

CO-EVOLVE

Promoting the co-evolution of human activities and natural systems for the development of sustainable coastal and maritime tourism

Deliverable 4.7.3 – R2

Report on advancement of Pilot actions implementation



Pilot action n°5B *Coast of the Orb delta river*

(Vendres – Valras – Sérignan - Portiragnes)

Département de l'Hérault
(with Hérault Tourisme contributions)

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1. *Scope of the document*

This document is the report on advancement on pilot actions implementation and corresponds to Deliverable 4.7.3-R2, following the last one Deliverable 4.7.3-R1 elaborated in May 2018.

The new informations are based on the description of the new events and developments / results during these last months.

For memory, the concept is described in the deliverable 3.18.1 “Guidelines for Tourism-driven strategic Planning”. This report contains the advancement of activities foreseen in the **pilot area 5B – Coast of the Orb delta River (Vendres-Valras-Sérignan-Portiragnes)** for the final formulation of local Action Plans on sustainable tourism.

2. *CO-EVOLVE and the objectives of WP4*

The WP4 (M2-Testing) translates in practice the findings of WP3 in order to implement Pilot Actions (plans, concrete actions and measures), setting the conditions for a sustainable tourism in coastal areas and related maritime space and promoting robust and transparent decision-making processes. CO-EVOLVE recognizes as a key challenge for sustainable coastal and maritime tourism development the strengthening of cooperation among Regions and the joint development and transferring of approaches, tools, guidelines and best practices. The actions envisaged are systemic, ecosystem-based and dynamic, taking into account future scenarios of natural (i.e. climate change) and anthropogenic changes. The Pilot Actions embrace a wide range of case in the Med area, from coastal urbanized or exploited areas (including port areas, structured waterfronts, different kind of beaches with tourism facilities, etc.) to natural protected areas (Natura 200, Ramsar, SIC&ZPS, etc). Fields of intervention are the **integrated planning of coast-maritime space, governance and management of conflicts between different uses, recovery and valorization of natural areas, developing of integrated tourist offers and deseasonalization of tourist fluxes.**

WP4 has two main specific objectives:

- **Define and test training tools for implementing sustainable tourism** and for sensitizing local administrators / tourism operators. (Output 4.1);
- **Formulate local Action Plans and implement actions for sustainable tourism** in the Pilot Areas, with the participation of main stakeholders and local coastal communities (Output 4.2);

WP4’ results and practice experiences on the field, constitute the basis of good practices contribution to the “Transferability Plans” at pilot areas and regional scale (WP5).

WP4 starts on month 02-2018 and end on month 05-2019 **and represents the Module 2 “Testing” of CO-EVOLVE, according to the modular structure of Interreg MED projects.**

3. *The strategic planning of Pilot area*

The strategic planning process guides development in the direction of those strategic priorities identified by all stakeholders through a consultative process. In particular, on coastal area, a tourism-

driven strategic plan for sustainable development of coastal areas have to integrate main principles and goals provided by the Integrated Coastal Zone Management recommendations (UNEP/MAP/PAPRAC Guidelines for ICMZ, 2012) and the Sustainable Coastal tourism approach guidelines (UNEP, 2009).

The methodology proposed by deliverable 3.18.1 for a definition a strategic planning tourism based on a pilot area is organized in different consequential steps that constitutes an adaptive and cyclical process. It consists of 6 major phases, each of which includes key tasks and steps. The iterative process of tourism-driven strategic planning in coastal areas is reported in figure below.



4. Brief description of the Pilot area

12 x 3 km, Orb river, 2 urban coastal areas, many high level campgrounds, and natural areas.

Population: 23 000 during the year, 62 000 in summer.

+ 5 000 jobs during summer period.

Beach and dune erosion (44% of the coast), sea & river flooding, 2 tourist harbours.

Extreme climate events over the last 20 years: 5 to 15 storms per year and an average extreme flood every 2 years.

Evaluation of the coastal damage at the 2100 horizon: between 5 and 20 Billions € for the department of Herault.

The demographic trend is to a sharp increase of the population.

Coastal risks :

Mass tourism, anthropization and urbanization of the coast have created fragility and reduced the available space on the terrestrial part of the coastal strip. Sea level rise, flooding from the sea and the river, erosion of beaches ... More frequent and violent storms contribute to erosion of the coast, and floods of high amplitude and more frequent pose a risk for the residential and tourist equipments established on the coast. Coastal erosion poses a direct threat to urbanization and campsites near beaches.

