



LIFE Project Number  
**LIFE14/NAT/IT/000938**

**Final Report**  
**Covering the project activities from 1/10/2015 to**  
**30/09/2020**

Reporting Date

**31/12/2020**

LIFE PROJECT NAME or Acronym  
**LIFE Risorgive**

Data Project

<b>Project location:</b>	Bressanvido, Veneto, Italy	
<b>Project start date:</b>	1/10/2015	
<b>Project end date:</b>	30/09/2019	<b>Extension date:</b> 30/09/2020
<b>Total budget:</b>	€ 1,161,293	
<b>EU contribution:</b>	€ 696,775	
<b>(%) of eligible costs:</b>	60%	

Data Beneficiary

<b>Name Beneficiary:</b>	Comune di Bressanvido
<b>Contact person:</b>	
<b>Postal address:</b>	Via Roma, 42, Bressanvido (VI), 36050, Italy
<b>Telephone:</b>	+39 0444 660223
<b>E-mail:</b>	
<b>Project Website:</b>	<a href="http://www.liferisorgive.it">www.liferisorgive.it</a>

**This table comprises an essential part of the report and should be filled in before submission**

Please note that the evaluation of your report may only commence if the package complies with all the elements in this receivability check. The evaluation will be stopped if any obligatory elements are missing.

<b>Package completeness and correctness check</b>	
<b>Obligatory elements</b>	<b>✓ or N/A</b>
<b>Technical report</b>	
The correct latest template for the type of project (e.g. traditional) has been followed and all sections have been filled in, in English <i>In electronic version only</i>	✓
Index of deliverables with short description annexed, in English <i>In electronic version only</i>	✓
<del>Mid-term report: Deliverables due in the reporting period (from project start)</del> Final report: Deliverables not already submitted with the MTR annexed including the Layman's report and after-LIFE plan Deliverables in language(s) other than English include a summary in English <i>In electronic version only</i>	✓
<b>Financial report</b>	
The reporting period in the financial report (consolidated financial statement <b>and</b> financial statement of each Individual Beneficiary) is the same as in the technical report with the exception of any terminated beneficiary for which the end period should be the date of the termination.	✓
Consolidated Financial Statement with all 5 forms duly filled in and signed and dated <i>On paper (signed and dated originals*) and in electronic version (pdfs of signed sheets + full Excel file)</i>	✓
Financial Statement(s) of the Coordinating Beneficiary, of each Associated Beneficiary and of each affiliate (if involved), with all forms duly filled in (signed and dated). The Financial Statement(s) of Beneficiaries with affiliate(s) include the total cost of each affiliate in 1 line per cost category. <i>In electronic version (pdfs of signed sheets + full Excel files) + in the case of the Final report the overall summary forms of each beneficiary on paper (signed and dated originals*)</i>	✓
Amounts, names and other data (e.g. bank account) are correct and consistent with the Grant Agreement / across the different forms (e.g. figures from the individual statements are the same as those reported in the consolidated statement)	✓
Mid-term report (for all projects except IPs): the threshold for the second pre-financing payment has been reached	N/A
Beneficiary's certificate for Durable Goods included (if required, i.e. beneficiaries claiming 100% cost for durable goods) <i>On paper (signed and dated originals*) and in electronic version (pdfs of signed sheets)</i>	✓
Certificate on financial statements (if required, i.e. for beneficiaries with EU contribution ≥750,000 € in the budget) <i>On paper (signed original) and in electronic version (pdf)</i>	N/A
<b>Other check</b>	
Additional information / clarifications and supporting documents requested in previous EASME letters (unless already submitted or not yet due) <i>In electronic version only</i>	✓
This table, page 2 of the Mid-term / Final report, is completed - each tick box is filled in <i>In electronic version only</i>	✓

*\*original signature by a legal or statutory representative of the beneficiary / affiliate concerned*

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## 2 List of key-words and abbreviations

BRESS: Comune di Bressanvido

VA: Agenzia Veneta per l'innovazione nel settore

CB-BRENTA: Consorzio di Bonifica Brenta

AQP: Aquaprogram

RDP: Rural Development Plan

### 3 Executive summary

*(maximum 2 pages)*

*Briefly describe the project objectives, key deliverables and outputs.*

*Compare in a few paragraphs the activities planned to the progress made. Summarise the achievements, deviations, important problems and difficulties met during the project implementation. This summary should be a stand-alone text.*

#### 3.1 Project objectives, key deliverables and outputs

The overall project objective was the restoration and consolidation of a green infrastructure represented by a network of springs, irrigation ditches and canals in the territory of Bressanvido Municipality (in the province of Vicenza, Italy). This infrastructure is located in a context which is strongly characterized by agriculture (animal husbandry for milk production) and in which it can significantly contrast the loss in biodiversity caused by the intensive exploitation of the territory. A non secondary objective was to increase the awareness of the local community on the importance of such ecosystems.

Restoration works included 26 systems of springs (43 single springs) already defined at the beginning of the project, on the base of a previous census, and banks of water ditches and streams starting from the springs and flowing to the cultivated lowland. The works on the springs followed 6 methods alternatively, chosen according to the characteristics and importance of each spring. Land acquisition to expand the natural areas to be improved was foreseen, plus the realization of a didactic spring near the municipality building, for education and awareness rising purposes. At policy level, one of the key results of the project was the drafting and signing of a “Resurgence Agreement”, engaging stakeholders from Bressanvido and nearby areas in the definition and implementation of long-term plans for the protection of this specific habitat.

The project directly involves local farmers and NGOs (in particular the “Comitato Risorgive” local environmental group), who play an essential role in the conservation and valorization of local green infrastructures.

#### 3.2 General progress

The project initially suffered some delays, and a one-year extension was asked at the beginning of 2019, but then all activities were completed by the end of the project on 30/09/2020.

The technical blueprints (action A1) of the C actions have been completed and approved by the competent bodies during 2017 and permitted to start the works in several sites. Land acquisition (action B1), which included consultation and agreements with a lot of little landowners, has done an important step forward during 2018, and was completed in September 2020. The restoration works were possible because the Municipality of Bressanvido had found verbal agreements with the landowners to be able to carry out the work on their properties. During the project, these agreements were then regularly formalized with contracts. Unlike initially anticipated, more land was acquired than expected, mainly through land lease contracts (Total planned area: 9.500 mq, total acquired area 2.016 mq and total leased area 13.188 mq). This was needed to better carry out the work and to ensure areas remain dedicated to conservation of biodiversity and provision of ecosystem services also in long term. All the land acquired was reclassified as zone F.

The C actions (concrete conservation actions) were all completed by the end of 2019. In particular, Task C1 (interventions to restore hydraulic functionality) started in October 2017 and ended in June 2019. Task C2 (Nursery and plant production) began in 2016 and ended

in the spring of 2019, with a total of over 26,000 plants planted, while works for Task C3 (municipal resurgence) started in December 2018 and ended a year later.

Action D (Monitoring of the impact of the project actions) was successfully completed in September 2020. All the monitoring D1 (Monitoring of biodiversity), D2 (Monitoring of socio-economic impact) and D3 (Evaluation of recovery of ecosystem functions) highlighted positive results that will be described below in this report. With action D1, improvements in the LIMeco, Star ICMi, IBMR and ISECI index were highlighted in about 33% of the sampling stations, but it is possible that the data may improve following the stabilization of the areas subject to intervention.

Action D2 has shown a good sensitivity in the population that sees little-maintained and little-valued springs, while they would like them to be more publicized, more protected, cleaner. From the analysis of the data collected through the questionnaires, it emerges that a good percentage of respondents 63% know the LIFE project, and 84% of the latter have a very positive or positive perception of the project itself, a consequence of a good and effective dissemination campaign and a growing interest on the part of the population regarding environmental issues and nature conservation. In particular, it emerges that the issue of the redevelopment of springs is considered a valid issue for 74% of the interviewees and that 47% of the interviewees note positive changes in the springs they frequent. A good answer then came as regards the knowledge of the Natura 2000 Network and the EC activities for the protection of biodiversity, moreover 42% of the interviewees stated that the LIFE Risorgive project has brought benefits to their business. Overall, therefore, there was good participation from the whole community and the growing interest of the latter in safeguarding, defending and improving its natural heritage was clearly perceived.

With action D3, an improvement was observed in 60% of the forefathers of the Resurgence Functionality Index, while the River Functionality Index improved only in a few channels. The flow rate was significantly increased in 30% of the survey stations, slightly increasing in 28% of the survey stations and unchanged in 62% of the survey stations. As Ecosystem Services, it is observed that 70% of the outcomes of the indicators are positive while 30% are indifferent, with the exception that 50% of the indifferent indicators are positioned on high levels of the function (therefore they cannot improve).

Actions E (Public awareness and dissemination of results) despite having encountered some difficulties and delays have been completed. In particular, action E7 (Implementation of the resurgence contract) suffered slowdowns due to Covid-19 but the contract was officially signed on 29 September 2020. For Action E1, ten notice boards (type A panels) and two multimedia totems (type B panels) have been created to inform citizens and visitors of the project activities and the specificities of the territory during their visit to the sites. For Action E2 the project website has been online since 1/04/2016 and during the project, the pages and contents, both in Italian and English, have been revised to update them to the current status of the project. For Action E3, networking activities took place during the project through contacts with other projects dealing with similar issues. For Action E5, in addition to meeting with farmers and stakeholders VA decided to realize a not originally planned "deliverable", a vademecum/manual, in PDF format, about correct management of springs and water courses. For Action E6, the works started during 2018 with the creation and inauguration of two trails while the third path was completed in June 2019 and has been viable ever since. 36 new road signs have been installed along the routes and a graphical map of the new paths/cycleways was produced. More details on the progress of all E Actions have been reported in this report.

Type F actions (Project management and monitoring of the progress of the project) allowed the technical and administrative management and the monitoring of the project's efficiency and effectiveness. Action F2 led to the drafting of the After-LIFE plan, with the strategies to be adopted after the conclusion of the project.

On 28-29/06/2016, 4-5/4/2017, 14-15/05/2018 and 12-13/06/2019 the Monitor carried out visits to the project, while on 11/03/2020 and on 10/11/2020 monitoring was carried out with videoconferences with some recommendations and requests that have been considered to complement this report.

### **3.3 Identified deviations, problems and corrective actions**

The objectives of the project are perfectly realized and so is the work plan. However, some delays occurred in some activities but they were nevertheless completed by the deadline. Some activities took longer than expected and a one-year extension was requested.

The project suffered for a delay, mainly in the initial part, due to both difficulties/delays in lands acquisition – Act. B1 (properties fragmentation and complex ownership situation, landowners not willing to sell, length of the mandatory administrative steps needed for acquisition, cost of land higher than budgeted, etc.) and difficulties/delays in the executive planning of the interventions – Act. A1 (need to ensure coherence between executive projects and land availability/landowners collaboration, longer approval procedure). However, the delay has been recovered during the second part of the project, and thanks to a one-year extension till September 2020.

During Actions C1 and C2 a certain level of flexibility was applied, to adapt interventions to actual environment conditions found during works (ex. need to use more supporting material where soil resulted to be less stable than expected; small expedients to improve hydraulic efficiency of works; opportunity to bring to light an old inactive spring in Tav. 11; adaptation of species and quantities of plants for each area to real micro-stational conditions after works, to maximise rooting and survival expectancy; etc.). As for Act. C3, which started late and therefore a series of unplanned awareness events were implemented to balance the delay in the realization of the educational spring.

As a consequence, actions D were also extended and some monitoring was postponed to verify the impacts after the end of the works and not during.

Regarding communication actions E, action E1 led to the creation of ten notice boards (type A panels) as initially planned and two multimedia totems (type B panels) replacing the two Notice Board originally described in the project. This activity took longer than expected as detailed below. Action E7 (Resurgence Contract) started later than expected (also in this case because it was important to have completed at least the main works as a demonstration element for the stakeholders) and then had difficulties with COVID, but successfully concluded with 36 signatories. Action E5 ran into some difficulties because, as described below, unfortunately, in the period in which the action was carried, there was not any active and financed measure of Veneto Region Rural Development Plan (RDP 2014-2020) concerning hedges plantation and bank restoration actions for single landowners. For this reason, to avoid the risk of using unsuccessfully the action's resources, VA turned some of the meetings with farmers to other important stakeholders' categories, such as fishermen, hunters, reclamation consortia, associations, and regional authorities. In addition a vademecum/manual, was prepared to disseminate information about management of springs and water courses.

