

Action Plan

1. GENERAL INFORMATION

Project:

WaVE Interreg Europe

Partner organisation:

Provincial Council of Alicante (Diputación de Alicante)

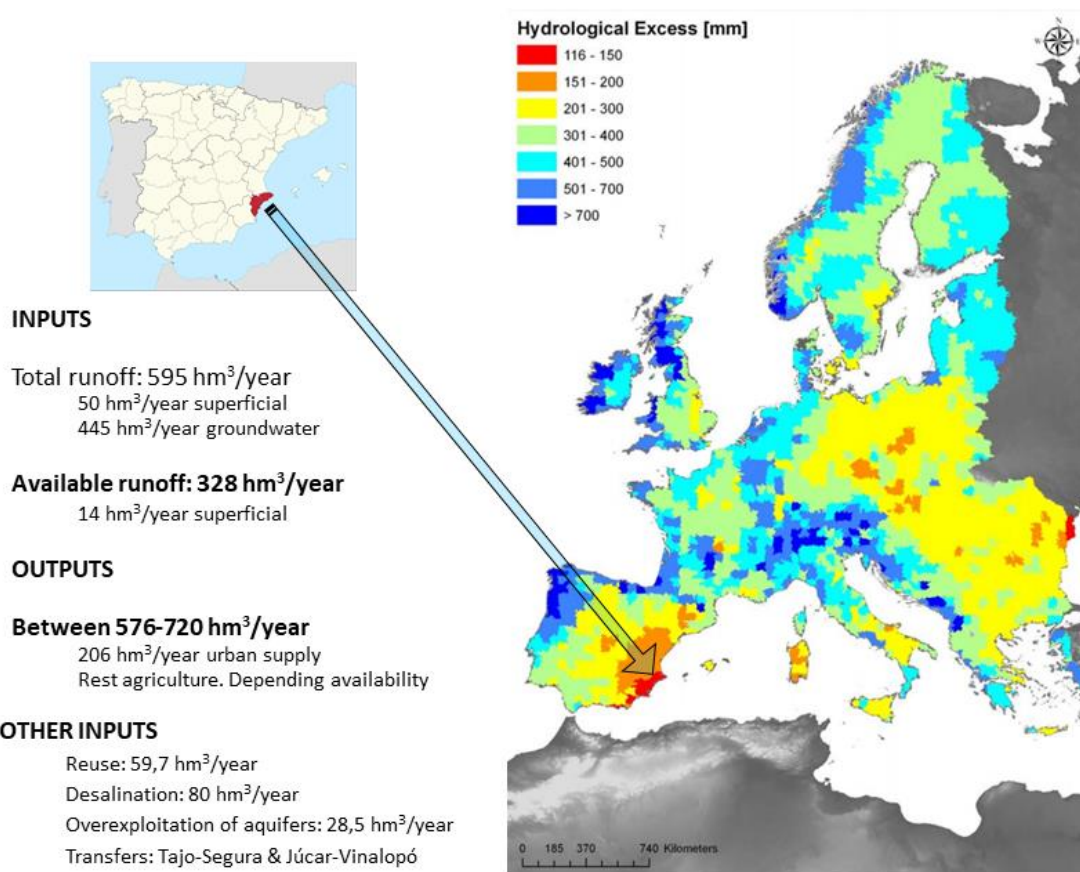
Other partner organisations involved (if relevant):

Delft University of Technology (Netherlands)

Municipality of Breda (Netherlands)

Country:

Spain



Location and water resources of the Province of Alicante
(Source of illustration: own elaboration; map: Wriedt & Bouraoui, 2009
<https://publications.jrc.ec.europa.eu/repository/handle/JRC53258?mode=full>)

NUTS2 region:

Province of Alicante (one of the three provinces of the Valencian Community)



Location of the Valencian Community in Spain and its three provinces, being Alicante the southest one

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2. BASELINE SITUATION IN THE REGION

A. MAIN FEATURES AND ENVISAGED IMPROVEMENT OF THE POLICY INSTRUMENT

Policy instrument(s) addressed:

Plan de Recuperación, Transformación y Resiliencia **PRTR** (Recovery, Transformation and Resilience Plan) - Nex GenerationEU.

Institution responsible for addressed policy(ies):

Secretaría General de Fondos Europeos, Ministerio de Hacienda del Gobierno de España (General Secretariat for European Funds, Ministry of Finance of the Government of Spain).

Proposed self-defined performance indicator(s):

1. Inclusion of water-linked heritage concept in the new Spanish Recovery, Transformation and Resilience Plan.
2. Number of proposals submitted.
3. Number of proposals funded.

Measurable and attainable results (before July 2022):

- Presentation of Expression of Interest to the Ministry (River Monnegre Green Corridor – Action 1) to define the next calls and funding programmes, in order to include water-linked heritage valorisation.
- Consolidation of the Regional Stakeholders' Group (RSG) called 'Camins d'aigua' (Water paths) around the project of River Monngere Green Corridor. Sign an agreement of majors to create a permanent Consortium to promote and to apply for EU funding calls (first semester 2022).
- Implementation of the Special Plan of the Tibi dam and its environment as a policy instrument (second semester 2021).
- Implement the new Blue Route of Almoradí (Action 2) from the Provincial Council of Alicante budget (web-app and informative panels) and the Council of Almoradí budget (ecomuseum, route design and kick off) from the first semester of 2021 to the first semester of 2022.
- Revalorization proposal for the Relieu dam.
- Collaborate with CONVEGA, a consortium among the Provincial Council of Alicante (Diputación de Alicante) and 26 municipalities of the region of Vega Baja in the province of Alicante to create cycling tourism paths, to develop and impulse the Blue Routes (2022).
- Create a new EU partnership with some WaVE partners and other from new countries to apply for EU funding of a common project in water-linked heritage valorisation (2022-2023).

Target value of the indicator(s):

1. At least 1 specific mention to water-linked heritage in the PRTR Calls.
2. Number of proposals submitted to PRTR Calls including water-related heritage.
3. Number of projects funded by PRTR Calls.

Evaluation of the current operation of the policy(ies):

From the provincial/regional point of view, different policies have to be considered and have been influenced by WaVE, such as the **Provincial Council of Alicante Funding Calls**. Nevertheless, this Action Plan is focused in the **NextGenerationUE** policy, regarded by the UE as a once in a lifetime chance to emerge stronger from the pandemic, transform our economies and societies, and design a Europe that works for everyone. This policy is translated to Spain in the **Plan de Recuperación, Transformación y Resiliencia PRTR (Recovery, Transformation and Resilience Plan) NextGenerationEU**.

The **ERDF OP** has been the main funding program to accomplish changes in the territorial management. When the WaVE project was launched, its target was ERDF OP 2014-2020 as the main EU policy for the region, but it was in the ending phase and was no longer influenceable. ERDF 2014-2020 OP had the main aim to boost economic growth in the Valencia region, as well as to contribute to the achievement of the EU 2020 targets for **smart, sustainable and inclusive growth** that included the creation of jobs and the boost of regional productivity. The ERDF investment financed the 11 objectives or thematic priorities established by the Cohesion Policy to promote growth in the 2014-2020 period. Priority 6 (Environment and resource efficiency) addressed some topics directly approached by WaVE, specifically IP 6.c that deals with the protection, promotion and development of cultural heritage. This policy instrument should have been bottom-up (evaluation and consultation), although sometimes it has been criticised for have being actually top-down. WaVE orientation around stakeholders' groups could facilitate the transition to a bottom-up approach for the next period.