The reduction of the sediment contribution from rivers and streams has deprived the system of a considerable volume of sand.

Threat to the water supply:

The pilot area is a very high-tension tourist sector with frequent drought situations in summer, often requiring the establishment of a crisis unit at the level of institutional actors and progressive constraints of users (watering limited green spaces, crops, washing cars ...). Existence of conflicts of uses related to water.

The flow of neighboring rivers is decreasing and the influx of tourists increases water consumption.

Waste Management : Pollution and anthropogenic pressure.

5. Planning SET-UP in the pilot area

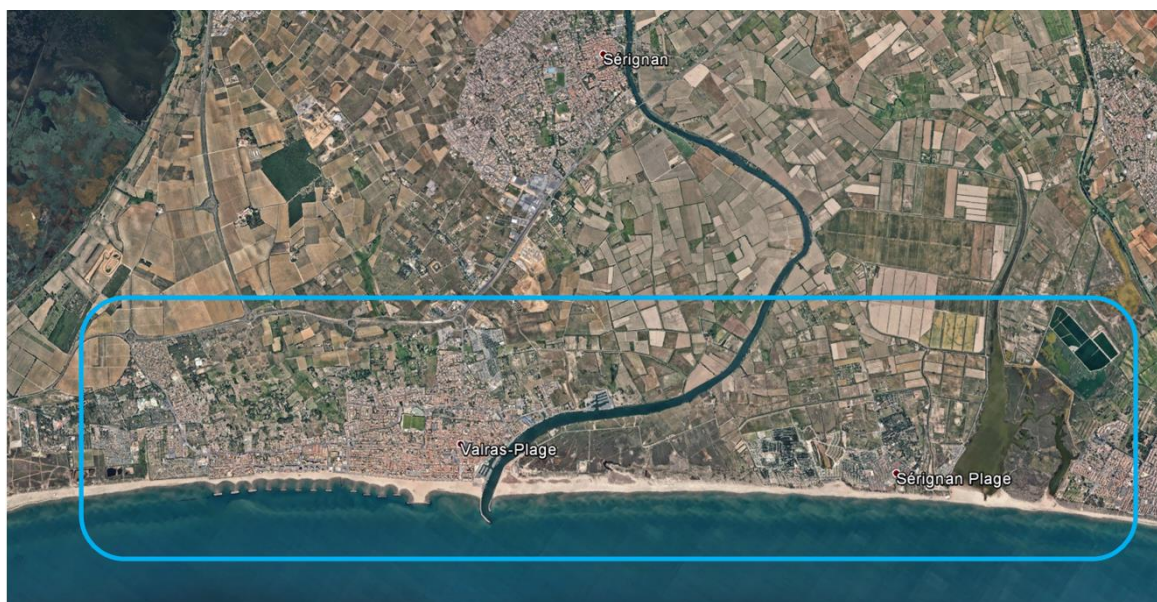
The main aim of this phase, that can be considered the most important pre-planning phase, is to create the needed bases for the subsequent implementation of the whole planning process.

The general framework was well studied during the 2017 year with the works developed in WP3 and the corresponding Tasks.

At the scale of the Occitanie Region was elaborate the “Schéma Régional de Développement du tourisme et des loisirs de la Région Occitanie - 2017 / 2021 ». Some months later, Department of Hérault elaborated the “Schéma départemental de développement du tourisme et des loisirs – 2018 / 2021, well coordinated with the regional Plan.

At the scale of the Pilot area “ Orb delta river”, we met at first the services of Department and the urban Community of Béziers (2017, January 16). The working team was identified : Conservatoire du littoral, Syndicate mix of Orb river, State and Region services, Municipalities, stakeholders.

We list the most important studies and the actions in progress : a frequenting management Plan for the natural zone called “Orpellières” was recently adopted. And we precised *the territorial scope, including the territories of the municipalities of Vendres – Valras – Sérignan – Portiragnes*. See below the Google picture.



Concerning the stakeholders, we identified some of them well organized like Municipalities and public services. Others, in particular campgrounds, less informed about precise developments of Climate changes, and more anxious for the future of their tourist activity and their work tool.

