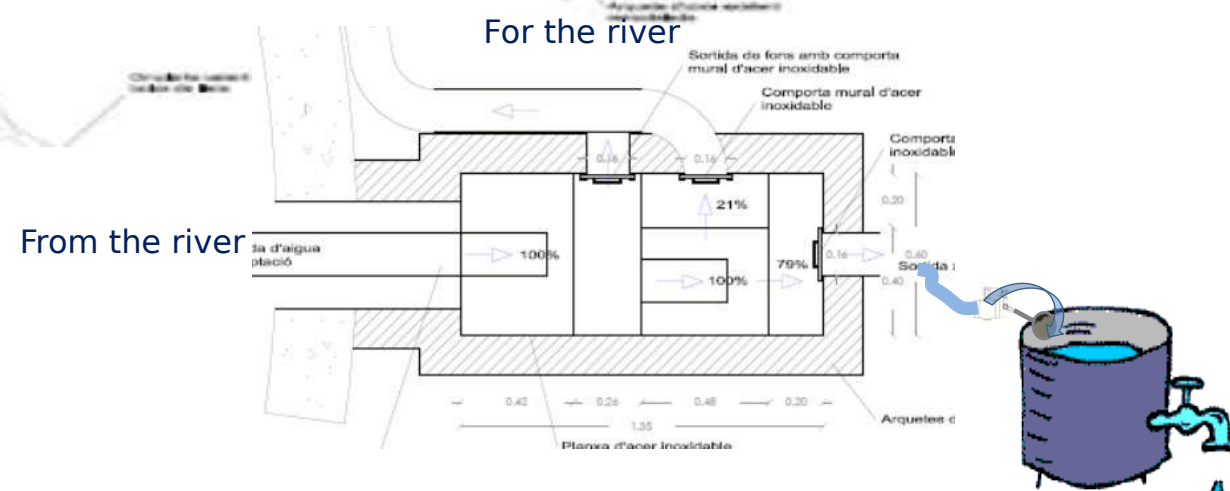
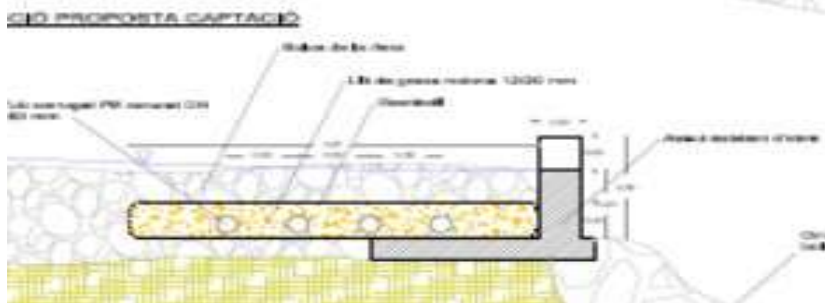