During this ending stage of the ERDF OP 2014-2020, the COVID19 crisis has changed the picture of EU policies, launching the **NextGenerationUE** recovery plan. The Next Generation EU (NGEU) fund is a European initiative to provide financial support to all member states to recover from the adverse effects of the COVID-19 pandemic. Despite all the negatives that this pandemic has brought, there is widespread optimism that the EU can emerge more robust than ever. So, this WaVE Action Plan aims to influence this new and key PI, that in Spain is competence of the Government of the country and has been launched as: **Plan de Recuperación, Transformación y Resiliencia PRTR (Recovery, Transformation and Resilience Plan) NextGenerationEU**.

Policy instrument addressed	
Official name:	Plan de Recuperación, Transformación y Resiliencia PRTR (Recovery, Transformation and Resilience Plan) - Next GenerationEU
Timeframe:	2021-2026
Territorial scope:	National and regional (Comunidad Valenciana)
Priority areas/objectives/thematic focus:	leading the way out of the crisis and building a greener, more digital and more resilient Europe
Funding (euro) provided by the instrument:	The EU long-term budget 2021-2027 together with NextGenerationEU, form the largest stimulus package ever financed through the EU budget, of €1.8 trillion.

Though **Provincial Council of Alicante is not directly in charge of this policy**, political representatives in the Provincial Council, linked often to local stakeholders, may influence the Ministries in the context of the WaVE Project and beyond.

Until now no explicit reference had been made to water linked-heritage in those policies but the WaVE project is changing the perception of the subject so that it might be included in the near future agendas. There might be some barriers for policy change if water-heritage is perceived as burden to keep and restore rather than a development vector that might create green and sustainable development opportunities. In addition, the emergent needs related to COVID19 crisis could make the investments more difficult in water-linked heritage. **The goal is to turn these risks into opportunities showing the society that valorisation projects related to water and heritage have a direct impact on social inclusion, employment, environment and sustainable development.** In fact, there are some initiatives and important stakeholders in the province of Alicante interested in the valorisation of cultural water-linked heritage, including intangible heritage, climate change adaptation, protection against climate extreme events, and the application of new technologies and digitalisation in heritage management. Some of these initiatives include the valorisation of the Alicante orchard and the traditional irrigation system in the province; rescuing the Water Paths ('Camis d'aigua') and improving the sites with water-linked heritage, like weirds (Assuts), and their accesses for visitors in the municipality of Mutxamel; ...

The Provincial Council can also energize stakeholder groups to launch new projects with a broad social support to be presented to the policy makers. Through the continuous dialogue with stakeholders, including the Local Stakeholder Group (LSG) meetings in the context of WaVE Project, and the three specific actions proposed in this Action Plan, we want to grow a permanent interest in revalorization projects, so that investment in water-linked heritage is not relegated to the background or to a later period when the economy is back on track. A convincing narrative, explained below, is being developed on the base of the experiences from the partners of WaVE and in the test sites (Tibi/Relleu dams or Vega Baja). The aim is to reinforce, **through WaVE storytelling, the idea that re-valorisation projects can be a powerful economic driver, as experiences and Good Practices (GPs) results in other regions show.**

Change to be achieved in the addressed policy(ies):

The main change to achieve in the **PRTR** is the creation of a specific line or call for funding water-linked heritage valorisation actions, held by a new narrative on the subject. We propose to **include specific mentions to water-linked heritage in calls related to land and water management and/or a new call on water-linked cultural heritage valorisation.**

Our role in promoting policy change is to change the narrative about water-linked heritage, that has been until now just reduced to maintenance of hydraulic elements with no added value. It must be highlighted that, according to the functions that the revalorised heritage may play, there are several elements that can be identified as useful to produce value:

- **Water-linked heritage is a producer of environmental services** that may serve to fight loss of biodiversity or to reduce the effects of climate change.
- Valorisation of water-linked spaces **nearby urban areas provides new services** to the citizens that increase wellbeing.
- Water-linked spaces may **attract or improve touristic services**. Alicante has a wide touristic offer but these spaces can improve it and empower the development of complementary activities such as educational, sport, cultural...

The three vectors may cause direct **socioeconomic and environmental benefits** around the concept of sustainability and **circular economy**.

We will influence the change by storytelling at several levels:

- First, and most important regarding effectivity, the PI responsible are the first target, as they should understand the need to generate synergies between sectors and themes like economic development or environmental issues with water-linked cultural heritage, through calls related to these subjects.
- Stakeholders must not only be aware about the potential of water-linked heritage projects but also influence the PI responsible to create specific calls on this matter. Provincial Council is working with stakeholders in this direction and preparing project proposals for the forthcoming funding calls.
- Water managers have to be involved in the new narrative. During 2020, the Provincial Council of Alicante included water-linked heritage valorisation as a subject to be considered in Basin Management in its allegations to the Important Issues Schemes Participation Process of the revision of River Basin Management Plans (RBMP) for horizon 2021-2027.

B. BASELINE SITUATION AND VISION BASED ON THE REGIONAL STATUS QUO

STARTING POINT

There is **no clear previous regional strategy** to valorise water-linked heritage in the region of Valencia, of which Alicante is one of the three provinces. The approaches to heritage are currently, in any case, rather conventional: conservation, cataloguing and giving touristic value. But there is a need of going beyond this traditional approach by connecting to other ‘agendas’, such as water management, climate change, flood prevention, economic development, cultural events, etc.

Despite the lack of a regional strategy, the Provincial Council of Alicante has promoted some isolated activities in the past to include water linked heritage valorisation in the agenda of water management. One of the most successful is the ‘Blue Routes’, a set of proposals to visit water linked heritage of Alicante directed towards hikers and travellers, with educational contents about the role of water in land modelling, water-linked ecosystems and human settlements history. The contents are shared through a web page, phone app and two guides, both in physical and in pdf formats.

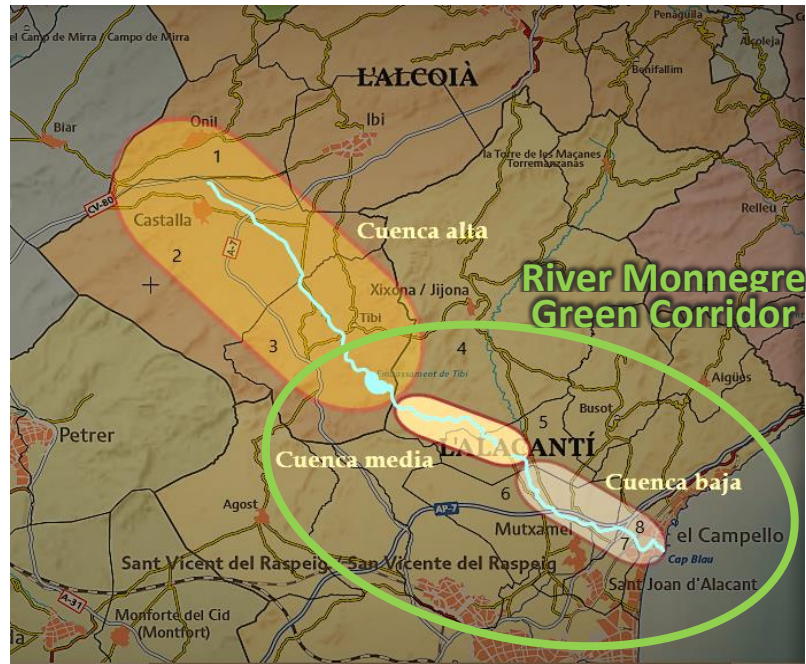
However, local stakeholders are acquiring a growing vision about the value of water-linked heritage as a vector to development. WaVE is committed to have a positive impact by bringing a new storytelling to the actors and other stakeholders in a regional scope. However, regional strategy might be sometimes too abstract and theoretical to engage stakeholders, so valorisation of heritage at the regional level of Alicante province has to combine local actions with general strategies.