We could observe that during the first semester of 2017 : first meeting with representative organization called Fédération de l'Hôtellerie de Plein Air (FHPA), letter to formalize a **specific partnership** (see annexe), information and sensibilization needed, 3 thematics chosen : coastal risks (beach erosion, maritime and river flooding), water economy during summer time, mosquito prevention and information on the fight.

The first Action identified is the "ELABORATION OF A CYCLE OF INFORMATION AND AWARENESS MEETINGS FOR COASTAL TOURISM PROFESSIONALS".

At this step, we decided to find the help of an expert : a public consultation was organized, and some months later – September 2017, we choose Mayane. See annexe for objectives and expected results.

A *specific work plan* was elaborated during the first semester '17 in concertation with the working team, a **steering committee was set up** – see in annexe meeting reports of October & November 2017, March 2018.

The most important milestone of this work plan are :

- Official engagement of the Action during an info Day & Conference Co-Evolve / CastWater at the "SETT 2017 November, Montpellier – Herault" <http://www.salonsett.com/fr/le-salon/sett-2017>
- Debriefing, evaluation,
- Technical working meetings : Spring 2018,
- Capitalization, Mayane's Deliverables : animation process, best practices Guide for sustainable Tourism, communication Plan.
- Results presentation & discussions during the SETT 2018, November 2018 – Co-Evolve Info Day.

As part of the SC discussions, and in relation with co-evolve result expected, a needed monitoring of the beaches is identified in December 2017. **This monitoring – Action 2** - will use data from download observations with webcams installed at the top of a housing tower (45 m high, in front of the beach). This monitoring will focus on an analysis of tourist attendance and management of coastal sediments.

We decided to find the help of an expert : a public consultation was organized, and some months later – April 2018, we choose Casagec. See annexe for objectives and precise expected results.

Working Plan :

Sediment management Plan elaborated in October 2018,

Tourist Frequenting of the beach : study expected for October 2019, with 2 summer periods of data.

6. Building knowledge framework in the pilot area

The overall aim of the step “Building Knowledge framework” is to analyze the area, in a coherent and integrated way, in order to build up the knowledge to support the decision-making process and the participatory process

Collect here all the information already gathered by WP3 pilot area analysis focusing on

- Threat and enabling factors

https://drive.google.com/drive/folders/0B52sNsU20a_LbXNqTy0xR2dHM00

- Definition of sustainable toolkit

https://drive.google.com/drive/folders/0B52sNsU20a_LbXNqTy0xR2dHM00

Please add info on analysis of existing planning and procedures on pilot area/s

During Tasks 3.16 & 3.17, a definition of sustainable toolkit was elaborated and proposed with the help of University of Thessaly. We remember below the informations and suggestions produced.

Pilot Area	5B. Vias/Vendres Orb Delta
Partner	Department of Herault
RESULTS	
Synopsis	The results indicate a differentiation from the standard sun and beach tourism model and a clear intent to develop alternative types of tourism activities. However, the respective data on the pilot area's key assets is considerably limited in order to fully assess the dynamics of tourism development at the destination. The establishment of measuring and monitoring mechanisms as well as the definition of thresholds for tourism development is considered crucial towards the sustainable development of the pilot area.
Customized Tourism Sustainability Toolkit	Core indicators
	C.A1.1. % of tourism enterprises/establishments in the destination using a voluntary certification/labelling for environmental /quality/sustainability and/or Corporate Social Responsibility
	C.B1.1. Number of tourist nights per month
	C.B2.1. Average length of stay of tourists (nights)
	C.B3.1. Direct tourism employment as % of total employment in the destination
	C.C1.1. Number of tourists/visitors per 100 residents (peak period)

- C.D3.1.** Waste production per tourist night compared to general population waste production per person (kg)
- C.D5.2.** % of tourism enterprises taking actions to reduce water consumption
- C.D6.2.** % of tourism enterprises that take actions to reduce energy consumption

- C.D7.1.** % of local enterprises in the tourism sector actively supporting protection, conservation and management of local biodiversity and landscapes