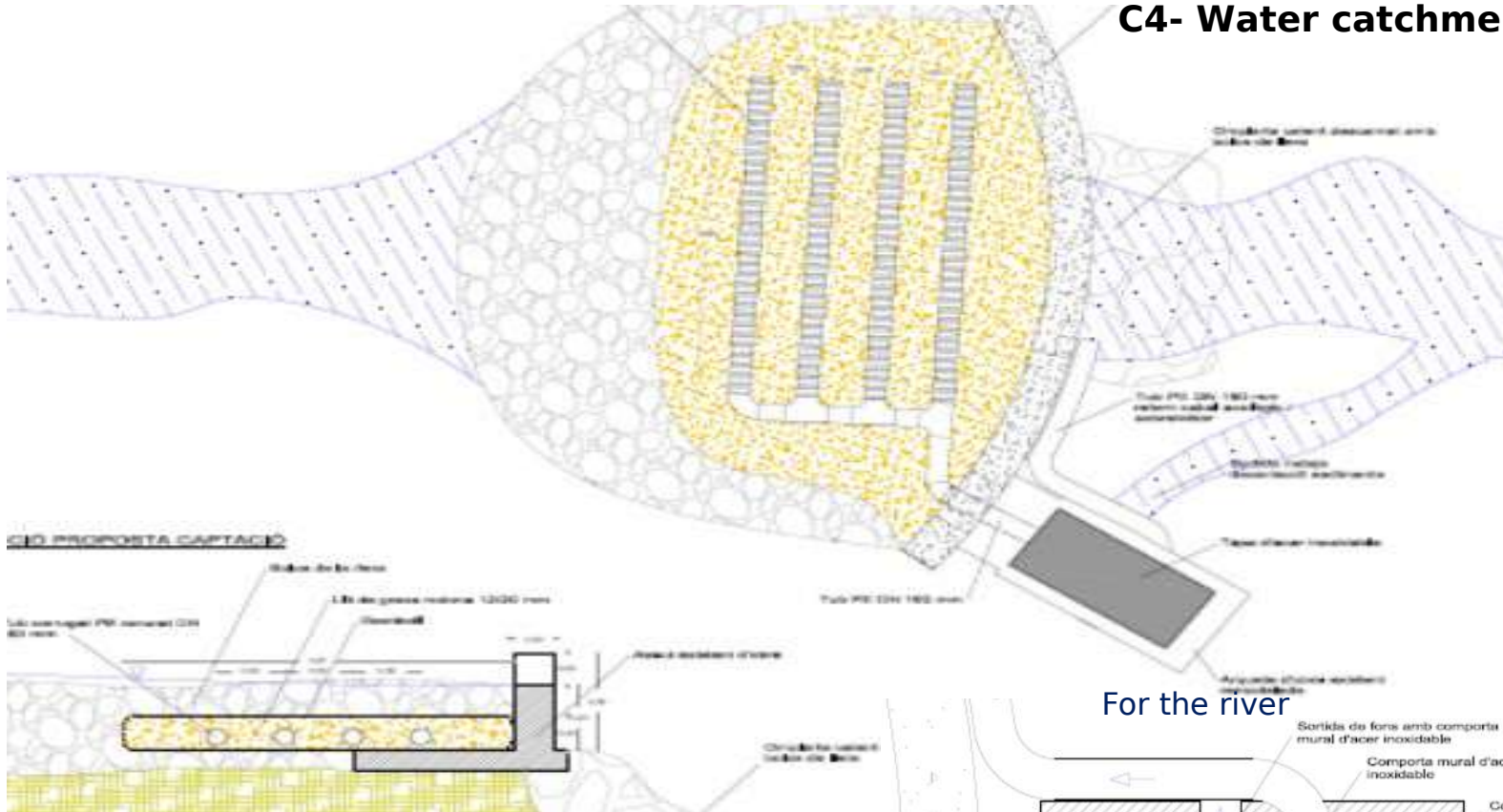