With this purpose, in the WaVE Project we are developing 3 actions, which include from the engagement of local stakeholders to a regional strategy influence about the potential of the water-linked heritage’s transformative role for the province:

1.- The recovery River Monnegre, from the emblematic Tibi dam to the river mouth in the municipality of El Campello, creating a Green Corridor that connects the inlands with the sea through the municipalities of Tibi, Xixona, Alicante, Mutxamel, Sant Joan d'Alacant and El Campello, all along the 'comarca' of L'Alacantí (an intra Provincial region of 10 municipalities). The objective is to re-naturalize the course of this river, also known as Dry River, which is very degraded in some areas, using water-linked landscapes and heritage as a connector along the region. The City Councils, irrigators and neighbours' associations, local business and citizens have been involved. We all are working together to engage regional actors from the River Basin Authorities to the Regional Authorities ('Dirección General de Fondos Europeos': General Director of EU funding) of the Valencian Community and influence regional policies.

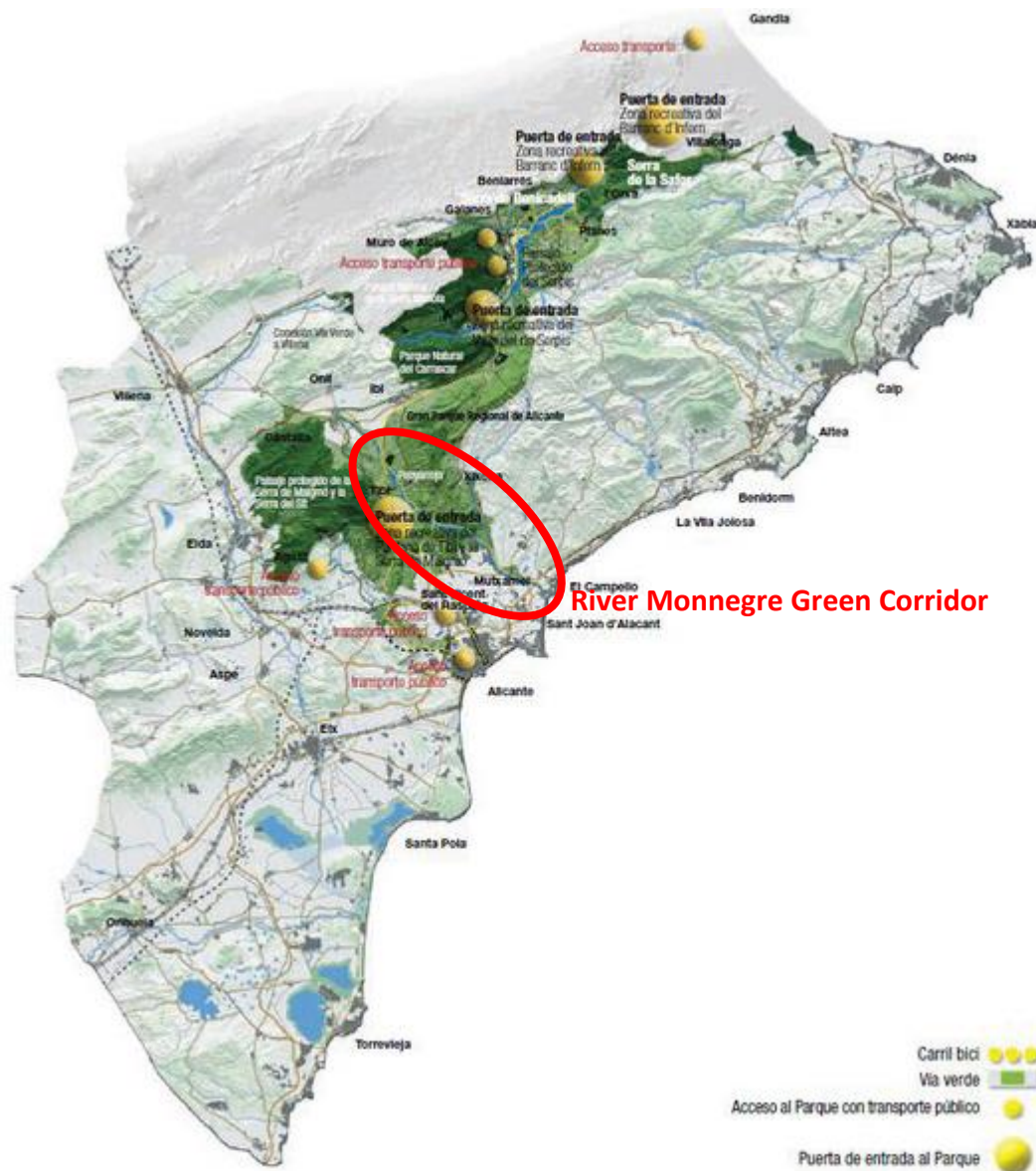


River Monnegre in the 'comarca' of L'Alacantí



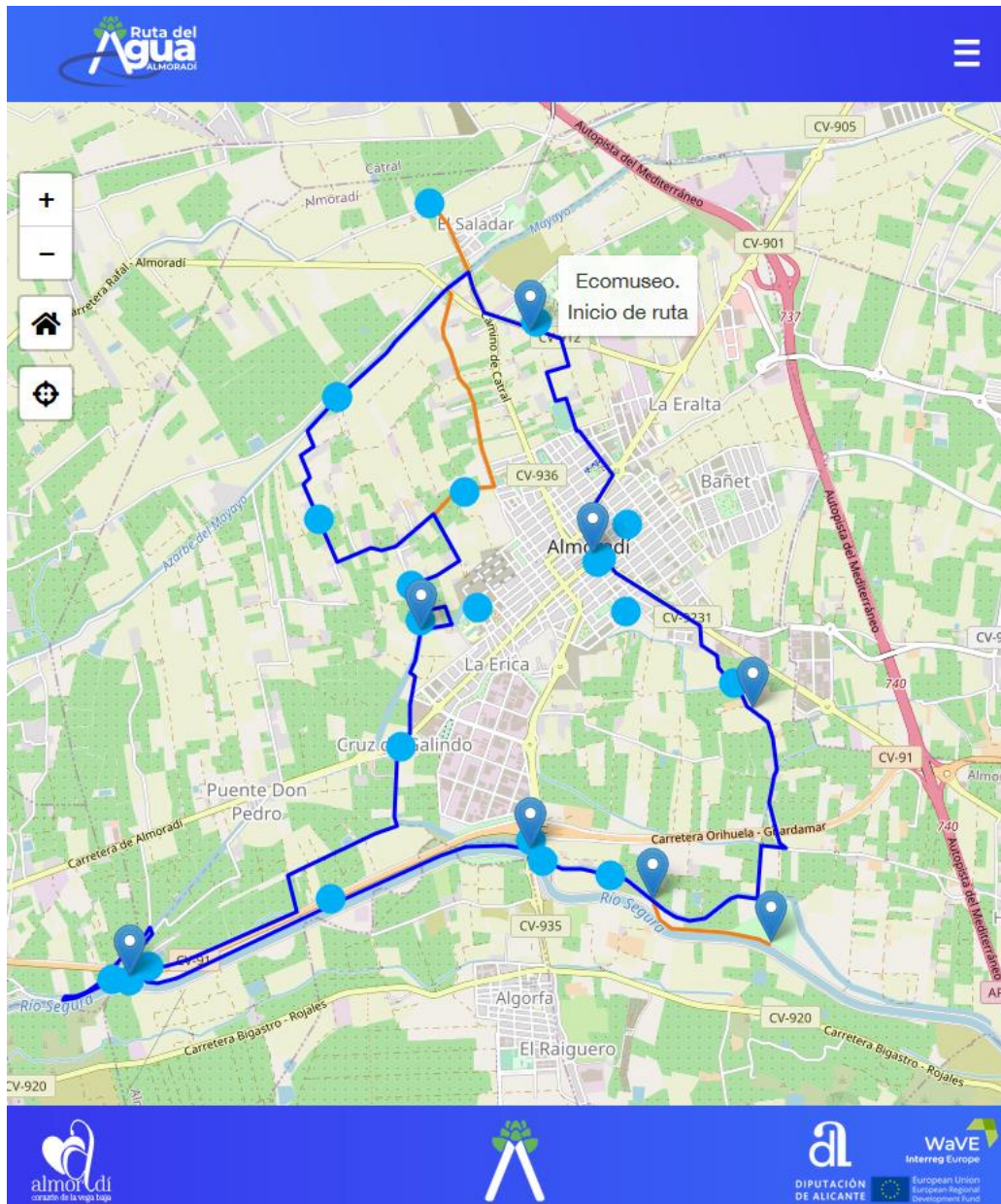
Location of River Monnegre in the Valencian Community

This green infrastructure can be extended to another provincial or regional scale with the proposal of the 'Big Provincial Alicante Park' of the Valencian Community Territorial Strategy. This proposal consist on the development of a big park or green arch, which connects Alicante city and its green sites with the inland through Monnegre and Serpis rivers. It would integrate the main natural and cultural inland areas