Destination Indicators: Di.Beach/Maritime tourism

- Di.A4.** Number of second homes per 100 homes in coastal zones*
- Di.B1.** % of tourist infrastructure (hotels, other) located in coastal zones*
- Di.C2.** % of beaches awarded the Blue Flag
- Di.C3.** Costs of erosion-protection measures (e.g. sea walls.)
- Di.C4.** Beach nourishment: sand volume and extension of the restored beach (m3 and m2)
- Di.D1.** Existence of up to date tourism plans and policies (YES/NO)
- Di.D2.** Existence of a land use or development plan (YES/NO)
- Di.D8.** Existence of performance indicators designated for evaluating the plan developed and used(YES/NO)
- Di.D11.** Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO)

Destination Indicators: Dii.Urban/Cultural tourism

- Dii.A3.** % of total tourists visiting in peak month and average for the year
- Dii.C4.** % of sites under a management and monitoring system for protection of cultural sites
- Dii.D1.** Existence of up to date tourism plans and policies (YES/NO)
- Dii.D2.** Existence of a land use or development plan(YES/NO)
- Dii.D8.** Existence of performance indicators designated for evaluating the plan developed and used(YES/NO)
- Dii.D11.** Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO)

Destination Indicators: Div.Recreational boating (Yachting/Marinas)

- Div.A2.** Number of yachts per year (by month)
- Div.D1.** Existence of up to date tourism plans and policies(YES/NO)

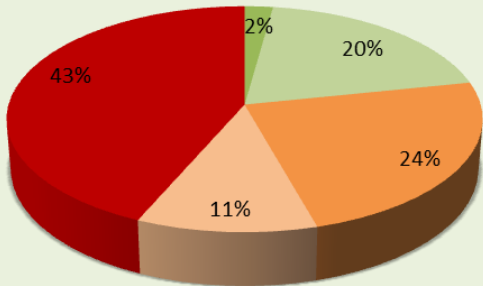
- Div.D2.** Existence of a land use or development plan(YES/NO)
- Div.D11.** Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO)

Destination Indicators: Dv.Nature/Ecotourism

- Dv.A3.** Total number of visitors to parks and to key sites
- Dv.B1.** Number of sites/ecosystems/assets considered to be damaged or threatened (% of all defined systems/assets in protected area)
- Dv.C2.** % of endemic species at the site
- Dv.D1.** Existence of up to date tourism plans and policies(YES/NO)
- Dv.D2.** Existence of environmental plan and management(YES/NO)

Pilot area-specific indicators

- P.A1.2.** % shoreline subjected to erosion
- P.A1.3.** Coastal area in degraded condition (low/medium/high)

	<p>P.A1.6. Coastal flooding events per year(number)</p> <p>P.A2.1. Land occupied by artificial surfaces within the first 500m of coast (in %)</p> <p>P.A2.2. % of area designated for tourism purposes</p> <p>P.A3.1. Total tourist numbers (mean, monthly, peak) (categorized by their type of activity)</p> <p>P.B1.1. Existence of a coastal planning management system</p> <p>P.B1.2. Length of protected and defended coastline (km)</p> <p>P.C1.2. % environmental, social, cultural actions recommended in plan which have been implemented</p> <p>P.A4.3. Percentage of bathing sites with excellent water quality</p> <p>P.B2.6. Implementation of Natura 2000 management plans</p> <p>Added by PA Tourism fluxes between urban zone, campgrounds zone and natural area (complementary zones)</p> <p>Added by PA Considering the important river, flooding risk (monitoring marine and river flooding risk) and population alarm process</p>
Data Availability Overview	 <ul style="list-style-type: none"> Available at destination level Available at different spatial scale Partially available: Estimations based on proxy and qualitative data at destination level Partially available: Estimations based on proxy and qualitative data at different spatial scale No available data
Key message from final measurement and data evaluation	<p>The data available includes several estimations, proxy calculations and spatial inconsistencies (e.g. data available only at NUTS3 or municipal level). However, there is important data input from official statistical agencies, tourism boards and studies, showing a clear trend in measuring and monitoring, which could be used as a starting basis to extract conclusions at destination scale through participatory workshops with local stakeholders.</p> <p>There is also significant input regarding satisfaction levels and trends which, however, should be verified and updated in order to integrate the perspective of official authorities, experts, public and private stakeholders involved in the tourism sector.</p> <p>The pilot area <i>invests in several types of tourism activities and differentiates from the standard sun and beach tourism model</i> developed in most Mediterranean destinations. However, there is significant <i>lack of data regarding tourism flows and key assets for the development of tourism activities</i> at the destination (especially in terms of cultural and ecotourism activities) in order to fully assess its dynamics and future prospects.</p> <p>Significant effort is made in the field of environmental protection, especially regarding</p>