- 34 Redevelopment of water catchments (9 finished, 25 pending)
- Adaptation of legal catchments to ensure an ecological flow (cost €: ~ 3.500 €)
- Dismantling of illegal catchments (in collaboration with Catalan Water Agency)
- Installation of water storage tanks, with closing buoys

C4- Water catchments

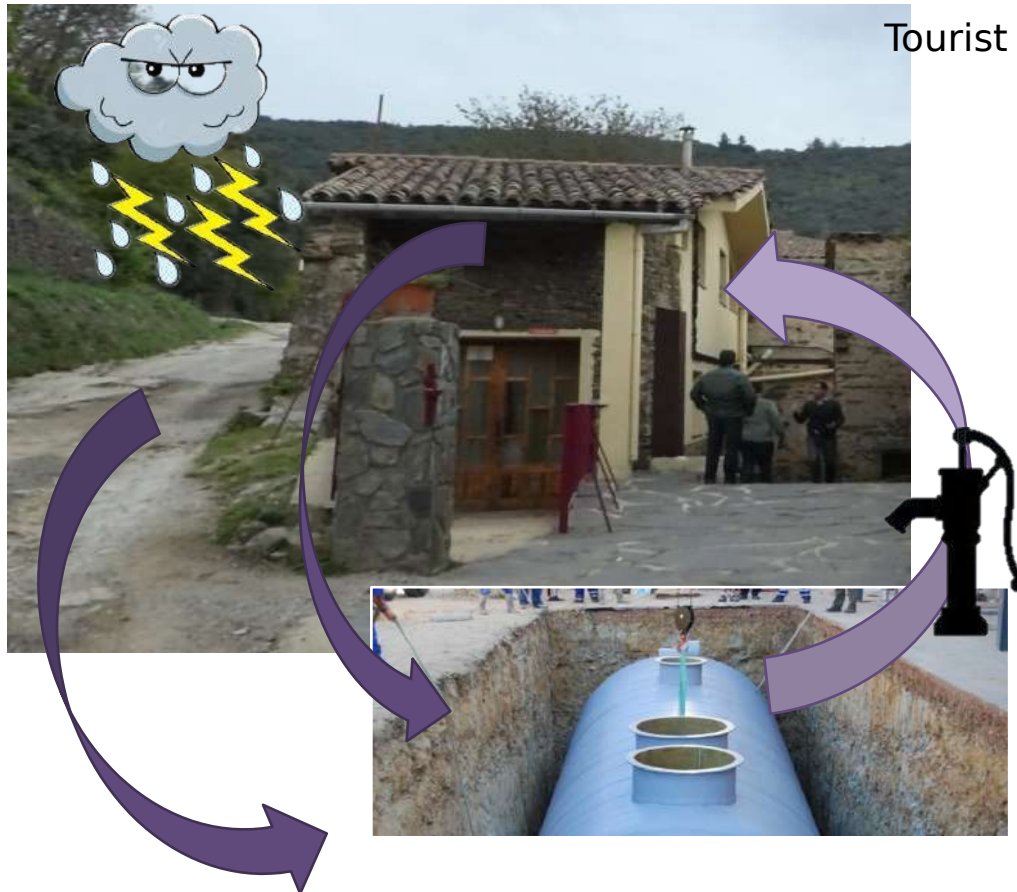


C4- Water catchments



C5- Stormwater

- River catchments can be reduced by 50% to 90% , if there is a good **rainwater collection** and storage system in place
- Installation of rainwater drainage, storage tanks and pumping station (13 actions planed, 2 finished, 11 pending) (cost €: ~ 3.000 € for single family house, to >20.000 € for agricultural, livestock or tourist exploitations)