Action F3 has also been changed due to a project incorrect designation indication and a KPI set modification introduced by program in the initial phase of the project.

In addition, during the last year, due to Covid-19 some activities have suffered slowdowns but thanks to video calls and smart working it has been possible to complete all activities.

Action		2015				2016				2017				2018				2019				2020			
A.N.	Action title	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
A.1	Progettazione esecutiva interventi				O	O	O	O																	
					R	R	R	R	R	R	R	R	R												
B.1	Acquisizioni diritti d’uso di aree				O	O	O	O	O	O	O	O	O	A	A	A	A	A	A	A	A				
					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
C.1	Interventi di ripristino funzionalità idraulica				O			O	O			O	O			O	O								
					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R						
C.2	Produzione vivaistica ed impianto nei siti				O	O	O		O	O	O		O	O	O		O	O	O						
					R	R	R	R	R	R	R	R	R	R	R	R	R								
C.3	Ripristino risorgiva comunale				O	O	O	O	A	A	A	A	A	A	A	A	A								
					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R					
D.1	Monitoraggio della biodiversità				O	O	O	O	O			O	O	O	O	O	O	O	O	A	A	A	A		
					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
D.2	Monitoraggio impatto socio-economico											O	O	O	O	O	O	O	O	A	A	A	A		
												R	R	R	R	R	R	R	R	R	R	R	R	R	R
D.3	Valutazione recupero f. ecosistemiche				O	O	O	O	O			O	O	O	O	O	O	O	O	A	A	A	A		
					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
E.1	Notice Board									O	O	O	O	O	A	A	A	A	A						
										R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
E.2	Sito web di progetto				O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	A	A	A	A		
					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
E.3	Networking									O	O	O	O	O	O	O	O	O	O	A	A	A	A		
					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
E.4	Layman's report																		O	A	A	A	A		
																					R	R	R		
E.5	Formazione degli agricoltori							O	O			O	O			O	O	A							
												R	R	R	R	R	R	R							
E.6	Creazione itinerari di visita							O	O	O	O	A	A	A	A	A	A	A	A						
																R	R	R	R	R	R				
E.7	Implementazione contratto di risorgiva							O	O	O	O	O	O	O	O	O	O	A	A	A	A				
								R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
F.1	Project Management				O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	A	A	A	A		
					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
F.2	After LIFE plan																		O	A	A	A	A		
																			R	R	R	R	R	R	R
F.3	Aggiornamento indicatori di progetto					O	O	O	O	O	O	O	O	O	O	O	O	O	O	A	A	A	A		
						R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

O = Original Project prevision

A = Amendment

R = Real time table

## 4 Introduction (maximum 2 pages)

- Description of background, problems and objectives (as foreseen in the proposal)
- Expected longer term results (as anticipated at the start of the project)

### Overall and specific objectives (as foreseen in the proposal)

The overall project objective was the restoration and consolidation of the network of springs, irrigation ditches and canals in the territory of Bressanvido Municipality (in the province of Vicenza, Italy). The project was highly demonstrative, having the intention to:

- 1) highlight the ecological role played by these green infrastructures for the conservation of biodiversity;
- 2) assess the eco-system services related to this infrastructure (increased attractiveness potential of the territory; increased resilience of the agroecosystem against the infestation risk by dangerous insects for cultivations; increased carbon stocking; improved water management);
- 3) enhance farmers' role in nature preservation, also through the use of the Structural Funds (EAFRD);
- 4) illustrate the possibility of managing streambeds according to methods which are consistent both with hydraulic safety and with biodiversity preservation;
- 5) draw the attention to the efficacy of participatory processes in implementing projects for nature and biodiversity preservation;
- 6) underline the importance of restoring springs for the achievement of the objectives of "Water" framework directive (Dir. 2000/60/EC);
- 7) enhance and evaluate the potential role of these green infrastructures for naturalistic education and environmental didactic.

### Sites involved

All project activities have been implemented in the territory of Bressanvido Municipality (in the province of Vicenza, Italy) and were focused on a network of 26 systems of springs (43 single springs), irrigation ditches and canals. This infrastructure is located in a context which is strongly characterized by agriculture (animal husbandry for milk production) and in which it can significantly contrast the loss in biodiversity caused by the intensive exploitation of the territory. It is not included in the Natura 2000 network but the nearest Natura 2000 site is inside the municipality area and is named "SIC IT3220040 – Bosco di Dueville e risorgive limitrofe".

### Which habitat types and/or species are targeted

The project targets the following vegetal communities:

- Water habitats: Batrachion fluitantis Submerged floating rooted macrophytic communities (Batrachids) of running, oligotrophic and oligocalcareous to eutrophic and calcareous waters.
- Water riverbeds: Glycerion fluitantis-Sparganion neglecti. Glycerio fluitantis-Sparganion neglecti Phalaridion arundinaceae. Phalaridion arundinaceae Phalaris arundinacea Apion nodiflori.
- Forestal habitats (present in linear remnant areas): Salicion cinereae, Alnion glutinosae Salicetea purpureae. Rhamno catharticae – Prunetea spinosae Querco roboris – Fagetea sylvaticae

The project will have positive effects on the following species included in the Red List IUCN: *Orsinigobius punctatissimus* - class. CR, *Rana latastei* - class. VU, *Bufo bufo* class. VU, *Anas querquedula* - class. VU, and several other animal species present in the sites mentioned at page 32 of the project.

### **Main conservation issues being targeted (including threats)**

- Agricultural conversion of the resurgence biocenoses
- Groundwater pollution of agricultural origin.
- Groundwater pollution of civil and industrial origin.
- Reduction of water flows.
- Introduction of non-native species.

### **Socio-economic context**

The territory of Bressanvido is characterized by the abundant presence of water that has determined over time the prevailing use for agricultural purposes. It is therefore a territory with strong characteristics of rurality, characterized mainly by the cultivation of stable meadows and arable land, mainly aimed at cattle breeding (dairy cows).

In many municipalities of the spring area of the province of Vicenza in recent years there has been a strong awareness of the inhabitants who have taken initiatives to preserve the peculiar environmental, naturalistic, historical, cultural heritage, represented by resurgences. In the municipality of Bressanvido the activity has been particularly intense and individual citizens, associations, administrations have implemented numerous initiatives. According to a modern bottom-up approach, the project is born from the initiative of citizens belonging to the Risorgive Committee, who subsequently found their support of the local municipal administration and of the local Consorzio di Bonifica, the managing body delegated by the minor hydrographic network. In this context, the involvement of farmers should also be highlighted, through direct contact and the involvement of the main category organization, which led to a consensus of the owners of the land adjacent to the resurgences since the early stages of the project's conception.

### **Expected longer term results (as anticipated at the start of the project)**

- Strengthening and stabilizing n. 26 spring systems in Vicenza middle-lowland (green infrastructure) which include n. 43 springs and their watercourses flowing in the entire territory of Bressanvido Municipality – including 2 more main residential areas.
- Demonstrating the effectiveness of spring systems as infrastructure to achieve the objective of “Water” Directive (2000/60/EC) of preventing the deterioration of the quality and quantity of water bodies as a result of the reduction in nutrients quantity (particularly, nitrates) originated by farming.
- Demonstrating the possibility of involving economic private organisations (e.g. farmers and their associations, as well as reclamation consortia) and non-economic private organisations (e.g. voluntary groups, game fishers' associations) in actions for the maintenance of spring systems which can also be financed with some measures from Rural Development Plans and by providing positive socio-economic effects (e.g. rural tourism).
- Raising citizens' awareness of the role of spring systems as green infrastructure for the improvement of life quality in rural areas with reference to ecosystem services – good fresh water supply, purification of waters originated by farming, conservation of genetic pools, supply of recreational areas, improvement of the landscape, and carbon stocking.
- Spreading an innovative management model of spring systems on interregional scale in all middlelowland areas. The project proposes a model which can be transferred to the entire spring zone going almost uninterruptedly from the foothill of the Alps all along Po Valley, from Friuli to Piedmont, and can be replicated in other European areas featuring spring environments.

## 5 Administrative part

### **The project management process, the working method**

In action F1 Project management we have described what the project manager and other representatives of the coordinating beneficiary have done to organise/co-ordinate the project (meetings, etc.), as well as what the associated beneficiaries have done in the reporting period.

The management of the project required a considerable amount of communication activities and the maintenance of constant relations between the coordinating beneficiary, the associated beneficiaries, the monitor and the European Commission.

The organization of the project activities, as well as the application approved by the EC, was based on partnership agreements. The relationships between the partners specified in the project and in the partnership, agreement have been defined with the aim of allowing a sufficient degree of coordination between the coordinating beneficiary and the associated beneficiaries.

The project manager is Salvatore Abbate, senior civil servant of the Bressanvido Municipality, assisted by Giovanna Brunelli (from October 2015 to June 2018), then substituted by Francesca Borga (from June 2018 to the end of the project), Stefano Picchi (from October 2015 to January 2020), and Giordano Munaretto (from September 2018 to the end of the project) belonging to the external assistance of Bressanvido Municipality of European Project Consulting (EPC) company, all experienced in EU project and LIFE management.

This management team had the task of the ordinary management and implementation of the project, to monitor the development of the actions by urging the partners to carry out the planned activities within the established times. The team includes the mayor Giuseppe Leopoldo Bortolan (from October 2015 to May 2019) and the mayor Luca Franzè (from May 2019 to the end of the project), and the member of the city council Verusca Grendene (from October 2015 to May 2019) and Alessandro Scuccato (from May 2019 to the end of the project) who actively intervene on the main actions to be taken.

The Management Board is composed by the management team described above and by the personnel working for each associated beneficiary on technical and administrative aspects. It has met regularly to verify the project progress and discuss and solve eventual problems. It is composed by Roberto Fiorentin and Francesco Pernigotto Cego (VA), Samuele Pia (CB-BRENTA), Stefano Salviati and Giuseppe Maio (AQP) plus other personnel involved on specific activities and legal representatives when necessary (Federico Carollo (EPC), Enrico Marconato (AQP), Enzo Sonza (CB-BRENTA), Alberto Negro (VA).

### **The problems encountered**

The project suffered some delay for the following problems which, however, have been solved:

1. At project start up, the negotiated procedure for external support of project management took longer than expected due to lack of candidacies by professional associations which had been contacted following law decr. 163/2006 requirements. The problem was then solved and since April 2016 the external support service of project management (EPC company) is fully operative.
2. New legislation has entered into force the which modifies the procedures related to the acquisition of permission for areas subordinated to landscape restrictions: July 28th 2016 has entered into force the Law Decree 126/2016 which has modified Law 241/1990 and introduced additional conferences of services and obligations, with a direct impact on action A1 due to longer procedure and additional requests for

projects approval.

3. Land acquisition took more time than foreseen because of the need to obtain the data on the exact parcels and have agreements of the landowners.
4. Some mistakes in project application (e.g. wrong procedure of land reclassification, incorrect dates of completion of some deliverables/milestones, cost of land acquisition and Notice Boards significantly underestimated) make it difficult, mainly in the initial phase, to define a detailed and feasible implementation strategy.
5. Municipal elections in Bressanvido in May 2019 and consequent change of the mayor and the council members caused another small delay (two months), due to limitations to the ordinary activity of the municipality in the last part of the campaign, and at the beginning of the new governing period.
6. COVID-19 outbreak from March 2020 caused a slow-down of public and participatory events in the last part of the project, impacting mainly on the Resurgence Contract development process (Act. E7), in Communication and Dissemination activities, and also in Project Management activities (partners meetings, monitoring visits). Higher usage of on-line communication tools allowed to overpass these limitations.

### **Communication with the EASME and Monitoring team**

This aspects proceeded without particular problems. The change of the monitor at less than 1 year from the end of the project required some additional communication effort to ensure to be properly aligned with the new person. The COVID-19 outbreak that prevented us from organizing the final monitoring visit on-site was not of help. However, monitors have been always willing to provide clarifications and suggestions for a proper project management, and they resulted very supportive also in this particular situation.