with the sea through a compact system of green corridors and trails. It has been developed by the Regional Authority of Agriculture, environment, climatic change and rural development (Valencian Community) and included in the Territorial Action Plan for the metropolitan areas of Alicante an Elche.



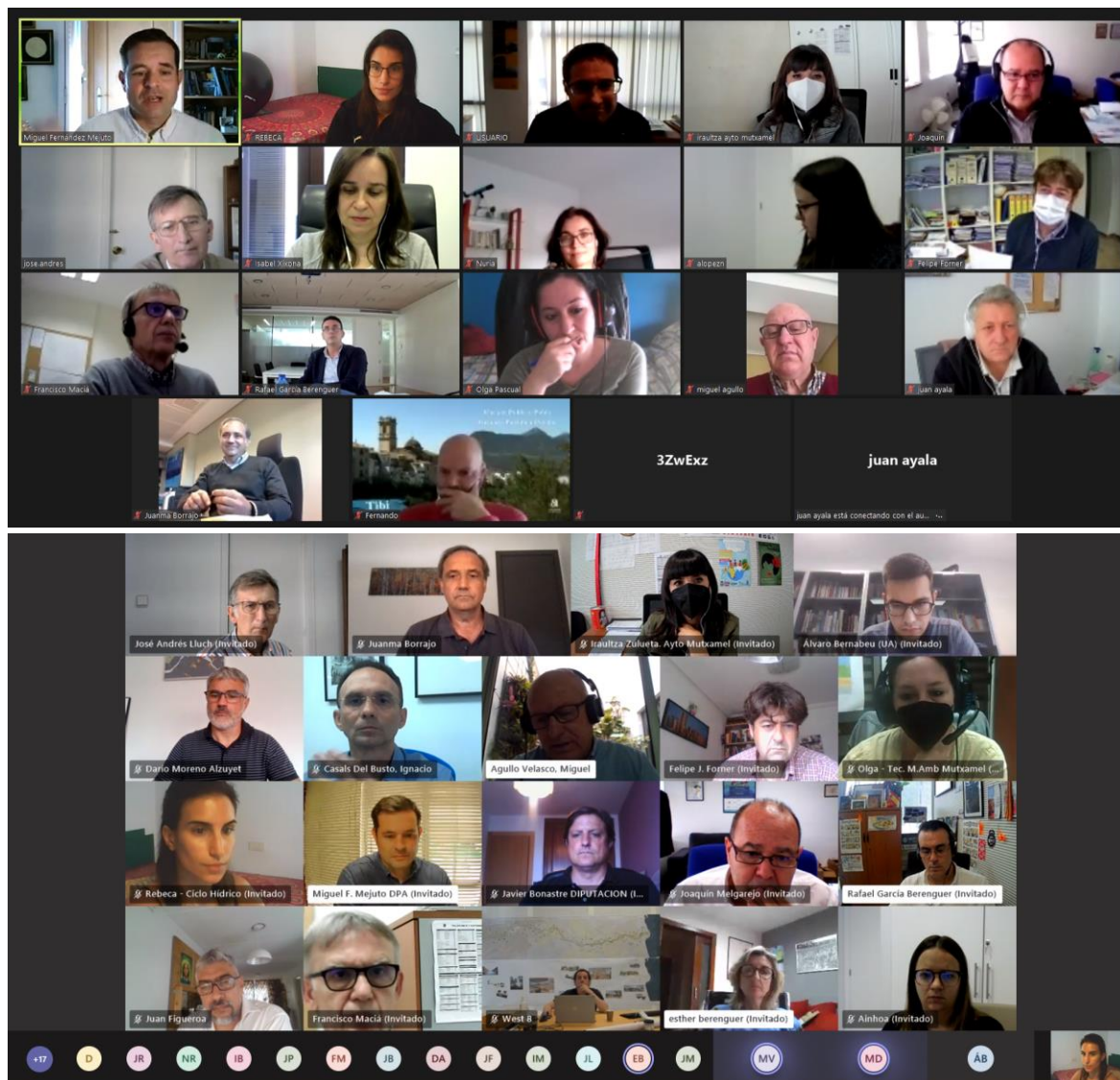
Proposal of 'Big Provincial Park of Alicante' and its connection with River Monnegre Green Corridor in the province of Alicante. (Source: Valencian Community Territorial Strategy)

2.- The design and promotion of Blue Routes around water resources and heritage. We plan to promote and design (or re-design in some cases where there is already one) these routes with stakeholders, including local companies, business, hiking groups and citizens. The first experience with this collaborative focus is the water Route of Almoradí and its storytelling about tangible/intangible water-linked heritage of the Vega Baja traditional irrigation system, which is a clear example of this kind of heritage in the province. The City Council of Almoradí has a very proactive role towards the valorisation of the traditional irrigation system and its agricultural production, and has a great concern about floods. It executes every year several actions and develops different activities in order to valorise traditional irrigation and its products, especially artichoke. All these activities are supportive to and welcomed by irrigation associations, schools and local food industry and restaurants. Moreover, the Artichoke Association Vega Baja was founded for the promotion of the product developing a valorizing strategy based in the creation of a powerful commercial brand of Vega Baja del Segura Artichoke ('Alcachofa Vega Baja del Segura').