	<p>water consumption and coastal erosion, through the implementation of tourism plans and strategies and land use management policies. Tourism businesses also seem to be actively and increasingly involved in environmental actions to reduce the impacts of tourism activities at the destination. Special attention should be given in monitoring littoralization trends since almost 80% of tourism infrastructure is located in the coastal zone and 45% of the land within the 500m. of coast is occupied by artificial surfaces.</p>
<p>Suggestions for future evaluation and monitoring</p>	<p>Future efforts should focus on measuring and monitoring tourism flows and littoralization trends at the destination as well as on recording and monitoring its key assets, in order to support the development of alternative types of tourism activities (especially cultural tourism and ecotourism).</p>

Source: UTH elaboration

Moreover, we can refer to some results from local studies or projects in progress :

- 1/ Orpellières natural area : frequenting management Plan,
- 2/ Valorisation of the coast from Béziers to the sea.

7. Defining vision-goals-objectives in the pilot area

The starting point to create an effective strategy for sustainable tourism development in coastal areas is to set the main direction to which we want to move: the vision and its related objectives. The construction of the vision for the area and the identification of strategic specific objectives must be constructed, on one hand, addressing the strategic issues emerged from the analytical phase, and, on the other hand ensuring the coherence and compliance with ICMZ and Sustainable tourism principles and main goals.

- *Design of a common and integrated vision for the area*
- *Identification of the main planning goals and objectives*
- *Linking objectives with ICZM and Sustainable tourism goals*

Vision – objectives :

Preserve complementarity between urban areas, natural and wild areas, camping areas (temporary summer housing, outdoor establishments).
 Protect natural areas.
 Maintain tourism activity by allowing it to evolve and adapt to changes.

The vision for this area is meant to increase competitiveness and market access for sustainable and better informed tourism. The principal development purpose for the area will consist of applying the best management tools for environmental and coastal protection. The tourist development will be focused mainly on sustainability, not only in strictly environmental terms, but also with regard to economic development, intermodal and soft mobility, economic and territorial sustainability, use of heritage, creation and innovation in tourism products.

For the Orb River Delta, this type of development process will be related with:

- New communications technologies and social media able to improve destinations' sustainability and competitiveness while influencing consumers' behavior. Communicating sustainability in the right way can definitively change production and consumption patterns.
- Certification that can helps certified entities to measure their performance in a more efficient way while helping them develop and monitor a sustainability strategy.
- Coastal protection will be an imperative since it responds to consumers' asks and expectations, and allow the survivance of a coastal touristic economy.

The main planning goals and objectives identified :

- Avoid sanctuarizing natural areas, but by managing and directing frequentation in space and time, outside sensitive periods - for example, bird nesting periods.
- Maintain tourism activities as a source of employment, reducing their environmental impact.
- Protect freshwater resources (vulnerable in summer), by saving water and by looking for alternative resources.

8. News events that took place between May & November 2018

We will focused on the most important events realized at the Co-Evolve local Partner's initiative.

8.1 May 2018, 24th : information and awareness meeting for tourism professionals "Sustainable and resilient tourism: technical workshop water savings"

Organized in association with CastWater Med project, the complete program is provided in the appendix.

We noticed the day before this meeting, a very small number of registrants - participants: the decision was made to cancel this event.

After reflection, we have put forward the following reasons for this slightest interest:
Proposed for some representants of Tourism / campsites, the date was not the best period to organize it, the hot season beginning;
the spring of 2018 was rainy and wet, with no water restrictions, unlike in 2016 and 2017;
similar steps and developments have taken place in the recent past in this sector.

We decided to postpone it to a later date, at the end of the year 2018.

8.2 June 2018, 12nd : Co-Evolve Coastal workshop

It was agreed that the meeting would be held with a small group of stakeholders in order to favor an open and easy dialogue between institutional and private participants. 14 people participated.

Three themes will be successively addressed:

- A communication to adapt: rethink the method and the tools;
- Towards a co-construction: what place for local economic actors?
- The difficult strategic retreat: a necessary reflection around the legal and regulatory tools.