### **Changes due to amendments to the Grant Agreement**

1. The first one was applied by the Commission to all the new projects. It is relative to the change of some articles of the Grant agreement concerning the need of audit only above the threshold of 325.000€ of EU cofinancing.
2. The second one is relative to the substitution/change of the name of Veneto Agricoltura now called Agenzia Veneta per l'innovazione nel settore primario, starting from 1/01/2017. The relevant forms have been modified in agreement with the monitor, we are now waiting for the approval of the Commission.
3. The third (dated 08/08/2018) is the modification of some conditions included in the Grant Agreement by EASME.
4. A fourth Amendment was asked on 27 February 2019 and approved with EASME letter dated 17/04/2019, approving an extension to project duration till 30/09/2020, with modification of Forms A1, C2 and C3 and postponement of some deliverables and milestones.

## 6 Technical part

### 6.1 Technical progress per action

*Please describe what and how progress has been achieved regarding the different technical/substantial components of the project (such as research, fieldwork, construction, development of communication tools). Indicate what has been done regarding each action (sub-action if appropriate) but avoid describing the objectives and targets as such. The description of the work done has to be sufficient to allow a good understanding of the project without a need to refer to the deliverables. Present and discuss the main findings and results and their implications for other actions and the project as a whole. The technical details, however, should be given in the deliverables.*

#### A1 Progettazione esecutiva degli interventi sulle risorgive (responsabile AQP)

##### Executive planning of the interventions on springs (responsible: AQP)

Start date: 01/10/2015

End date: 30/09/2016

Actual start date: 01/10/2015

Actual end date: 31/12/2017

The executive planning of the 26 interventions on springs and the correspondent approval process "Conferenze dei servizi" has been completed on 30/12/2017. The interventions have been merged in 11 projects. They include a planning table, a particle plan, a technical report, a landscape assessment, an environmental effects assessment with a shape file of the areas of interference and metadata (according to the indications of the DGR 2299/2014 (available in attach). The projects were "tuned" to make them adherent to the availability of the land by the owners who have been contacted in the meantime within action B1. The projects were completed with a form of "participatory planning" in which project partners (BRESS, VA and CB-BRENTA) intervened with ideas, suggestions and proposals, as well as local stakeholders (Bressanvido Risorgive Committee).

Several surveys have been done in the following dates; 4-11-18-23-30 March 2016, 6-8 April 2016, 3-10 May 2016, 3-9 June 2016, 30-31 May 2017, 7-9-12-13-14-15-16-28 June 2017, 23-25 August 2017, 1-12-14 September 2017, 5-9-11 October 2017.

Expected results achieved: 26 executive plans approved, merged in 11 project tables and technical documentation related, attached in electronic format.

Changes applied: the duration of the action was extended to 31/12/2017 for some reasons. As indicated in the first progress report the deliverable finalisation date indicated in the milestone table was wrong (28/02/2016) instead of 28/09/2016 as correctly indicated in the initial project (see pages 54/149, penultimate paragraph) the A1 action duration was of 12 months in order to produce the final projects of the foreseen interventions. Moreover before planning it was important to proceed with the land acquisition process B1 and apply a participatory process as stated above which took more time than foreseen. A new law changed the procedure of approval of the projects and this increased the delays (see below).

Problems encountered (already evidenced in the first progress report):

- 1- the morphologic structure of the springs does not allow to create slopes for ri-vegetation. Implemented measures: slopes have been created only where it was possible to create them without causing problems to watercourses steadiness
- 2- in the project "Tergola scuole" (tab. 8) the platform for simplified fishing activity for kids in the preliminary design was located in a watercourse area with scarce water. Implemented measures: the platform has been moved in the main section of Tergola watercourse, with high flow rate.

- 3- New legislation for the approval of the projects entered into force on July 2016. It modified the procedures related to the acquisition of permission for areas subordinated to landscape restrictions introducing additional bureaucracy and obligations. The law requires that, in order to obtain permits for any right of construction, it is necessary to convene an online meeting with the other public bodies involved that must express opinions within 45 days (term that can be revoked in the first 15 days only for a maximum of 30 days), closing the procedure. This law looked in contrast with the previous one on landscape heritage (Law Decr. 42/2004) which at that date was not explicitly abrogated; this law allowed to examine the project within a local commission, to transmit the result to the Authority and to obtain a reply (positive or negative) or tacit consent after 60 days. Municipalities were confused on which law to be applied and in particular about which will be the reaction of the authority which has so far applied the 60 days of tacit consent. After some month the procedure was clarified and it was possible to proceed with the approval process.

## **B1 Acquisizioni diritti d'uso di aree di particolare rilevanza (responsabile: BRESS)**

### **Acquisition of rights to use areas of particular importance (responsible: BRESS)**

Start date: 01/10/2015

End date: 31/12/2017

Actual start date: 01/10/2015

Actual end date: 28/09/2020

The implementation of this action resulted to be much more complex and time-consuming than foreseen in the original proposal for various reasons:

- New legislation has entered into force the which modifies the procedures related to the acquisition of permission for areas subordinated to landscape restrictions: July 28th 2016 has entered into force the Law Decree 126/2016 which has modified Law 241/1990 and introduced additional conferences of services and obligations.
- Land acquisition took more time than foreseen because of the need to obtain the data on the exact parcels and have agreements of the landowners, since the last cadastral maps were not updated due to the change of the watercourses along the time. In some case it was necessary to proceed with the division of the cadastral area and correction of other irregularities, to be able to formalize the agreements.
- Need to wait the final approval of projects (Act. A1) to formally know the exact parts of land to be acquired and thus justify the cost for a public body.
- Differently from what was supposed initially, an informal approach to the landowners was unsuccessful, because of the initial hostility of some landowners. Thus a more formal approach had to be adopted, which required individual contacts with each owned and lead to specific and individual agreements negotiated on a case by case basis.
- The cost of land purchase was much higher than values considered in preparing the project budget, and just a very small part of owners accepted to sell the land at proposed conditions. Considering the length and risks linked to expropriation procedures, that were not compatible with project timing, in all other cases long term lease agreements had to be considered.

Nevertheless, the strategy implemented by partners to overcome these difficulties and recover initial delays allowed to start recovery works (Act. C1) in September 2017. To this end:

- Formal meetings with the landowners were held in the period May-October 2017, since the informal contacts held during 2016 didn't bring to the desired results.
- In 2018, BRESS signed definitive agreements for 8 properties for a total of 8.940 square meters: 111 sq. m acquisition, 1 property, 8.829 sq. m. 20 years lease, 7 properties.
- During 2019, after parcel and cadastral map revision and further negotiations with owners, agreements with other 4 properties were signed, for a total of 6.130 square meters.
- 2 more agreements were signed in 2020, reaching a final amount of 15.204 square meters acquired (on 9500 square meters foreseen).

List of all acquisition is reported in the following table.

Project	Kind of land acquisition	Amount	Total square meters	Subscription date
Project 3: TERGOLA SCUOLE	LEASE	€ 620,00	397	04/05/2018
Project 9: ROGGIA CASTELLARO	PURCHASE	€ 1.332,00	111	04/05/2018
Project 3: TERGOLA SCUOLE	LEASE	€ 6.600,00	2780	18/05/2028
Project 3: TERGOLA SCUOLE	LEASE	€ 2.000,00	797	04/05/2018
Project 9: ROGGIA CASTELLARO	LEASE	€ 9.000,00	3440	11/05/2018
Project 7: STRADELLA DEI VEGRI	LEASE	€ 400,00	65	04/05/2018
Project 9: ROGGIA CASTELLARO	LEASE	€ 700,00	390	09/11/2018
Project 1: ROGGIA TERGOLA SUD Project 2: FONTANE MARZARE	LEASE (Diritto di superficie)	€ 8.000,00	4294	29/01/2019
Project 7: STRADELLA DEI VEGRI	LEASE	€ 3.000,00	960	29/10/2018
Project 3: TERGOLA SCUOLE	PURCHASE	€ 27.351,08	410	11/02/2019
Project 3: TERGOLA SCUOLE	PURCHASE		878	11/02/2019
Project 3: TERGOLA SCUOLE	PURCHASE	€ 11.505,68	548	11/02/2019
Project 9: ROGGIA CASTELLARO	PURCHASE	€ 1.350,00	69	25/09/2020
Project 7: STRADELLA DEI VEGRI	LEASE	€ 400,00	65	29/09/2020
<b>TOTAL</b>		<b>€ 71.943,76</b>	<b>15.204</b>	

As far reclassification is concerned, the procedure was originally started with the town council of 27/09/2017, then stopped waiting for defining exact agreements with all landowners, and started again in 2020. In May 2020 the classification process in "Zone F" was restarted with a resolution of adoption by the municipal council and the process ended on September 28, 2020 with the approval resolution.

Pursuant to article 18, of the Regional Law n. 11/2014, the variant n. 3 on the second Intervention Plan relating to the classification by territorial area homogeneous type, "Zone F" concerns: *"public interest parts intended for equipment and structures of interest general and private areas, public parks, special constraints"*, (*parti di interesse pubblico destinate ad attrezzature ed impianti di interesse generale, aree di rispetto, verde pubblico, vincoli speciali*).

#### Changes applied:

- The activity has been extended till the end of the project, for the reasons presented in detail above.
- Long term lease agreements (20 years) have been adopted instead than land purchase, in all those cases where owners were not available to sell or costs would be too high.
- Unlike what was expected, it was not necessary to rent the property of Tavola 3 Tergola

Scuole but a property was acquired at table 9 Roggia Castellaro

- Total of 15.204 square meters of land has been acquired, on an original target value of 9.500

Problems encountered: see above

## **C1 Interventi di ripristino della funzionalità idraulica (responsabile: CB-BRENTA)**

### **Interventions to restore hydraulic functionality (responsible: CB-BRENTA)**

Start date: 01/01/2016

End date: 31/03/2019

Actual start date: October 2017

Actual end date: 30/06/2019

On-field recovery works started in October 2017 in "Girosa" area (project n. 8), on lands that were no subject to acquisition from private owners. Other works have been scheduled in following months, taking into account land property constraints, type and length of works to be performed in each site, equipment availability, period of the year (for weather conditions and flora and fauna seasonality), etc. All on-site works have been completed before the end of 2019, as better detailed below.

#### ***Project 1 - ROGGIA TERGOLA SUD***

Activities implemented on January 2019.

Project 1 "Roggia Tergola" includes 3 resurgence systems and 4 spring-heads: CR40, CR41-CR42, CR43. These have been treated, from the point of view of the interventions, as a single project.

The interventions consisted of actions aimed at maintenance, with ordinary management with mowing of the grass once a year, plus small interventions of rearrangement of the bottom and banks, purging interventions aimed at removing the sediments from the bottom, redevelopment of the foreman and the shaft downstream of the foreman, interventions on the banks.

Works implemented: Bank re-profiling, slope softening, head reshaping and arrangement of the target species reproduction island, opening of the puddle for amphibian reproduction, arrangement of the existing isthmus.

Deviations from original plans / relevant notes: none

#### ***Project 2 - FONTANE MARZARE***

Activities implemented between October and December 2018.

Project 2 – "Fontane Marzare" includes 5 resurgence systems: CR35, CR36, CR37, CR38, CR39. These have been treated, from the point of view of the interventions, as a single project. The interventions included actions aimed at maintenance, with ordinary management with mowing of the grass once a year and small interventions of rearrangement of the bottom and banks and redevelopment of the foreman and the shaft downstream of the foreman. Reopening with flattening of the ground up to the interception of the resurgence point was also foreseen.

Works implemented: Reshaping of head 1, reopening of the head and initial section of the shaft, bamboo eradication, arrangement of landslides, reshaping of head 2, sediment removal and re-profiling of the riverbed, creation of a puddle for amphibian reproduction.

Deviations from original plans / relevant notes: none

#### ***Project 3 - TERGOLA SCUOLE***

Activities implemented between February 2018 and June 2019.

Project 3 – "Tergola Scuole" includes 2 resurgence systems and 3 spring-heads: CR32-CR33, CR34. These have been treated, from the point of view of the interventions, as a single project. The interventions consisted of actions aimed at maintenance, which provide for ordinary management with mowing of the grass once a year and small interventions for arranging the bottom and banks, purging interventions aimed at removing sediments from

the bottom and arranging the banks, and interventions of environmental requalification of the resurgence area and of the river. A pedestrian path to access the area was also created. Works implemented: Removal of sediments and re-profiling of the riverbed, laying of the flat bridge towards the south that crosses the channel to connect to the path, positioning of stones and boulders, positioning of constrictor, barriers, creation of a reproduction of amphibians, islands, re-profiling and lowering of embankments with the creation of a wetland, creation of a pedestrian path and laying of a flat bridge to the north.