<https://www.almoradirutadelagua.com/mapa-ruta-del-agua/>

3.- Creation of a water-linked heritage think tank, to keep a community of engaged stakeholders, all the municipalities, business and institutions around water-linked heritage valorization. Local companies, business, hiking groups and citizens are showing their interest in increasing the economic, touristic, leisure and educational opportunities linked to the sites/areas related to actions 1 and 2, and the objective is to keep them engaged and boost new projects. Attracting people to these areas could influence positively countryside tourism and help to drive tourism away from the coast. This would create a sustainable model of new economy opportunities, new jobs and rising incomes for the services sector related to water-linked heritage.



Online meetings with stakeholders, including local experts, the University of Alicante, municipal technicians, mayors and other representatives of the municipalities involved in the actions.

Good Practices learned in WaVE are being shared at the regional level to engage new stakeholders and to show them the role they may play to valorise both tangible and intangible heritage. One of the main forums to create this regional awareness is the Provincial Water Board that has addressed the subjects in three meetings during 2020 and four in the first semester of 2021, and where we will continue to work. A big effort to engage stakeholders through storytelling is also being done in the media and social networks.

VISION

The final objective of this action plan is to **influence the policies** so that water-linked heritage is regarded as an **environmental and socioeconomic vector of change** for the province of Alicante, that needs, and more after the COVID crisis, new models of sustainable development.

The province of Alicante is rich in wide types of water-linked cultural heritage, from big hydraulic infrastructures, like historical dams, to traditional irrigation systems and the ancient 'know-how' of water and soil management in arid zones with dry climate and shortage of water resources. In

the future water-related heritage should be in the centre of the cultural, touristic and environmental offer of the province, creating new opportunities for the local population, job creation, business, leisure, tourism and education. The **change from an economic model of 'sun and beach' to a model of added value tourism around nature, environment and culture** can be catalysed by valorisation of water-linked heritage. This is an important goal of the province to reinforce its tourist and leisure offer.

The change would be greater if there was a regional strategy rather than smaller local activities, because water-linked heritage can be an axis that binds together different territories of the province. For example, the re-naturalisation of river courses and riverbanks will create 'green corridors' that intercommunicate the territory, linking several municipalities, connecting the coast with inlands, creating opportunities for sustainable mobility (bike-paths), etc., and so, definitively having a multiplier effect and developing a model of more sustainable and attractive touristic offer.

However, while the society is waiting this transformation to happen, **it is necessary to have funds to support transformative actions**. The main source for these projects should be the **PRTR NextGenerationEU** programme.

Stakeholders, that have shown an important engagement with the new storytelling, may disengage if no actions are developed in the short-medium term. We have found that in the areas where the Provincial Council has developed concrete transformations -even small- parallel to WaVE storytelling, stakeholders' engagement is greater. For example, in the case of Tibi dam where the Provincial Council has funded the Special Protection Plan, stakeholders are enthusiastic and have joined new proposals to revalorise heritage. In Almoradí, the team worked to stablish the new 'blue route' (Action 2) and the municipality is doing investments together with other stakeholders, and they are keeping a web page about their water-linked heritage.

The strategic documents of relevance for the regional policies that might have been or will be influenced by this approach are:

- PRTR NextGenerationEU. This is the key tool to achieve results. During 2021 and 2022 some changes in this policy instruments will be done in the sense of including water-linked heritage as a priority.
- General Strategic Plan for Funding of Provincial Council of Alicante. During 2021, the Agenda 2030 for the institution has to be drawn up. In the valuation criteria of the Water Dept. calls for funding for 2022, water-linked heritage valorisation has been explicitly included, which will have a reflection in the General Strategic Plan.
- River Basin Management Plans (RBMP), Segura and Júcar basins, horizon 2021-2027. As it was explained previously, allegations have been done to include water-linked heritage as an element for water management in the next planned horizon. During 2021 we have worked so that it is included in the final RBMP that will appear in 2022.
- Local Protection and Action Plans. The Special Plan elaborated for Tibi will serve as template for other municipalities and, as a policy instrument, it itself can be considered a policy change.
- Proceedings of meeting of the Provincial Water Board include from 2020 and 2021 references to WaVE Project and its objectives.

It is not a straightforward task to influence these documents, as there are many different topics to address. In the short term, if only some of these documents are influenced, it would be a satisfying result, and would start the change in policies.

STRATEGY TO REALISE THE VISION

The key to success is to show how **water-linked heritage is not a load for the Administrations but an opportunity** for a new sustainable and intelligent economy. To achieve the desired vision, it is necessary to **disseminate success cases and good practices** that have had an important return of investments (economic, social, cultural, environmental) related to water-linked heritage valorisation, while working with local stakeholders to land these ideas in their areas.

With our storytelling, we want to engage stakeholders in the regional strategy and objectives. For this task, we can profit from the commitment of local stakeholders in Relleu, Tibi, Almoradí and other municipalities of Vega Baja region and the municipalities of River Monnegre, and from the Provincial Water Board, who will influence the policy makers to realise the importance of the vision. The change in local policies may also have an impact on the vision of the National Government responsible for the PRTR NextGenerationEU.

STAKEHOLDERS ENGAGED

Type of stakeholders		Name of the stakeholder organization(s)	Scope
1 Internal	1.1 PP Staff members directly involved in the project	Diputación de Alicante -DPA- (Provincial Council of Alicante). Water dept.	Provincial
	2.1 Managing Authorities of P.I. (have provided LoS) 'Key LSG'	General Director for EU Funding (Valencian Community)	Regional
2 Organisational	2.2.a PP Staff members indirectly involved in the project	DPA. Presidency	Provincial
	2.2.b PP Staff members indirectly involved in the project	DPA. European projects	Provincial
	2.3.a Public Authorities responsible for water-related Policies and Policy Instruments	Municipalities	Local
	2.3.b Public Authorities responsible for water-related Policies and Policy Instruments	Agriculture, environment, climatic change and rural development (Valencian Community)	Regional
	3.1.a University & Knowledge Provider	University of Alicante (UA)	Local, Regional
3 LSG	3.1.b University & Knowledge Provider	University Miguel Hernández of Elche (UMH)	Local, Regional
	3.2.a (Semi) Public Governmental Administrations	Irrigation users' associations	Local-Regional
	3.2.b (Semi) Public Governmental Administrations	Chamber of Commerce	National
	3.2.c (Semi) Public Governmental Administrations	CONVEGA (Consortium among DPA and 26 municipalities of the region of Vega Baja in the province of Alicante)	Intra Provincial region
	3.3.a Water Management Organisations	Confederación Hidrográfica del Júcar (Júcar River Basin Authority)	Regional, National
	3.3.b Water Management Organisations	Confederación Hidrográfica del Segura (Segura River Basin Authority)	Regional, National
	3.4.a Civil Society Interest Groups	Political parties (PP, PSOE, C's, Compromís, EUPV, other)	Regional, National
	3.4.b Civil Society Interest Groups	Rural houses in Tibi (Masia L'Ancornia, La Petita); mountain and climbing clubs;	Local, Regional