A report of this meeting is available.

8.3 Salon SETT à Montpellier : 6 until 8 November 2018

SETT®, N ° 1 in Europe for the campsites sector.

With more than 40,000 m² and 9 exhibition halls, SETT® 2017 gathered 14,952 trade visitors (15% of whom were international visitors) who met the 587 exhibitors.

With many formal and informal meetings & conferences, the SETT® is 3 days of conviviality between the decision-makers and the exhibitors: main actors of the market.

We organized a Co-Evolve conference focused on water management in Summer. (unfortunately, a french Minister was speaking at the same time...).

See more on <http://www.salonsett.com/fr/visiter/programme>



Moreover, we had a small place to expose the Co-Evolve poster during the 3 days – see below.



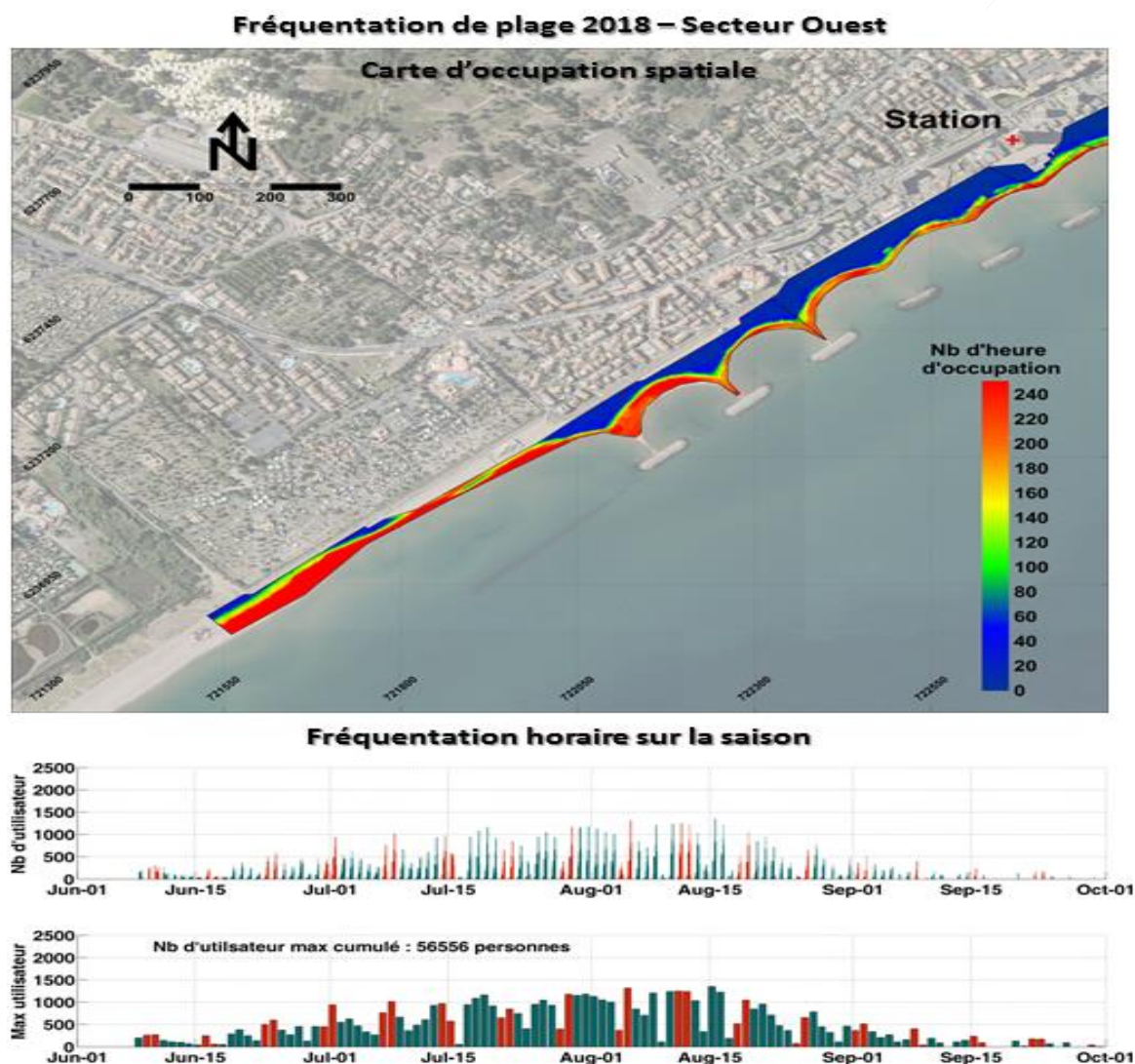
9. First Results

9.1 Tourist frequentation

We launched a study on tourist visits of the beach of Valras-Plage during 2 summer periods 2018 and 2019.