Deviations from original plans / relevant notes: none

#### ***Project 4 - ROGGIA ROZZOLO***

Activities implemented on February 2018.

Project 4 "Roggia Rozzolo" includes 2 resurgence systems: CR30, CR31. These have been treated, from the point of view of the interventions, as a single project.

The interventions consisted of actions aimed at maintenance, with ordinary management with mowing of the grass once a year and small interventions of rearrangement of the bottom and banks and redevelopment of the foreman and the shaft downstream of the foreman.

Works implemented: Purge and arrangement of the banks of the resurgence head (north), re-profiling of the section with the creation of a new bank and levelling on the ground level, removal of sediments and re-profiling of the riverbed (north), removal of sediments and re-profiling of the riverbed (south), purge and arrangement of the banks of the head of resurgence (south).

Deviations from original plans / relevant notes: none

#### ***Project 5 - ROGGIA CUMANA***

Activities implemented on February 2019.

Project 5 "Roggia Cumana" includes 5 resurgence systems, for a total of 10 spring-heads: CR16, CR20, CR21-CR22-CR23-CR24, CR25-CR26, CR27-CR28. These have been treated, from the point of view of the interventions, as a single project.

The interventions included actions aimed at maintenance, which consisted of ordinary management with mowing of the grass once a year and small interventions of rearrangement of the bottom and banks, redevelopment of the shaft downstream of the foreman. In addition, purge operations aimed at removing sediments from the bottom and head reopening actions were foreseen.

Works implemented: Head reopening and re-profiling of the auction with arrangement of the area for the reproduction of amphibians. Sediment removal and re-profiling of the riverbed in the central section, widening of the resurgence along the watercourse and bank re-profiling, sediment removal and re-profiling in the downstream section.

Deviations from original plans / relevant notes: none

#### ***Project 6 - ROGGIA TERGOLA NORD***

Activities implemented on January 2019.

Project 6 "Roggia Tergola Nord" includes 1 resurgence systems: CR29.

The intervention consisted of actions aimed at maintenance, which provide for ordinary management with mowing of the grass once a year and small interventions to rearrange the bottom and banks and redevelop the head of the bridge and the shaft.

Works implemented: Purge by hand, arrangement of the sides of the resurgence head and of the rod, arrangement of the area with side softening. Removal of abandoned cement waste.

Deviations from original plans / relevant notes: none

### ***Project 7 - STRADELLA DEI VEGRI***

Activities implemented between January and February 2019.

Project 7 "Stradella dei Vegri" includes 2 resurgence systems: CR10, CR19. These have been treated, from the point of view of the interventions, as a single project. The intervention consisted of maintenance actions, which provide for ordinary management with mowing of the grass once a year and interventions for the arrangement of the bottom and of the banks. Works implemented: Sediment removal and re-profiling of the riverbed on both channels and restoration of flows and slopes, arrangement of the support of the bank and arrangement of existing bridges, creation of a constructed wetland area for the northern part.

Deviations from original plans / relevant notes: none

### ***Project 8 - ROGGIA GIROSA***

Activities implemented between October 2017 and May 2018.

Project 8 "Roggia Giosa" includes 1 resurgence systems with 5 spring-heads: CR11-CR12-CR13-CR14-CR15. The interventions consisted of actions aimed at maintenance actions, which provide for ordinary management with mowing of the grass once a year and small interventions to rearrange the bottom and banks and the environmental requalification of the resurgence area and the river. Reshaping and re-profiling of the banks as well as the laying of deflectors, constrictors and stones and boulders inside the shaft were also foreseen. Other interventions, on the other hand, concerned the construction of structures that favour the use of the Giosa spring by people for tourist / educational purposes, with the creation of a new route for visiting the spring and the Giosa canal.

Works implemented: Positioning of stones and boulders in the north, constrictor north, construction of the flat bridge, deflectors, constrictor south, removal of the bridge, pre-existing canal, removal of the pre-existing irrigation channel, positioning of stones and boulders in the south, construction of pipes under the road to allow the water to flow channel for irrigation.

Deviations from original plans / relevant notes: During the execution of the works it emerged the possibility, and the utility for environmental purposes, of carrying out some further interventions to protect and enhance this specific resurgence system, not originally foreseen. A semi-natural phytodepuration area was created inside a newly planted hygrophilous grove, to reduce the impact of the agricultural activities on the water ecosystem. By softening the banks in an area not foreseen, it was possible to favour the natural revegetation of the area, and to create a point suitable for the reproduction of amphibians. Finally, due to the low water flow in some points, it was necessary to realize a drainage system with the laying of some underground pipes, to avoid unwanted stagnation.

### ***Project 9 - ROGGIA CASTELLARO***

Activities implemented between January and October 2018

Project 9 "Roggia Castellaro" includes 1 resurgence systems with 2 spring-heads: CR17-CR18. The interventions consisted of actions aimed at maintenance, which provided for ordinary management with mowing of the grass once a year and small interventions to refurbish the bottom and banks and environmental requalification of the resurgence area and the river. Construction of structures to favour the use of the Castellaro resurgence by people for tourist / educational purposes was also foreseen.

Works implemented: Construction of the 1st floor bridge, sediment removal and re-profiling of the riverbed, construction of the 2nd floor bridge, positioning of stones and boulders, construction of a pedestrian path and head re-profiling.

Deviations from original plans / relevant notes: none

### ***Project 10 - BACINO CASTELLARO***

Activities implemented on February 2018

Project 10 "Bacino Castellaro" includes 2 resurgence systems, for a total of 4 spring-heads: CR6-CR7-CR8, CR9. These have been treated, from the point of view of the interventions, as a single project. The interventions consisted of actions aimed at maintenance, which provided for ordinary management with mowing of the grass once a year, purging interventions aimed at the removal of sediments from the bottom and the rearrangement of the bottom and the banks, redevelopment of the head of the spring and of the shaft downstream of the foreman for the first 100 meters.

Works implemented: Drainage and bank arrangement on both banks, realization of bank support, sediment removal and re-profiling of the riverbed on both banks.

Deviations from original plans / relevant notes: none

### ***Project 11 - SORGENTI DEL TERGOLA***

Activities implemented on January 2019.

Project 11 "Sorgenti del Tergola" includes 2 resurgence systems, for a total of 5 spring-heads: CR1-CR2-CR3-CR4, CR5. These have been treated, from the point of view of the interventions, as a single project. The interventions consisted of actions aimed at maintenance, which provided for ordinary management with mowing of the grass once a year and small adjustments to the bottom and banks, plus the redevelopment of the shaft downstream of the foreman for the first 100 meters.

Works implemented: Sediment removal and riverbed re-profiling, stones and boulders laying, positioning of 2 constrictors.

Deviations from original plans / relevant notes: During works in this area, following information extemporaneously received from local citizens, it was possible to localize and to bring to light an old spring that was occupied by a parking lot. This activity was not originally foreseen in the project, but represent an important result from environmental point of view.

A table summarizing works implemented in comparison to planned ones is reported in the following page:

Kind and Number of interventions/ Project	Percentage (%) done until December 2019	Project 1: ROGGIA TERGOLA SUD	Project 2: FONTANE MARZARE	Project 3: TERGOLA SCUOLE	Project 4: ROGGIA ROZZOLO	Project 5: ROGGIA CUMANA	Project 6: ROGGIA TERGOLA NORD	Project 7: STRADELLA DEI VEGRI	Project 8: ROGGIA GIROSA/LIROSA	Project 9: ROGGIA CASTELLARO	Project 10: BACINO CASTELLARO	Project 11: SORGENTI DEL TERGOLA
Type A. <u>Bleeding</u> (6 interventions) removal of sediments from the bank and the stream bottom; minor operation for bank consolidation (bioengineering).	100,0	DONE (1)		DONE (1)		DONE (1)		DONE (2)			DONE (1)	
Type B1. <u>Primary spring recovery</u> (10 interventions): removal of sediments and artificial pipes, bank remodelling, consolidation and creation of small ponds, hydrophytes planting, <i>Salix cinerea</i> planting.	100,0	DONE (2)	DONE (1)		DONE (2)	DONE (3)	DONE (1)				DONE (1)	
Type B2. <u>Stream recovery in the first 100 meters</u> (8 interventions): sediments removal, enhancement of internal morphological complexity, creation of small ponds, bank consolidation, hydrophytes planting, <i>Salix cinerea</i> , <i>Viburnum opulus</i> , <i>Ligustrum vulgare</i> planting.	100,0	DONE (1)	DONE (2)			DONE (2)	DONE (1)				DONE (1)	DONE (1)
Type C. <u>Overall spring and stream recovery</u> (3 interventions): same interventions as above; increase of the riparian of herbaceous and woody vegetation ( <i>Quercus faginea</i> , <i>Alnus glutinosa</i> phytosociological classes), pedestrian paths and notice boards placement.	100,0			DONE (1)					DONE (1)	DONE (1)		
Type D. <u>Spring reopening</u> (2 interventions): connection of spring with the existing resurgence network, planting of herbaceous and woody vegetation.	100%		DONE (1)			DONE (1)						
Maintenance (26 interventions): mowing vegetation and few minor bank operations.	100,0	DONE (3)	DONE (5)	DONE (2)	DONE (2)	DONE (5)	DONE (1)	DONE (2)	DONE (1)	DONE (1)	DONE (2)	DONE (2)
Number of resurgences networks	26 (TOTAL)	3	5	2	2	5	1	2	1	1	2	2
Resurgence network names		TERGOLA (2) + TERGOLA BASSO	FONTANE MARZARE (3) + MARZARE (2)	TERGOLA + TERGOLA SCUOLE	ROZZOLO (2)	TURCA + CUMANA (3) + CUMANELLA	TERGOLA	BOSSETTA DE ANTONI + ARCADIA	GIROSA/ LIROSA	CASTELLARO	CASTELLARO + BACINO CASTELLARO	RIO TERGOLA + TURCA
Number of resurgences	43 (TOTAL)	4	5	3	2	10	1	2	5	2	4	5
Resurgences Codes		CR40*, CR41*, CR42*, CR43	CR35, CR36, CR37, CR38, CR39	CR32, CR33, CR34	C30, C31	CR16*, CR20*, CR21, CR22, CR23, CR24, CR25*, CR26*, CR27*, CR28*	CR29	CR10, CR19	CR11, CR12, CR13, CR14, CR15	CR17, CR18	CR6, CR7, CR8, CR9	CR1, CR2, CR3, CR4, CR5
SIC AREA (YES/NO)		YES* (3)	NO	NO	NO	YES* (6)	NO	NO	NO	NO	NO	NO

(n) = number of occurrences

In relation to the question 10 raised in EASME letter of April 2018, on the actions financed by LIFE and the ones by Veneto Region, we confirm that interventions financed by Veneto Region are different from the ones supported by LIFE project from a technical, geographic and budgetary point of view. The two financing are thus in integration not in overlapping. Detailed justifications regarding the financial support of Veneto Region have been provided in occasion of the Progress Report II, dated 30/11/2018. Same information is clearly reported also in final C1 deliverable "Report interventi di recupero". We indeed confirm that costs and activities co-funded by Veneto Region have not been included in LIFE financial statements, and viceversa.

Changes applied:

Due to a change in Italian regulation concerning temporary contracts in Public bodies and to internal administrative procedures, it was not possible for CB to hire additional staff for this project. As a consequence, CB has to make greater use of external suppliers, mainly for "Operated Rentals" (nolo a caldo) of excavators for Action C1, (external suppliers)

From technical point of view, on Tergola scuole (Tav. 3), Girona (Tav. 8) and Castellaro (Tav. 9) areas, more stones and rocks than originally estimated have been used, due to less stable soil and the need to increase thicknesses for the above route. In the southern part of Girona it was necessary to use a more robust (and more expensive) type of piping than originally planned, in order to ensure that the route is usable and safe also for the operating vehicles used to perform ordinary and extraordinary maintenance to the hydraulic system. Moreover, during the execution phase some hydraulic aspects were sometimes improved by using greater amounts of dams and environmental requalification, favoring the creation of new areas for the planting of tree species (ex islet in the Tergola Scuole). This resulted in final increase of consumable costs (+39.935€), that was compensated with economies in Personnel (-94.550€) and Travel costs (-16.500€) categories linked to the different type of contracts awarded.