Type of stakeholders		Name of the stakeholder organization(s)	Scope
	3.5 SME's (e.g. renovation and construction company)	forest firefighters; local food restaurants and a dog shelter from Almoradí	Local, Regional
	3.6.a Other	Vega Baja Artichoke Association (the irrigators association creator of the local brand of 'Vega Baja Artichoke'), CEV (Business association), UEPAL (Business association) and INECA (Research institution)	
	3.6.b Other	ASAJA (Agriculture syndicate)	
4 Wider	4.1 Other city planners & managers	Environment & turism SME	Local, Regional
	4.2 Construction & Renovation Industry		
	4.3 Leisure Industry		
	4.4 National & EU Policy Makers	iÁgua, Alicante Plaza, Diario Información Local citizens groups; Coliberica and Dasotec (landscape companies); West8 (urban design & landscape architecture); Royal Spanish Cycling Federation (RFEC); Aljibe Consultores (hydrogeology technical consultants); Crea 360 (European Funds technical consultants); Rodes Ingeniería de Recursos Naturales (mining and environment technical consultants)	Local, Regional Regional, National, International
	4.5 Wider water management sectors (e.g. wastewater, ...)		
	4.6 Natural heritage preservation sector and energy sector		
	4.7 Online & Offline Press (Local, National and Specialized)		
	4.8 Other		

The roadmap includes milestones, which aim at: first, raising the awareness of the stakeholders and the whole society, second, configuring LSGs as think tanks that can create and take advantage of the opportunities and third, pushing the policy responsible to finance the change and the private sector to invest in it. Some milestones in the short/medium term will create new synergies that support the long-term vision:

1.- Communication of GP and pilot actions: interregional learning and local examples can be inspirational to create a new perception and understanding of the high socioeconomic return of investment potential.

2.- Creation of stable Regional Stakeholders' Group (RSG) called *Camins d'aigua* (Water paths): stakeholders' engagement through storytelling needs an ecosystem to grow and evolve. WaVE has established some forums to discuss about water-linked initiatives such as the Provincial Water Board, mailing groups about the subject and a yearly conference on the topic.

3.- Edition of WaVE Final Report, with a Spanish version both in hardcover book edition and in electronic format, so that the interregional lessons are readily available for all our stakeholders.

4.- Assessment of possible projects/actions to apply for European funds: RSG should also serve to provide assessment not only with a top-down approach from the Provincial Council to smaller institutions such as municipalities, but also between stakeholders themselves.

5.- Involve other Provincial Councils within the region: the experience in Alicante shall be shared with Valencia and Castellón (also part of the Valencian Community).

6.- Lead or join proposals of water-linked heritage valorisation projects: NextGenerationEU has to configure the structure of calls. During 2021, there have been Calls for Expressions of Interest where the Provincial Council, together with stakeholders, have presented the potential of a project about water-linked heritage: River Monnegre Green Corridor (Action 1). Hopefully, this may make these projects eligible for calls about circular economy, climate change resilience and sustainable socioeconomic development.

7.- Impact on strategic documents: in addition to proposals, we have influenced strategic documents (see previous section).

The table shows an approximate the schedule to develop these tasks during the remaining months of WaVE:

MILESTONES	QUARTER							
	2021				2022			
	1	2	3	4	1	2	3	4
Communication of GP and pilot actions								
Regional Stakeholders Groups								
Publication of the WaVE Final Report								
Assessment to municipalities in possible projects/actions to apply for European funds								
Involve other Provincial Councils within the region								
Lead or join proposals of water-linked heritage valorization projects								
Impact to strategic documents								

These actions will have a great effect in national/regional policies, but funding is a requirement. Without investment, no transformation can be done and, so, demonstrative effects and the Return of Investment (ROI) cannot be appreciated. There are strong chances that the Provincial Council of Alicante itself includes water-related heritage in its policies, what should facilitate the change in the wider national/regional level. In addition, WaVE has promoted that water-linked heritage had reached the agenda in the negotiation of actions for the PRTR, but there is still uncertainty about the outcomes.

Therefore, WaVE is a first step to include water-linked heritage in the schedule of national/regional planning, but success of this change will depend on joint with fundraising options, because without some emblematic actions it would difficult to gain momentum.

3. ACTION 1 - River Monnegre Green Corridor: a joint action to vertebrate several municipalities in the region around water linked heritage

ORIGINAL GOOD PRACTICE(S)

Good practice *Uncovering River Aarhus*, from the municipality of Aarhus (Denmark): The river was covered between 1933-57. It was uncovered from 1992-2015 to create recreational areas along an open canal and have better environmental and recreational surroundings in the historical centre. This experience of lost heritage that can be recovered developing new functions for the society has been one of the main inspirations for our proposal.

Good practice *REDOUTES (STQTC methodology)*, from the Municipality of Breda (Netherlands): Making cultural heritage more perceptible while solving water management issues during the realisation of new nature. 'Water redoutes', a kind of ancient water reservoir used to flood the areas around the city with a defensive mission, have been adapted and revalorised for new environmental uses. It is a good example of collaboration between designer, waterboard and the ecologist of the environmental department and the heritage specialists of the municipality. In the case of the 'green corridor', the idea of creating new spaces for nature from infrastructures of the past while solving hydrological problems (erosion, floods, water pollution) is one of the leitmotifs of the project.

Good practice *(Re)development in dialogue*, from the Municipality of Breda (Netherlands): The comprehensive approach by design thinking on a metalevel and the dialogue process helped by using Imagineering: this focus, and even the term translated into Spanish (*desarrollo en diálogo*) has become part of our storytelling used with stakeholders from the very first stages.

Good practice *SACHER (Smart Architecture for Cultural Heritage in Emilia-Romagna)*, from the Municipality of Ravenna and CertiMaC (Italy): SACHER is an innovative Web-oriented ICT platform, based on Cloud Computing infrastructure. It provides customizable service applications for data access, analysis and display.

It has inspired us to link heritage with digitalisation of the territory as one of the key elements of this transformation, including 3D rendering in the project.

Good practice *SAVE Index (Survey of Architectural Values in the Environment)*, from the municipality of Aarhus (Denmark): Development of an index that values properties in Aarhus pre-1940 by using a national methodology. Creation of a publicly available register that allows for a better and more systematic integration of build-up heritage in local planning. A similar structured approach would be very helpful in order to unify and connect at the regional level all the water-linked heritage of municipalities.

TRANSFER JOURNEY OF THE GOOD PRACTICE

Our team has a background in hydrology and usually deals with urban water supply and regional water management. When we joined WaVE we were thinking of identifying and restoring water related heritage basically for the value it has by itself and, in some cases for the environment.

Some good practices like the cases of Aarhus or Breda have changed our perception, to have a broader view where the water-linked heritage is not only a vector for environmental improvement but also for improving citizens lives in our cities and to create economic development.