The report well received at the end of October, concerns the modernisation of a web station, its test / validation and the methodology used.

The study of beach attendance during the 2018 summer period was made using an innovative automated detection algorithm. A set of more than 8,400 video images, more than 1,400 hours of monitoring, has highlighted many results that will be used to optimize the management of the beach.

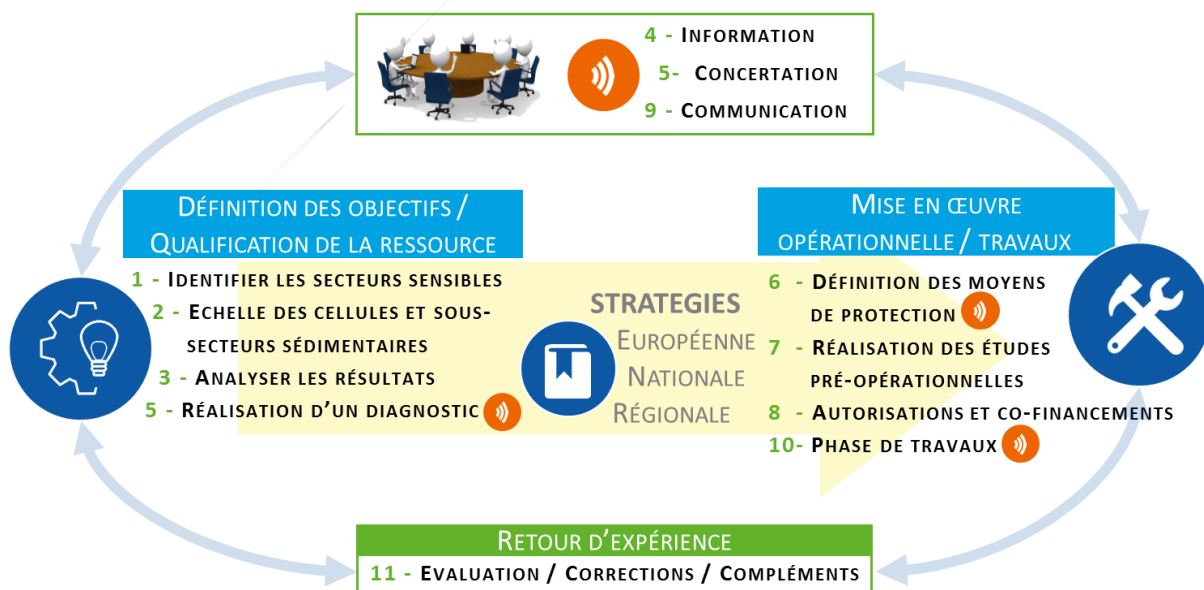
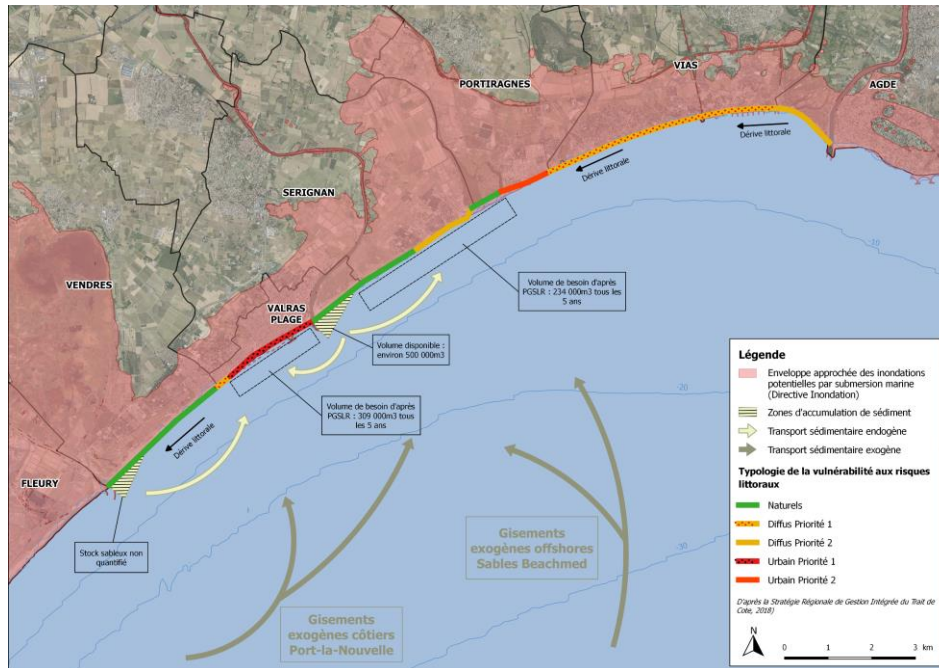