These budget modifications were communicated to an approved by EASME Project Officer on 12/11/2018 and on subsequent Progress Report dated 30/11/2018.

Problems encountered: delays in defining agreements with landowners and in finalizing land acquisition forced to reorganize this activity and to reschedule some works, that have been anyway completed within project timeline.

## C2 Produzione vivaistica ed impianto nei siti di progetto di piante per l'incremento della biodiversità floristica e la riqualificazione spondale dei corsi d'acqua di risorgiva (responsabile: VA)

**Nursery production and planting in the project sites of plants for the increase of floristic biodiversity and requalification of resurgence watercourses (responsible: VA)**

Start date: 01/01/2016

End date: 30/09/2019

Actual start date: 21/06/2016

Actual end date: 31/03/2019

This action started in 2016 with the individuation of the sites for seeds collection; after this first phase, the following activities were seed collection, seed pre-treatment and finally sowing in "pots" of all seeds; monitoring and cultivation of seedlings (i.e. treatments, mowing, etc ) and plant inventory concluded the nursery life-cycle . Afterward, the obtained plants were all planted in projects sites, as shown in the attached tables, putting care to choose for every single site the micro-sites more suitable to the ecological attitude of every species and to correctly restore targeted habitats. 26.011 native plants were produced and planted, divided in trees and shrubs (22 species, 1960 plants), hygrophilous riparian herbs (21 species, 14.681 plants) and a group of other herbs - nemoral and others - (10 species, 9.370 plants), as shown in the attached tables. Among the most important species, we underline *Allium angulosum* (regional red list fo vascular plants, IUCN category: EN). But also other species are locally important, such as *Cardamine matthioli*, *Caltha palustris*, *Cucubalus baccifer*. In general, the action strongly increased plant diversity and vegetation complexity of all sites, previously species-poor and strongly simplified.

The following table shows date and place of seed collection of more significant species:

Category	Species	Seed collection place	Seed collection date
Trees and shrubs	Quercus robur	Colbertaldo (TV)	24/11/2016
Trees and shrubs	Quercus robur	Pederobba (TV)	09-12/10/2017
Trees and shrubs	Quercus robur	Malo (VI)	30/10/2017
Trees and shrubs	Alnus glutinosa	Villaverla (VI)	04/11/2016
Trees and shrubs	Alnus glutinosa	Villaverla (VI)	27/10/2017
Trees and shrubs	Ligustrum vulgare	Rosolina (RO)	13/10/2017
Trees and shrubs	Prunus spinosa	Arcugnano (VI)	13/09/2016
Trees and shrubs	Prunus spinosa	Moriago della Battaglia (TV)	17/08/2017
Trees and shrubs	Viburnum opulus	Arcugnano (VI)	27/10/2016
hygrophilous riparian herbs	Carex acutiformis	Gazzo padovano (PD)	06/05/2016
hygrophilous riparian herbs	Carex acutiformis	Dueville (VI)	10/05/2016
hygrophilous riparian herbs	Carex acutiformis	Vicenza	10/05/2018
hygrophilous riparian herbs	Carex acutiformis	Arcugnano (VI)	21/05/2018
hygrophilous riparian herbs	Allium angulosum	Montecchio Precalcino (VI)	20/08/2016
hygrophilous riparian herbs	Cardamine matthioli	Montecchio Precalcino (VI)	02/05/2017
hygrophilous riparian herbs	Caltha palustris	Montecchio Precalcino (VI)	23/05/2016
hygrophilous riparian herbs	Myosotis scorpioides	Camisano (VI)	01/06/2016
hygrophilous riparian herbs	Phalaris arundinacea	Camisano (VI)	01/06/2016
hygrophilous riparian herbs	Phalaris arundinacea	Camisano (VI)	07/06/2018
hygrophilous riparian herbs	Valeriana dioica	Dueville (VI)	10/05/2016
hygrophilous riparian herbs	Valeriana dioica	Montecchio Precalcino (VI)	02/05/2017

Nemoral and other species	Cucubalus baccifer	Sandrigo (VI)	23/09/2016
Nemoral and other species	Allium ursinum	Altavilla (VI)	29/05/2017
Nemoral and other species	Allium ursinum	Fara vicentino (VI)	29/05/2017
Nemoral and other species	Leucojum vernum	Arcugnano (VI)	22/04/2016
Nemoral and other species	Leucojum vernum	Arcugnano (VI)	25/04/2017
Nemoral and other species	Primula vulgaris	Villaverla (VI)	16/05/2017
Nemoral and other species	Primula vulgaris	Villaverla (VI)	16/05/2018
Nemoral and other species	Scrophularia umbrosa	Dueville (VI)	18/07/2016
Nemoral and other species	Thalictrum aquilegifolium	Villaverla (VI)	13/06/2016

Achieved results: a total of 26.011 plants have been produced and planted, in line with project targets. A detailed division of this number per type and location (11 project areas) is reported in the annexes.

Problems encountered: the distribution of the species and quantities of plants for each project site was defined after the project tables' final drafting. Therefore, the numbers provided in the tables must be considered correct even if different from those reported in the previous project, see the attached table which shows the site-by-site comparison of the plants envisaged and those actually planted. In particular, only in the executive phase it was possible to clearly verify the micro-stational conditions suitable for the various groups of species as well as setting the optimal planting densities and the relative extension to be given to the different, targeted habitats. This mainly as a consequence of the operational choices made during the bank remodeling, which led to an increase of the area suitable for restoring riparian habitats, so providing more opportunities to hygrophilous species, and of the more conservative reconsideration of the existing woody component, which led to a decrease in the density of forest plants compared to the initial forecast. The changes must therefore be considered as improvements, as they are more in keeping with the objective environmental conditions and "tailored" to the measure of each individual site, to maximize the effectiveness and success of the plantations.

Changes applied: as reported in the First Progress Report, in the timetable of the project it was erroneously indicated that the action would not be carried out in the fourth trimester of each year, while the realization of the action continues all along the year. We have evidenced this modification in the timetable included in the first progress report.

### **C3 Ripristino risorgiva comunale (responsabile: BRESS)** **Municipal resurgence restoration (responsible: BRESS)**

Start date: 01/01/2016

End date: 31/12/2016

Actual start date: 02/01/2016

Actual end date: 27/12/2019

BRESS assigned the elaboration of the plan to a company on 18/05/2017 after a call for tender. On 1/08/2017 BRESS held a meeting with the subcontractor to monitor and coordinate its work. The supplier in August 2017 provided a draft of the technical blueprint for the realization of the spring according to action C.3. Following a request of BRESS they have improved the project and in November 2017 they provided the final technical blueprint. On 9/10/2017 soil samplings have been carried out on the site of intervention to verify status of the water ground for a good realization of the work (see photo in the annex).

During year 2018, the contractor of BRESS Studio Silva completed the executive technical blueprint of the didactic spring, approved by BRESS on May 2018. The final project was officially approved on July 2018. On 30/07/2018 BRESS published the call for tender to realize the spring, 3 offers were received, the contract has been assigned in October 2018 to the contractor presenting the best offer. The works started on 20 December 2018 and have been completed on 27 December 2019.

The intervention has been done in a public area located in front of the municipality of Bressanvido.

As the action C3 has a high informative value with regards to the local population. Considering the delay of two years in the completion of the action, we have realized a series of additional meetings and events to inform the population and disseminate the issues treated by the project, to overcome the temporary lack of awareness that the spring should have granted after its completion. In particular:

- a) Guided visits to the project sites for the local school of Sandrigo, on April 4, 6, 11, 6 classes, 80 participants
- b) Dedicated project exhibition area and on site didactic visit for citizens in the framework of the "Magnalunga" initiative (1/05/2017), 2.000 participants
- c) Open day in "Parco delle Sorgenti" to celebrate 25 years of Life on the Life projects Life Risorgive, Life AQUOR and Life Sorba – Dueville (28/05/2017), 250 participants
- d) Public conference dedicated to Life Risorgive and with other 3 LIFE projects in the framework of "Festival dell'Agricoltura" – has been held on 29/09/2017 within action E3
- e) 17/06/2018 "Walk along the Resurgences" organized by Comitato Risorgive to encourage local people to visit project sites.
- f) 22 students from local high schools involved in an Alternating school/work experience related to Life Risorgive activities in the period June-August 2018
- g) 5 events dedicated to Life Risorgive topics and activities have been organized in 2018 edition of "Festival dell'Agricoltura", from 23 to 30 September 2018.
- h) More events organized also in subsequent editions of 2019 and 2020.

Other details of the events carried out are reported in the website of the project <http://www.liferisorgive.it/it/media/rassegna-stampa/> and in the facebook page <https://www.facebook.com/liferisorgive/>

#### Problems encountered:

As already stated, in 2016 new legislation has entered into force the which modifies the procedures related to the acquisition of permission for areas subordinated to landscape restrictions: July 28th 2016 has entered into force the Law Decree 126/2016 which has modified Law 241/1990 and introduced additional conferences of services and obligations. The law requires that, in order to obtain permissions for any construction right, it is necessary to convene an online conference of services which has to raise opinions within 45 days (deadline which can be relieved only once for max 30 days), closing the procedure within 45 days max.

This law looks in contrast with the previous one on landscape heritage (Law Decr. 42/2004) which so far has not been explicitly abrogated; this law allowed to examine the project within a local commission, to transmit the result to the Authority and to obtain a reply (positive or negative) or tacit consent after 60days. Municipalities are now confused on which law to be applied and in particular about which will be the reaction of the authority which has so far applied the 60 days of tacit consent. Meetings on the topic have been organised and therefore the delay is caused by uncertainty on the application of the correct procedure, since some jurists think that the new law is to be applied only to building procedures and not to public works.

Changes applied: For creating this didactic spring it was not possible to reopen a natural spring (as hypnotized in the project proposal), due to the scarcity of spring water found during preliminary samples. So a new artificial water area has been created (as already communicated with the first progress report and the Mid Term Report).

## **D1 Monitoraggio della biodiversità (responsabile: AQP)**

### **Monitoring of biodiversity (responsible: AQP)**

Start date: 01/10/2015

End date: 30/09/2019

Actual start date: 01/10/2015

Actual end date: 30/09/2020

ARPAV has been contacted to collect previous data and to compare analytics methods. Province of Vicenza has been contacted to obtain biological-environmental data collected during LIFE AQUOR project. ARPAV data is not relevant to the but it is important to understand how is the quality of the water bodies in the neighboring territory. The LIFE AQUOR data were obtained and used for the environmental classification of resurgences (they were also used for action D3). The collected data will be included in the internal databases by AQP, as part of the after-life activities.

In parallel with A1 surveys on field, also monitoring surveys have been done in the following dates: 4-11-18 March 2016, 6-8 April 2016, 3-10 May 2016, 3-9 June 2016, 30-31 May 2017, 7-9-12-13-14-15-16-28 June 2017, 23-25 August 2017, 1-12-14 September 2017, 5-9-11 October 2017. Monitoring surveys have been done also in these dates: 4-7-9-14-29 May 2018, 1-12 June 2018, 28 August 2018, 5-15-27 September 2018, 21-22-23-25-30-31 May 2019, 26 June 2019, 21-22-26-27 August 2019, 6-24 September 2019, 1 October 2019, 25 November 2019, 28 April 2020, 5-6-7-11-12-13-14-16 May 2020, 20-24-25-26 August 2020, 10-11 September 2020.

Aquaprogram has completed the first report foreseen on the action in September 2017 (it is composed of 145 pages and it includes the information gathered during the surveys on the springs and related streams on the foreseen indexes: LIMeco, Star ICMi, ICMi Index (diatomic index), IBMR index (aquatic macrophytes), ISECI), the second report foreseen on the action in September 2018 (it is composed of 212 pages and it includes the results of application of environmental indexes), the third report foreseen at the end of the project was produced in September 2020 (it is composed of 240 pages and it includes the results of application of environmental indexes).

The internal AQP database with monitoring data has been regularly updated with the data collected during the monitoring activities reported below:

Site inspection and identification of sampling stations in ante-opera phase

Realization of 36 surface water samples of the main sites of intervention for the LIMeco index. Laboratory analyzes were also carried out and database implemented in the year 2017, 2019, 2020. In the year 2018 were carried out 26 samples.