With this point of view, and from the original element we wanted to recover, the Tibi dam, we have identified a whole space that now suffers degradation that is the river course of Monnegre. Like river Aarthus or the redoutes in Breda, when river Monnegre losses part of its function due to changes in economy and society, it nearly becomes destroyed. But the idea of recovering the space and finding new functions for it in the present times has made us launch the idea of a project that reconnects Tibi dam with the sea through a green corridor along river Monnegre with hike and bike paths.



However, we have discovered from our partners that success comes not from the use of a top-down approach, but from participative processes with stakeholders (Re-development in dialogue). Therefore, the first steps have included the configuring of a stakeholder group that includes politicians and technicians from the municipalities where the project will act, social groups, economic institutions of analysis and development and companies with expertise in territorial management. This approach would have been unthinkable for us just a year ago, but learning from other partners and from the stakeholder analysis methodology provided by Delft has completely changed our focus.



Visiting the dam with stakeholders from the six municipalities involved

Also, from the early stages, we are considering two elements:

- The need to catalogue all water-linked cultural heritage including environmental, historical and cultural values in the area, using the philosophy of *SAVE Index* with consensus evaluation criteria.

- Storytelling and Imagineering have to be an important part of the process, in which 3D simulation/visualisation is very useful. Therefore, we want to elaborate graphic contents similar to the 3D views included in the *SACHER* platform. As a first step we launched a virtual 3D flight on the area where the proposed actions were described, that has had thousands of visualisations and has been used by the media.



Corredor verde del
río Monnegre

Orthophoto of the action area of the River Monnegre Green Corridor (virtual 3D flight).



Continuidad peatonal y bici
Zonas recreativas ajardinadas
Creación lámina de agua permanente
Mejora accesos
Iluminación con energía limpia solar

Proposed actions on a section of the River Monnegre:

- continuous pedestrian and bike path
- revegetated recreational areas
- creation of a permanent water surface
- improved accesses
- solar powered lighting

ADAPTED GOOD PRACTICE - Action summary

The area was very important for the development of irrigation agriculture around Alicante in the past centuries after the Tibi dam was built and there were many infrastructures to conduct and manage water for irrigation. Progressively as the resources of the dam grew smaller (clogging), other resources from wells began to be used, and the value of agricultural lands decreased in comparison with the value of urbanisation and industrial areas, the area began to suffer oblivion and deterioration.

Nowadays, there are a number of problems around this river with a non-permanent water flow:

- Large growth of invasive vegetal species (cane) in the riverbed, that displace local flora and fauna, and that increase the risk of flooding because they obdurate the channel.
- Desertification and soil loss of the riversides.
- Degraded areas nearby cities with little value and difficult to keep neat.
- Loss of heritage (Tibi dam, Mutxamel and Sant Joan weirs and ditches).
- Interruption of paths, being the river a barrier for hikers, bikers, etc.
- Depopulation of the inland municipalities caused by the lack of opportunities for the young.

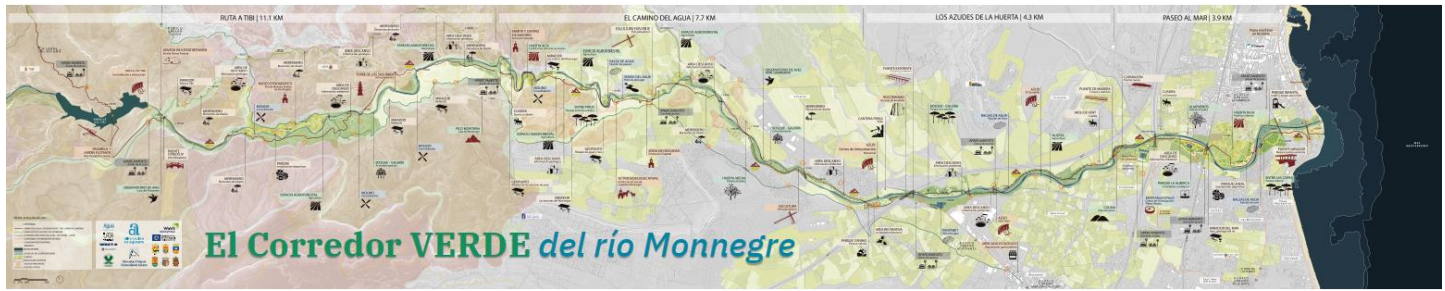
This action, conceived in relation to the concept of circular economy, where water starts a cycle to feed vegetation, and the waste of this vegetation is used to improve the soils of the area and vegetation itself improves water quality by digesting its nutrients, aims to create a new touristic attraction, as well as environmental, of leisure and of education, to serve as a catalyst for the economic recovery of Alicante.

It will establish a 'green corridor' in the River Monnegre from the dam of Tibi to the river mouth in the municipality of El Campello, making it passable along its 22 km by foot or bike, and which has attractive and connected spaces of nature, leisure, education and culture, while being efficient against floods. Rehabilitation and revalorisation of this route will recover places and create new ones, creating business opportunities in all the area.



River Monnegre mouth in the municipality of El Campello (province of Alicante)

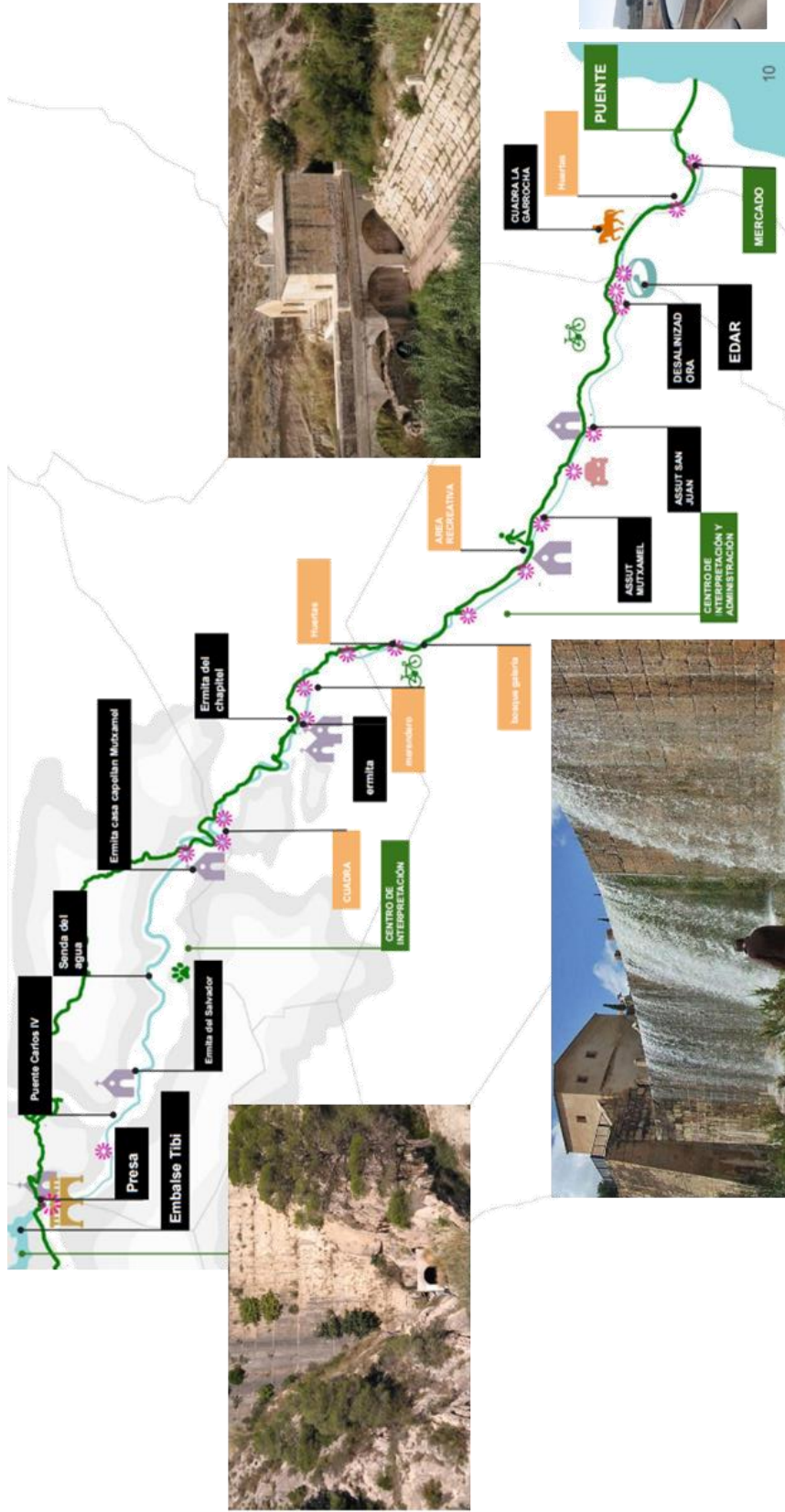
It is, in fact, a project of innovative tourism that connects the entire region with sustainable mobility options that strengthens the tourist attractive Costa Blanca (White Coast) of Alicante towards the interior lands, and that is based in water-linked heritage and the reuse of natural resources.