Tourist exploitation



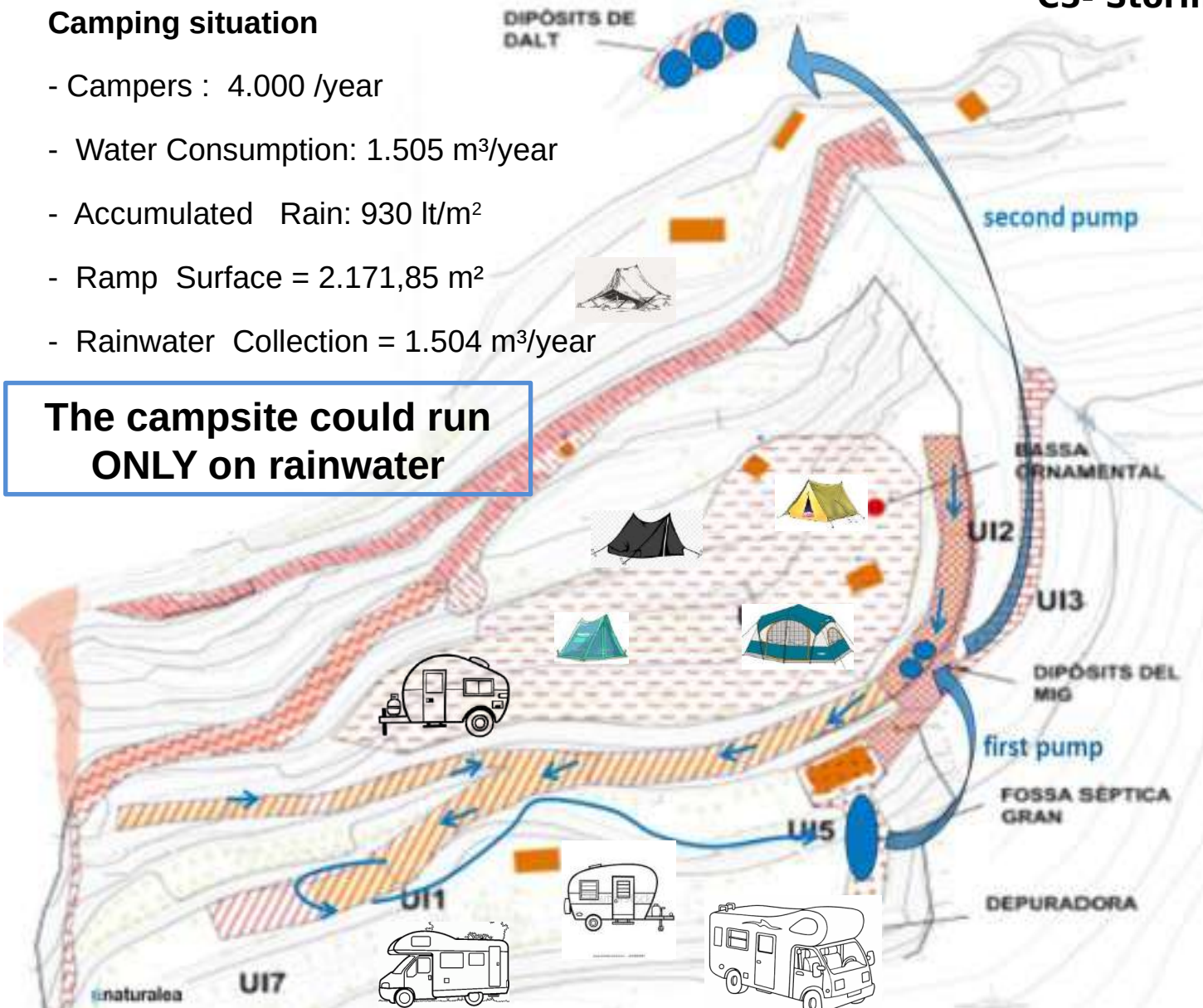
Family house

Camping situation

- Campers : 4.000 /year
- Water Consumption: 1.505 m³/year
- Accumulated Rain: 930 lt/m²
- Ramp Surface = 2.171,85 m²
- Rainwater Collection = 1.504 m³/year

The campsite could run ONLY on rainwater

C5- Stormwater





Protection



Dissemination & Education



Conservació
(in-situ i ex-situ)



Research & Monitoring



Habitat management



C5- Stormwater



inbeig
mbeo
n)
s
el
l'aigua
ucció
system

Sistema de reg gota a gota
Sistema de riego por goteo
Drip irrigation system



Wastewater Treatment Plant of Fontmartina Camping

C6- Waste water treatment



- One green filter has been built in the only equipment that could affect a newt population (cost: ~15.000 €)



Protection



Dissemination & Education



Conservació
(in-situ i ex-situ)



Research & Monitoring

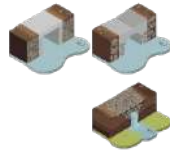


Habitat management



C7 River connectivity

- 27 Improvements in the Ecological Connectivity (22 finished, 5 pending)
- 4 Types of intervencions have been tested



13 Removal of the logging road (cost: ~2.000 €)

- 7 Concrete bridges (cost: ~20.000 €)

- 2 Filter rock (cost: ~2.000 €)



C7 River

conservació





Protection



Dissemination & Education



Conservació (in-situ i ex-situ)



Research & Monitoring



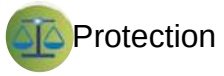
Habitat management



C8 Riverside habitat

- 24 Waterfront habitat improvements (12 finished, 12 pending)
- Construcció de terrasses amb bio-enginyeria i plantacions d'*Alnus*, *Fraxinus*, *Corylus* i *Sambucus*
- 12 Eliminació de coníferes exòtiques





Protection



Dissemination
& Education



Conservació
(in-situ i ex-situ)



Research &
Monitoring



Habitat
management



C8 Riverside habitat





<http://lifetritomontseny.eu>



Moltes gràcies!

Life Tritó Montseny



12-Video resum projecte-Musica_2min

0:00:09



0:02:17