Realization of 18 samples in the streams for the definition of the Star ICMi index. Samples collected were subsequently analyzed in a stereoscopic optical microscope laboratory for the definition of systematic units. Laboratory analyzes were also carried out and database implemented in the year 2017, 2019, 2020. In the year 2018 were carried out 13 samples.

Realization of 18 samples for the definition of the ICMi Index (diatomic index). Sampling on the streams was carried out for the collection of benthic diatomas. Samples were transferred to the laboratory for cold oxidation and subsequent reading at the optical microscope at transmission. Laboratory analyzes were also carried out and database implemented in the year 2017, 2019, 2020. In the year 2018 were carried out 13 samples.

Realization of 18 samples for the definition of the IBMR index (aquatic macrophytes). Samples for the definition of plant communities have been carried out. In the laboratory, dubious plant species were classified and the database was implemented in the year 2017, 2019, 2020. In the year 2018 were carried out 13 samples.

Realization of 24 fish samples for defining the ISECI index. Sampling samples were taken on

streams for the definition of fish communities. The captured fish was classified and measured and subsequently released into water. Laboratory analyzes were also carried out and database implemented in the year 2017, 2019,2020. In the year 2018 were carried out 17 samples.

The sampling campaigns carried out in 2017 should define the pre-completion condition of the ecosystems that will be affected by the redevelopment works, with the ultimate aim of being able to verify whether the interventions will produce variations in the state of the biocoenoses present.

The ecological status (defined by the set of 4 biological quality elements and a supporting chemical-physical quality element) it's moderate in nine stations, poor in two, and bad in one. It is not possible to establish the ecological status for seven stations in which it has applied only the LimEco index, which is not sufficient for the status classification.

The 2018 monitoring campaign takes place in the period in which most of the redevelopment interventions were carried out (in particular 4 sites were the works were completed). Therefore, not all the biological quality elements required for ecological status classification were collected as scheduled.

The ecological status was defined only in those sites wherever redevelopment projects were ended or in a very advanced phase, and where the data were collected both in spring and in late summer both for biological and chemical indicators.

As a result, the status has been defined in three stations, of which one remains in the class identified in 2017 (moderate), one has improved from scarce to moderate and one from moderate to good score.

In one sampling locations were collected the chemical-physical index and the ISECI fish index for both the season, spring and summer.

The ecological state has been anyway defined for this site, but it cannot be considered as significant as the aforementioned three. In this case, the class status appears to be stable regarding that observed in 2017.

For the remaining stations, an indication of ecological status was given using the available parameters.

In the 2019 monitoring campaign, all the biological descriptor indices were applied both for spring and for late summer. The ecological status class determined was moderate for eight sampling sites and good for the remaining one.

These status classes compared to those observed in 2018 point out a steady tendency in ecological conditions testified by the biotic and chemical-physical descriptors. In one site (station 11), the status raised from moderate to good but in this station alongside site 10 it was performed only by the chemical-physical index and the ISECI fish index, so the ecological status derived has to be considered being indicative.

The trend concerning the pre-completion campaign implemented in 2017 result in a more comprehensive positive trend, with one station upgraded from scarce to moderate one from bad to moderate, and one from moderate to good status classes.

A relevant issue to notice in the 2019 campaign is a generalized improvement of the ISECI fish index, therefore, of the ecological conditions of the fish communities that display a good number of native species and a good conservation rate results.

This improvement was observed among a good number of the sampling sites.

In the conclusive monitoring campaign of 2020, all the descriptors of biotic communities planned were applied as also the element of the chemical-physical status of the riverine

environment subject of the survey (9 sites for application of ICMi, STAR ICMi, IBMR, 12 sites for application of ISECI, 18 sites application of LIMeco).

The ecological status defined by the applications of the aforementioned five index resulted to be in line with the status defined in the 2019 campaign. It is possible to hypothesize that the environment subject of the survey displays certain stability.

The following considerations are related to the 9 sampling sites in which were performed all the biological and chemical-physical index during the project period.

In comparison with the results observed in the pre-completion monitoring phase carried on in 2017, the ecological status results improved in one-third of the sampling sites, for the remaining stations (67%) the status remains steady. There aren't sampling site which displays a worsened ecological status among the period 2017-2020.

The ecological condition of the macroinvertebrates communities based on the StarICMi Index scores displays an improvement in 33% of the sampling locations, while in 22% of the sites the condition result worsened. In the remaining 45% of the stations, the score index provides a steady status with respect to the 2017 results.

The community which seems to have benefited more than the others by the shifted ecological conditions because of the redevelopment works accomplished is the fish ones.

From the information got by the application of the ISECI fish index, it's resulted that this biotic community responded positively to the environment implementation put in place by the LIFE project.

Put in comparison the community status described by the index performed in the 2017 campaign and in 2020 campaign, the ISECI class is improved in the 58% of the sampling sites for the spring campaign and in the 50% on the summer campaign, while for the remaining 42% and 50% are stable. Moreover, for the aquatic plant community described by the index IBMR, the trend over the 4 years of monitoring is positive. In the 33% of the surveyed sites, the status class is improved while in the remaining 67% it results stable.

There aren't sampling locations where the conditions result worsened.

#### Problems encountered:

The conduct of the field investigations was characterized by a certain difficulty in the sampling phase determined by the reduced flow of resurgences resulting from a strongly drought year (2017) that followed a winter (2016) with snowfall practically absent in the Alpine arc . The concurrence of these meteorological events has led to a strong hydraulic impoverishment of the network of resurgences of the high Veneto plain and in general of the surface hydraulic network of the entire pre- Alpine area. The limited range of resurgences could have influenced the qualitative status of the water that in some stations was not optimal.

The 2018 environmental monitoring campaign was carried out without the completion of the project interventions in the intervention sites. The results of the monitoring are therefore not affected by the effects of the project initiatives but can be used as a reference with the results of the previous year.

Activities outside the LIFE (other projects / initiatives) that affect the action in some way: As part of the final conference of the LIFE12 project BIO/IT/000231 - AQUALIFE held in L'Aquila on 4-6 July 2018, a poster was presented showing the results of the previous monitoring of the quality of the resurgent water bodies forming part of the LIFE Risorgive project.

## **D2 Monitoraggio impatto socio-economico (responsabile: AQP)**

### **Monitoring of the socio-economic impact (responsible: AQP)**

Start date: 01/07/2017

End date: 30/09/2019

Actual start date: 01/07/2017

Actual end date: 30/09/2020

After initial inspections on the territory to define the functional characteristics of the socio-economic context, the correspondence of the population to cultural and environmental issues was tested by attending the environmental initiatives proposed during the Bressanvido Agriculture Festival held at the end of September and beginning of October 2017. On this occasion the first contacts were made with the agricultural realities of the territory with which the contacts have been developed later. It has been observed that, on one side there is an evident sense of ownership to the land and to the traditions expressed in the territory, but also an ecological and environmental sensitivity in the population that still needs adequate input to become aware of the richness in biodiversity that thrives in territorial area.

Based on the experience acquired, the questionnaire was drafted to be used in interviews with the population and stakeholders.

The action continued with greater intensity in the next spring, summer and autumn 2018-2019-2020 when the works of the C1 action have been completed and the fruition of the project areas have brought the population in direct contact with the areas of the Bressanvido springs.

The partial realization of the green project infrastructures has also led to an increase in the population's influx of resurgences that are often used for sports, leisure activities and educational activities. AQP conducted a survey with a questionnaire based on simplified questions to evaluate the perception that the population has of its territory and in particular of the resurgences. The questionnaire included open questions to allow the citizen to describe with simple adjectives if he knew the resurgences in his territory and what were the characteristics of these.

The questionnaire was distributed during popular events such as:

<b>Data</b>	<b>Manifestazione/occasione</b>	<b>Conteggio interviste</b>
11/06/2018	Interviste Studenti ASL	20
12/06/2018	Interviste ai Cittadini	12
17/06/2018	Passeggiata	28
22-24/07/2018	Festa dei Gnocchi Poianella	30
23/09/2018	Festa della transumanza	10
29-30/09/2018	N.D.	81
14/10/2018	Pedalata Brenta Pomeriggio	119
08/07/2019	N.D.	8
13/09/2019	N.D.	6
30/09/2019	N.D.	3
05-06/10/2019	Festa della transumanza	43
<b>Totale</b>		<b>360</b>

In the upcoming local popular events (Festival of transhumance and other) which were take place in 2018, 2019, 2020, further questionnaires were be compiled. The analysis stressed several aspects of people's perception and knowledge of the environment and

environmental issues (it's provided an extensive description of those aspects in the complete report).

The study reveals that the sensitivity of people in regards to environmental issues is somewhat higher in groups of citizens who are informed on the LIFE project and, in general, have more consciousness of the territory in which they live.

likewise, the study underlines the principal topics in which people are sensitive concerning environmental themes, like the need for maintenance of the landscape, the need for communication to let know habitats and related issues, the need for integration among anthropic activities, and biodiversity conservation.

In summary, using the “word cloud” scheme, it clearly emerges that people have a strong demand for the protection of resurgences in the sense of greater cleanliness and a greater presence of water; alongside this legitimate orientation, the need for better accessibility, usability and knowledge is affirmed, which have probably been neglected over the years.



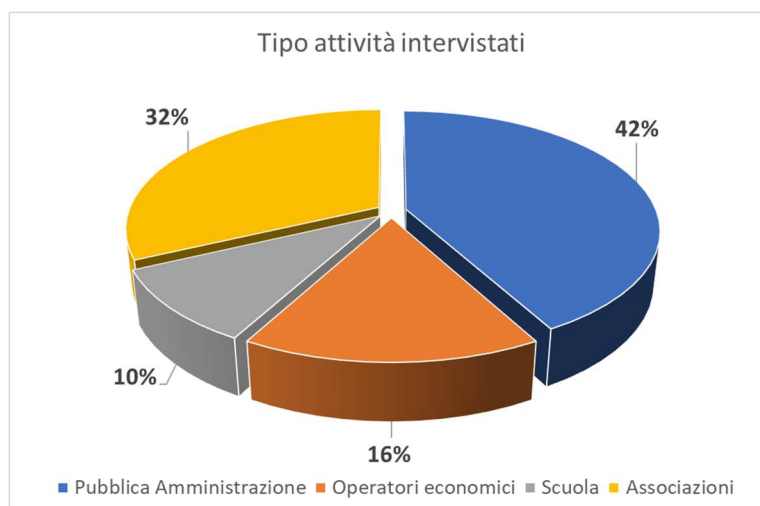
Between April and September 2020 important local stakeholders have been contacted to conducts surveys with more detailed questionnaires. The stakeholder's questionnaire is composed of 38 questions in addition to the request for a few demographic data. The analysis focused more on the impacts of the project on the stakeholders' commercial activities rather than on their perception of biodiversity. The information was collected through interviews by means of a questionnaire submitted to the major stakeholders (19) in the municipality of Bressanvido and in the surrounding municipalities.

The purpose of this choice was to monitor the level of knowledge and perception of the ecosystem, the knowledge of the project in question, the expectations and possible present and future implications, in various types of users, especially those actively involved in the activities, production and land management.

42% of the interviewees belonged to public administrations, 32% to local associations, 16% to local economic operators and 10% to educational institutions.