River Monnegre Green Corridor full map

The project gathers a lot of interesting innovative aspects:

- A. Complementarity to the sun and beach touristic model.
- B. Environmental improvement: renaturalization and revegetation.
- C. Improvement of life quality of the citizens.
- D. Creation of spaces of sustainable mobility.
- E. Digitalisation of the territory: create an application with the digitalized route, geolocation and information in real time.
- F. Creation of social capital and regional identity.
- G. New educative/formative opportunities.
- H. Valorisation of waste (muds from local wastewater treatment plants would be reused to improve soils)
- I. Solar powered lighting and use of solar energy to pump reused water for irrigation and to create an artificial lake near the river mouth.
- J. Recovery of tangible and intangible heritage.



The project proposal is now driven by a Consortium led by Provincial Council of Alicante and the University of Alicante (Institute for Water and Environmental Sciences), together with six city councils (Alicante, El Campello, Mutxamel, Sant Joan, Tibi and Xixona) and some companies, both multinational (West8) and SMEs (Aljibe Consultores, Crea 360, Colibérica, Dasotec and Rodes Ingeniería de Recursos Naturales).

Two of the main regional stakeholders to be involved in this project are the Júcar River Basin Authority and the Government of the Valencian Community (Generalitat Valenciana). They are being informed about all the main activities in the project and meetings with them are scheduled on a regular basis.

Of course, a proposal of this magnitude, that even regional newspapers have presented in their front pages, will be a 'game changer' for future revalorisation of water linked-heritage projects. It shows the transformative potential of these developments and it addresses a number of key topics of future Agenda 2030 and OSDs.

The action was presented in February 2021 to a call of Expressions of Interest, that will help to define the next PRTR calls and funding programmes that started to appear in the last months of 2021 and will continue at least during 2022 and 2023.

A detailed and holistic project proposal was written up in the first semester of 2021 by a team of experts, coordinated by the technicians of the Provincial Council and academics of the University. With this document, the Consortium plans to contend for funding in any of the Calls that may appear from January 2022. On 23rd July 2021, it was presented officially in the Auditorium of Diputación de Alicante (ADDA) by the technical team. The congress was introduced by the President of Diputación de Alicante, the Deputy (representant of the Provincial Council) of the Water Department and the Director of the Water and Environmental Sciences Institute of the University of Alicante, and it was closed by the Rector of the University. Among the stakeholders invited, there were representatives of the city councils of the municipalities involved, irrigators associations, provincial deputies, local actors and business, environmental and landscape technicians and experts, etc.



Official presentation of River Monnegre Green Corridor (23rd July 2021)

The initial requested budget is 32.250 million€ that would cover a wide number of activities: restoration of Tibi dam, visitor's centres, bird observatories, removal of invasive species, treatment of slopes, reforestation, solar impulsions, floodable park and lake, bio-remediation, geologic park, waste valorizing, pedestrian and bike paths, digitalisation (3D renders, app, web page), public participatory processes, etc.

WaVE Project and particularly some good practices of the project have permeated nearly every detail of the proposal. From the original idea, that starts in one of the WaVE's pilot areas, of recovery of lost natural environments like in Aarthus or Breda, to the configuration of a consortium

of stakeholders in the very first stage, the holistic approach of the project or the elements of digitalisation.

ACTION STEPS

Action step	Output(s)	Timeframe	Responsible person(s), organizations and stakeholders involved	Strategy of the stakeholders' involvement	Cost and Source of fund
1) Stakeholders' involvement: work team (public and private Consortium)	Stakeholder group	1 st semester 2021	Provincial Council of Alicante; Institute for Water and Environmental Sciences (UA); Municipalities; Private companies	Stakeholders participation. Sharing interests and ideas. Storytelling. Imagineering	Provincial Council, University of Alicante (UA)
2) RSQ Analysis and integration (from local to regional level)	Manifestation of interest	1 st semester 2021	Provincial Council of Alicante ; Institute for Water and Environmental Sciences (UA); Municipalities; Private companies	Stakeholders participation (meetings and individual consultation)	Provincial Council, University of Alicante (UA)
3) Design and preparation of the preliminary project and local actions	Corredor verde del Monnegre Project	2 nd semester 2021	Provincial Council of Alicante; Institute for Water and Environmental Sciences (UA); Municipalities; Private companies	Development in collaboration of a proposal to obtain funding	Provincial Council, El Campello, Mutxamel 60,000 €
4) Association among municipalities to apply for calls		1 st semester 2022			
5) Development of the project	A green reforested corridor along the river	2022-1 st quarter 2023	Provincial Council of Alicante ; Institute for Water and Environmental Sciences (UA); Municipalities; Private companies	Work team (public-private partnership). Co-creation.	PRTR Next Generation 32.25 M€ (full Project)

POLICY CHANGE

To carry out the action, the concrete calls of the PI have to be defined. The project has enough elements to be included in several calls. In this moment, there is uncertainty about the number, dates or form of the forthcoming calls. The project is being developed in a flexible and modular way so that it would be easily adaptable to suit different kind of calls or funding schemes.

As explained before, the project has been already presented to a call for Expressions of Interest. This does not grant the financing, but will allow having a first feedback about the viability of the initiative and being a base to start to influence the policies.

We are also trying to generate some influence from the society and the politicians. In this sense, we had a meeting with the President of the Provincial Council and the Majors of the six municipalities to obtain their full political compromise with the project. A final photography bonds them to work for the project and its repercussion in media (regional newspaper, television and radio) is creating an important social movement towards the initiative. All the advances and news have been mailed to the MA to influence the PI.