Secteur Ouest: (a) carte de distribution spatiale des utilisateurs de la plage, (b) nombre d'utilisateurs heure par heure, (c) nombre d'utilisateurs maximal par jour, et (d) nombre d'utilisateurs moyen par jour pour l'été 2018 (les barres rouges correspondent au week-end).

9.2 Beach Sand Management

Following our Co-Evolve commitments, we are finalizing a first report to be presented and discussed with our European partners.

After a summarize of the studies realized at a large scale, we focused on the pilot area 5B before proposing a transferable methodology – see below.



10. New Actions involved

Following discussions during our local participatory meetings, we are involved in new sustainable actions (from october 2018) to be realized during the last year of Co-Evolve period, in addition of those soon involved.

Presented and discussed during the last steering Committee of Barcelona, on October 29, 2018, these new actions are :

10.1 Environmental posting for tourist accomodations

Context

- Hérault : more than 100 km of coast side
- Coast line retreat
- Important anthropization of the coastline
 - 75 000 merchant beds et 4,3M coastal nights

Object :

- Creation of an environmental management tool
- Quantifiable indicators on a rule
- Annual Progress Approach

Goals :

- Sensitize hosts and tourists
- Reduce environmental impacts
- Reduce operating costs

Environmental posting

Governance : project management CD34 & co-management HT

Object : Operational tool for tourist accommodation. Progress making, based on reliable indicators echeloned on a graduated ruler from A (low impact) to E (high impact)

Partners : State (ADEME), Region (CRT), Department CD34, Federation Outdoor Hospitality (FHPA)...

Intention : reduce environmental impacts, reduce costs



Author	Deliverable	Status	Date of Delivery
RER	4.1.1	final	26/02/2018

10.2 Soft Roaming

Context

- Hérault: destination of sun, sea & adventure tourism
- Great transversal cycle roads

Object :

- Creation of cycle loops by day or ½ day
- From great itineraries (Canal of the 2 seas by bike, the Mediterranean by bike)

Goals :

- Boost the soft roaming offer to reduce the environmental impacts of transport network
- Discover the preserved landscapes and heritage



10.3 « Ports pour Tous » : accessibility diagnosis of ports in the two pilot areas

10.4 Study : Impact of sea level rise (induced by global warming / Climate Change) on the departmental port of Chichoulet in Vendres

11. Conclusion :

Participatory process / Concertation :

The implementation of the local actors during several meetings was interesting to better precise and to follow these actions : some steering committees were organized... We hope to obtain the first results of these last actions for May 2019 while the end of Co-Evolve is planified for October 2019.

We will inform our partners that Department of Herault decided to launch an initiative called **"Herault littoral"** which is more important and longer than the Co-Evolve time. In particular, this Strategy plans to build a coastal house directly on Frontignan's pilot site.

The new actions that will be undertaken will contribute to the actions Plan planified on this pilot site 5B "Delta de l'Orb".

Nota :

- Difficulties to establish a new dynamic on a sector for which many actions have been carried out, are planned or already committed.
- Legitimacy of the Department not always obvious to mobilize around an approach related to the management of this coastline, widely shared in France.



(+ to add / choose between some maps produced)