Tipo attività	Nome attività	Indirizzo	Ruolo dell'intervistato
Pubblica Amministrazione	Comune Pozzoleone	Pozzoleone	Assessore
Operatori economici	Latterie Vicentine spa	Bressanvido	Presidente
Scuola	Istituto Agrario Parolin	Bassano del Grappa	Docente

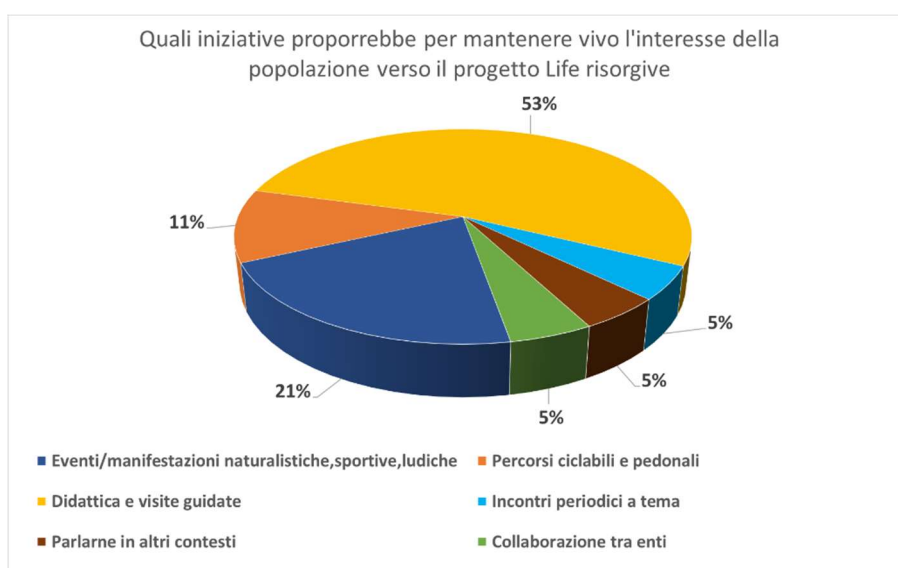
Scuola	Scuola primaria "le risorgive"	Bressanvido	Docente
Pubblica Amministrazione	ViAcqua	Vicenza	Presidente
Associazione Sportiva	CONI point Vicenza	Vicenza	Delegato provinciale CONI
Associazione scientifica	Associazione biologi del Veneto	Padova	Membro del direttivo
Pubblica Amministrazione	Comune di Bolzano Vicentino	Bolzano Vicentino	Assessore ambiente ecologia
Pubblica Amministrazione	Comune di Dueville	Dueville	Assessore
Associazione Sportiva	Pescatori Associati Bacchiglione Astichello Tesina	Vicenza	Presidente
Pubblica Amministrazione	Ordine provinciale Agronomi e Forestali	Vicenza	Pesidente
Pubblica Amministrazione	Comune di Caldogno	Caldogno	Assessore all'Ecologia
Pubblica Amministrazione	Cosorzio di Bonifica Brenta	Bressanvido	Operatore idraulico
Associazione di categoria	Federazione Coldiretti di Padova	Padova	Capo zona ufficio di Cittadella
Pubblica Amministrazione	Comune di San Pietro in Gu (PD)	San Pietro in Gu	Assessore comunale
Operatori economici	Pescicoltura Brenta snc	Nove	Cotitolare
Operatori economici	Ristorante Cà Divino	Bressanvido	Gestore
Associazione scientifica	Comitato Risorgive	Bressanvido	Volontaria
Pubblica Amministrazione	Polizia Provinciale	Vicenza	Agente Polizia Provinciale



It emerges that a good percentage of respondents 63% know the LIFE project, a consequence of a good dissemination campaign and a growing interest from the population regarding environmental and nature conservation issues, and 43% have a very positive perception of the project itself. It is noted that there is a positive trend with regard to the awareness and sensitization of the population regarding the Life Risorgive project and more generally to the issues of environmental protection and improvement, which also have a positive effect on tourism. In particular, it emerges that the issue of resurgence redevelopment is a relevant issue for 74% of respondents and that 47% of respondents note positive changes in the resurgences they frequent.

A good answer came with regards to the knowledge of the Natura 2000 Network and the EC activities for the protection of biodiversity, and 42% of the interviewees stated that the LIFE Risorgive project has brought benefits to their business. Direct benefits (increase in clientele) and indirect benefits are reported, intended as an increase in institutional exchanges, an increase in social interactions, an increase in environmental awareness, an increase in educational opportunities in the field which are important for training. A good vehicle of information for the LIFE project was the Municipal Administration which was indicated in 42% of cases, with a fair involvement of the local population.

95% of respondents said they will gladly join future LIFE projects as they believe they will benefit communities in both environmental and economic terms. The initiatives that will best keep the interest in the population alive are linked to educational activities and guided tours according to 53% of the interviewees.



Problems encountered: During the administration of the short questionnaires people stopped with difficulty also because they were interested in participating in popular events. In the extended questionnaires, some of the questions were irrelevant to the respondents' activity.

### **D3 Valutazione recupero funzioni ecosistemiche (responsabile: AQP)** **Evaluation of the recovery of ecosystem functions (responsible: AQP)**

Start date: 01/10/2015

End date: 30/09/2019

Actual start date: 01/10/2015

Actual end date: 30/09/2020

Preliminary inspections on springs have been done, in the dates indicated in D1. ARPAV has been contacted to collect previous data. Province of Vicenza has been contacted to obtain biological-environmental data collected during LIFE Aquor project.

The relevant activities of the IFR indices (Index of functionality of resurgences) and IFF (index of River Functionality) have been developed and the activities relevant to the flow in phase ante operam have been completed.

The implementation of the planned projects will affect the physiographic characteristics of the springs with repercussions on the morphology and ecology of the aquatic ecosystem. To better define the evolution of the transformed ecosystem, a monitoring plan is proposed that highlights the intraspecific dynamics of the system.

The protocols for the survey and classification of the Resurgence Functionality Index (IFR) and the River Functionality Index (IFF) were applied.

The main objective of the IFR and IFF indices is to survey the overall state of the resurgence and river environment and to evaluate its functionality, intended as a result of the synergy and integration of an important series of biotic and abiotic factors present in the aquatic ecosystem and the terrestrial ecosystem connected to it.

Through the analysis of morphological, structural and biotic parameters of the ecosystem, interpreted in the light of the principles of river ecology, the functions associated with them are detected, as well as the possible departure from the condition of maximum functionality, identified with respect to an ideal model of reference.

The measurement of the flow rate in the riverbed was carried out in sections purposely chosen for homogeneity of the water flow and regularity in the distribution of the depths corresponding to the survey sections detected in the 2017 campaigns. Along these sections were placed the depth detection points and of water speed; the number of points and their location are based on the section width and the speed distribution along the section.

For each point the distance from the edge was measured by means of a laser distance meter (Leika Disto A5) and the water depth value by means of a graduated rod with a precision of one centimeter. The flow rate for each point was subsequently measured with a current meter (OTT C2'10.150 '). with a diameter and pitch propeller adapted to the characteristics of the water flow.

This procedure allows to divide the section into homogeneous cells within which it is possible to calculate the flow value. The total flow of the water course is obtained by summing the contributions of the flow rates calculated in each cell.

32 IFR applications were performed in the springs that had previous data collected with the Aquor project and with a defined morphological structure and the results were compared with the surveys developed in previous works (LIFE AQUOR). In addition, 17 IFF applications were performed in the water bodies that were comprised in each project table.

The flow measurement was performed at 26 survey stations on the hydrographic network (one for each main group of springs) between July 2017 and October 2017. The data collected were entered in the appropriate database.

Since the interventions had been completed only in some springs in 2018, the IFR index was applied only in 10 springs and the IFF index in 5 sections of the canals. The flow

measurement was performed at 26 survey stations on the hydrographic network in July 2018 and only in 10 survey stations in October 2018.

In 2019 the IFR index was applied only in 32 springs and the IFF index in 17 sections of the canals. The flow measurement was performed at 26 survey stations on the hydrographic network between June/July 2019 and September 2019.

In 2020 the IFR index was applied only in 32 springs and the IFF index in 17 sections of the canals. The flow measurement was performed at 26 survey stations on the hydrographic network between June/July 2020 and September 2020. The flow rate of all springs was not measured as for some the morphology did not allow a reliable measurement, for others the flow rate was limited, to the limit of instrumental detectability.

The results of the surveys in 2017, in undisturbed conditions, for the application of the Resurgence Functionality Index showed that 71.8% of the wellspring are in non-optimal conditions with a poor rating, while 29.2% have a better condition with an overall rating of Good. The criticalities detected are related to the low flow rate, the presence of weed vegetation and low radiation.

In the stretches where the River Functionality Index was applied, the canals had banks characterized by a Mediocre rating (58.8%), with Poor rating (10.2%) and with a Good rating (8.2%). Lower percentages were represented by intermediate quality judgments between classes. Factors limiting the fluvial functionality were identified in the scarce depth of the arboreal vegetation (generally linear), the close presence of intensive / semi-intensive agricultural crops and the presence of non-native tree species.

The data related to the flow rate gathered in the 2017 campaign form a snapshot of the conditions existing before the start of the redevelopment project (the works begun in 2018). The meaningfulness of the data collected will be significant in relation to the eventual variation that could be produced by redevelopment interventions.

In 2018 the inspections for the application of the IFR were completed only in the forefathers that have been subject to environmental redevelopment (10 springs). 70% of the results defined a condition attributable to a Poor rating, while in 30% with a Good rating. 40% of the resurgens pools recorded an improvement compared to the 2017 condition with class change, while 60% showed only slight improvements or even no improvement. However, a greater water flow was noted as a result of the purging actions of the head of the source and a generalized improvement in the morphology and aquatic vegetation.

The IFF application was performed on 24 stretches of the banks of the springs. 62.5% resulted in mediocre condition, 8.3% in poor condition and 29.1% in intermediate mediocre / poor condition. Overall, the interventions resulted in a 45.8% improvement in the IFF class, while no changes were observed in 54.2% of cases. Riparian and aquatic vegetation is the ecological element that has undergone the most evident improvements.

In the 2018 monitoring campaign, the flow rates were measured in only a part of the sampling sites for both the spring and the late summer season. The missing data are due to the decision to realize the surveys only in those sites wherever redevelopment projects were ended or in a very advanced phase.

The comparison with the groups of data obtained in 2017 it's been performed only in those sites where the relief was done in both seasons.

In nine stations the flow rate measured in 2018, in particular in the second relief, results increased, in some cases of a quite sensible amount, in comparison with what was detected in 2017.

It is not possible to assume that the observed trend is influenced exclusively by the redevelopment interventions since the flow rates in such a complex system are dependent

on numerous environmental variables (i.e. mean year rainfall, underground aquifers level).

In 2019 all the project interventions were completed and consequently the analyzes for the application of the IFR and IFF were carried out on all the sections already visited in 2017. A generalized improvement of the leading sources determined by the project activities of expurgation is observed, morphological remodeling and new insertions of aquatic and riparian vegetation. Less evident, however, is the effect of the interventions in the canals downstream of the wellsprings; in many cases the works have involved small sections of the water system whose effect has remained localized.

The complexity of the resurgence supply system makes it difficult to interpret the analysis of fluctuations in flow rate both in the comparison between different periods in the same year and between periods with overlapping characteristics in the three years considered.

Compared to 2018, in 2019 in all the sites the flow rates were measured both in spring and in late summer as programmed.

Also, in 2019, the positive trend observed during 2018 in the sampling locations where the flow rate was measured twice results substantially well-established.

In the remaining sites, the flow rates measured in 2019, do not display appreciable variations throughout the period except for a few instances.

In 2020 the application of the Functional Indices was repeated in the stations visited in 2019. The conditions of improvement of the IFR are confirmed in most of the wellsprings and the effect contained in the quality of the IFF is confirmed in the segment of the surface network of the springs

In the 2020 monitoring campaign, the flow rates were measured both in spring and in late summer in all the 27 stations programmed.

The measurements done are compared to the data obtained during the entire period of the project. In eight sampling locations, the flow rate displays a stable positive trend along the four years of monitoring. While in twelve sites the variation is not as relevant as was supposed or, in very few cases, resulted in a negative way. In 7 stations, were not detected a noticeable tendency among the periods because of the minor nature of the variations occurred.

Problems encountered: In 2018, the project interventions were carried out only in a limited number of springs. This resulted in a reduction in the number of samplings for the application of the Functional Indices and for the measurement of flow rates. In 2019 and 2020, upon completion of the work, sampling was carried out on all the estimated stations

## **E1 Notice Board (responsabile: BRESS) (responsible: BRESS)**

Start date: 01/01/2017

End date: 31/03/2019

Actual start date: 01/01/2017

Actual end date: 30/09/2020

Main goal of Act. E.1 according to project description was the production of two kind of Notice Boards, 10 "small" notice boards (type A) aimed at informing citizens and visitors of project activities and territory specificities during their visit on project sites, and 2 "big" notice boards (type B), with more general education and dissemination purposes.

As for Type A Notice Boards, In July 2017 BRESS contracted a communication expert for the informative material. Afterwards BRESS, in cooperation with Comitato Risorgive and the designer, has elaborated the text and final layout for the panels. Printing of panels has been assigned on 20/7/2018 to a supplier, after a selection procedure. Panels have been installed in September 2018 (boards prepared by CB-BRENTA within action C.1), an electronic version has been diffused online and can be downloaded from project website ([www.liferisorgive.it/media/documenti/](http://www.liferisorgive.it/media/documenti/)).

As for type B Notice Boards, during 2018, with support from EPC and Comitato Risorgive, BRESS prepared a detailed technical description of the desired panels, based on project proposal. A public tender was issued on 27/02/2019, after a preliminary market search to identify potential providers. However, none of the three contacted companies was able to produce such dynamic panels within the timeframe and the budget foreseen in the project, so no bid was presented for the creation of the Notice Boards "Type B", mainly because of the complexity of the technical requirements.

The possibility to use a different type of panels - multimedia board with interactive digital contents - was thus considered and anticipated to the EASME through June 2019 monitoring visit (see annexes to EASME letter dated 10/07/2019 – "LIFE14 NAT/IT/000938 – LIFE Risorgive Fourth Monitoring Visit"). In the following months, BRESS verified in detail the feasibility of this option, both from a technical point of view (availability and characteristics of products, production times, functions offered) and from economic and maintenance point of view. Searches confirmed the possibility of replacing the two Notice Board Type B originally described in the project, with two interactive/digital totems characterized by: 40" LED touchscreen monitor, total dimensions 80 x 210 x 18 cm, for outdoor use, anti-vandalism protections, wireless or cable connectivity, as well as design and implementation of a multi-platform software with informative and educational contents on the theme of resurgences, accessible both from the multimedia totems and via Internet.

The totems would allow to achieve the same informative and didactic objectives originally foreseen for the Notice Board, but in a more modern way. In addition, the possibility to access the multimedia contents also via internet enlarges the potential audience, while the possibility to periodically modify contents contribute to keep them update and attractive. The overall cost of purchase and installation of the two totems, including the dedicated software, resulted to be in line with the budget available for the realization of the Notice Board Type B (see details below). Main negative points are operating and maintenance costs, that are probably higher than for traditional wood notice boards (electricity, connectivity, periodic maintenance and updating), but overall amounts are quite limited and shall be easily covered with BRESS yearly budget for electricity, connectivity and general maintenance.

The two interactive totems were ordered by BRESS (to external supplier) and have been

delivered and installed in September 2020. The two totems are currently positioned exactly where the two Type B Notice Boards were supposed to be located:

- one near Bressanvido town all, next to the demonstrative Resurgence created as part of Action C.3,
- the other one just outside Poianella primary school, at the beginning of Tergola resurgence pedestrian path.

Graphic layout of the Totems (Type B Panels), photos of the totem installed and their geographical position are reported in the attached document "E1\_Progetto grafico pannelli tipo B".

The total cost of the two multimedia totems, including the contents, was 34.160 euros and it includes:

- conceptual development of the panels
- conceptual and design development of scientific content and interactive functions
- elaboration of the detailed technical project defining the didactic elements
- construction and transport of panels
- creation of web pages or other multimedia contents
- installation of the panels in the identified sites and testing.

Problems encountered: for type A panels, the cost resulted to be 4.235€ higher than foreseen (5000€), since only one company participated to the tender with an offer more expensive. For type B panels, see above.

Changes applied: a logo, a leaflet and some roll-ups were not foreseen in the project, but they have been prepared because of their utility for project visibility. A logo, 2000 copies of a leaflet and 2 roll-up were produced and used for project communication activities and events. These materials were produced at no cost for the project, thanks to a tight cooperation with local stakeholders. The leaflets have been distributed over the years, during some local events, such as the Agriculture Festival (2016-2020), the Transhumance Festival (2016-2020), the Magnalonga Festival (2017-2019), and other conferences and events attended by project partners. There are 150 flyers left to distribute in upcoming editions of local festivals.

For type B panels: two interactive multimedia totems, with informative and educational contents, have been realized, instead than two interactive wood panels as originally foreseen. Moreover, there is the plan to move the second totem, currently located in Poianella, to a central and tourist area in Vicenza (Piazza Matteotti), instead than having both Type B totems and all Type A notice Boards in Bressanvido territory, as originally planned. This would help to increase the visibility of the project and to disseminate its topics and results to a wider audience.

The positioning of this second totem in Vicenza, originally planned for September 2020, has been delayed due to COVID outbreak and related difficulties. However, the commitment of Vicenza Municipality has been recently confirmed, and an agreement with local energy provider has been already formalized for the provision of electricity and connectivity, at no cost for BRESS.

## **E2 Sito web di progetto (responsabile: BRESS)**

### **Project website (responsible: BRESS)**

Start date: 01/01/2016

End date: 30/09/2019

Actual start date: 25/02/2016

Actual end date: 30/09/2020

The website (<http://www.liferisorgive.it/it/>) is online since 1/04/2016 in Italian and English version, containing information about project area, project scopes and activities, results, documents. A new section on “Contratto di Risorgiva” was created in Autumn 2019 and used to publish and disseminate information about the participatory process aimed at defining this voluntary agreement for the protection of resurgences area (Action E7). Project News were regularly updated. A “Media” page with links to 5 videos presenting project activities or results, 11 articles talking about Life Risorgive project, and more than 60 past news is also included. From the “Documents” page, all main project outputs can be downloaded.

At the end of the project, all texts of all pages, both in Italian and in English, have been reviewed to updated them to the actual status of the project.

Since September 2020 a second website has been activated ([www.risorgivedibressanvido.it](http://www.risorgivedibressanvido.it)) which presents the territory and the Resurgences of Bressanvido, and can be navigated also through the two interactive totems (act. E2). This site is targeted to a general public, providing mainly non-technical information, but is connected to the main site for further information and documents.

A facebook page has been set-up on April 2017, which has now 388 likes and 413 followers (checked on 15/01/2021). It has been used mainly to communicate news about project activities to the general public, and to create links and raise awareness on project topics, environment protection, wetlands importance, and so on. 98 posts have been published only in 2020, an average of 2 per week.

Articles or news about Life Risorgive project were diffused also trough local media and on-line journals, blogs and newsletter. A list of most relevant videos and articles presenting the project or some of its outputs is available on project website:

<http://www.liferisorgive.it/it/media/rassegna-stampa/>

### E3 Networking (responsabile: BRESS) (responsibile: BRESS)

Start date: 01/01/2017

End date: 30/09/2019

Actual start date: 22/06/2016

Actual end date: 30/09/2020

Networking started before than planned, in 2016. A database which collects other LIFE funded projects focused on topics linked to the main ones of LIFE Risorgive has been created together with 2 brief documents presenting the project (one in English and one in Italian). These have been sent via email to the project managers of the above mentioned projects, reaching a total of 18 projects. Then, during project course, contacts with other projects dealing with similar issues (rivers/wetlands protection, rivers restoration works, effective and sustainable water management) or in similar/nearby territories (Vicenza Province, Vento piedmont plain). These contacts were also used to send info related to public project events to reinforce the network.

Altogether, the following networking activities have been implemented:

Project(s)	Activity implemented	Goal / Result
<b>LIFE PHOENIX</b> (LIFE16/ENV/IT/000488) ----- <b>ECO-ALPS WATER</b> (Interreg Alpine Space)	21/03/2019 - Networking workshop among the 3 projects, with special participation of technicians from ARPAV – Regional agency for Environmental Protection in Veneto.	Exchange of knowledge and common skills. In particular, we talked about water systems as means of water purification, innovative systems for monitoring water quality and strategies for mitigating pollutants in water.
<b>WETNET</b> (Interreg MED)	04/12/2018: Networking meeting at Veneto Region Premise between Life RISORGIVE delegates and WETNET coordinators. Afterwards: direct contacts with experts involved in the set-up of the “Wet Areas Contract” in WETNET project (towards the Resurgence Contract) 03/10/2019: Life RISORGIVE presented during WETNET final international conference Beginning 2020: 4 good practices from Life RISORGIVE included by WETNET in the international database RiverWiki <a href="https://restorerivers.eu/wiki/">https://restorerivers.eu/wiki/</a> .	Exchange of knowledge and experiences related in particular to River Contract instrument (that has been adapted, on the one case, to wet areas, and on the other case to resurgences area), and to wet environments monitoring and management. Increased visibility of Life RISORGIVE results also at international level
<b>LIFE PALU'QDP</b> (LIFE17 NAT/IT/000507)	Second half 2018: Life PALU' QDP Coordinating Beneficiary contacted BRESS for suggestions/indications on project start-up activities. 16/03/2019: Participation of Life RISORGIVE delegates to Life PALU'QDP kick-off event. Presentation of the Life RISORGIVE as an example of economic optimisation and protection of biodiversity. Afterwards: Visibility in respective web sites, exchange of knowhow through common partner VA	For Life PALU'QDP: suggestions and support for facilitating project start-up activities For Life RISORGIVE: opportunity for visibility and for promoting transfer and replication of project results in other territories.
<b>LIFE SILIFFE</b> (LIFE 14/NAT/IT/000809)	29/09/2017: Participation of LIFE SILLIFE project in a public conference on the protection of wet environments organized in Bressanvido in the framework of “Festival dell’Agricoltura 2017” (together with Life RISORGIVE, Life SORBA and STAR Life) 30/11/2018: Participation to the LIFE SILIFFE Final Conference. The following topics were tackled: the resurgences system in the Veneto region, the use of environmental indicators for describing resurgences' ecosystems, the faunistic and botanical emergencies in the resurgences of Tesina, Bacchiglione and Sile, the ecosystem services of the resurgences habitats, the Resurgence Contract as social and environmental management element.	Exchange of knowledge and common skills between the two projects. Increased visibility and opportunity for promoting transfer and replication of project results in other territories.
<b>LIFE RII</b> (ENV/IT/000243) <b>LIFE RINASCE</b> (LIFE13 ENV/IT/000169)	23/10/2018: Participation to the IV Italian Convention on Fluvial Requalification, that took place from the 22nd to the 26th of October 2018, in Bologna. During the Convention, representatives of the LIFE RISORGIVE examined the principles of river restoring on Italian territory and shared technical information with the representatives of the projects LIFE RINASCE and LIFE RII.	Exchange of knowledge and common skills among the three projects.

<b>LIFE AQUALIFE</b> (LIFE12 BIO/IT/000231)	04/07/2018: LIFE Risorgive took part in the AQUALIFE project's final conference "Ecosystems depending on groundwater" in L'Aquila. Sharing of technical information between the two projects, in particular related to the experience developed by Aqualife in the monitoring and evaluation of biodiversity of the ecosystems influenced by groundwater	Support for project visibility outside project area. Exchange of knowledge and common skills between the two projects.
<b>LIFE AQUOR</b> (LIFE 2010 ENV/IT/380)	28/05/2017 Open day in "Parco delle Sorgenti" to celebrate 25 years of LIFE with the projects LIFE RISORGIVE, LIFE AQUOR and LIFE SORBA. Total: 250 participants Exchange of experiences on the Groundwater Contract developed by LIFE AQUOR	Provision of baseline data on for technical projects (act. A) and for monitoring activities (act. D). Support for communication start-up. Know-how provision related to Contract instrument
<b>PRO-BYKE</b> (Interreg Italia-Austria)	07/05/2020 – Bilateral meeting to verify possible cooperation elements. Materials produced by the Pro-Byke project provided to BRESS	Exchange of information. Possible synergies for after-life implementation (promotion of new cycling path)

Changes applied: we decided not to produce nor publish on the website the reports on each single networking activity, given the scarce usefulness for the public. On the contrary, a page dedicated to networking is present on the website, with a presentation of each network project, link to official project website, and a factsheet summarizing main contact elements with LIFE RISORGIVE.

#### **E4 Layman's report (responsabile: BRESS) (responsibile: BRESS)**

Start date: 01/07/2019

End date: 30/09/2019

Actual start date: 01/03/2020

Actual end date: 30/09/2020

Project Layman's report is provided as Annex.

Briefly, the Layman's report communicates to a non-specialistic audience LIFE Risorgive objectives, results and their transferability. It is a bi-lingual English and Italian document, with a schematic and visually-attractive lay-out. It can be downloaded in electronic format from the project website. 500 copies were printed by BRESS, with own resources, after the end of the project.

## **E5 Formazione degli agricoltori (responsabile: VA)**

### **Training of farmers (responsible: VA)**

Start date: 01/10/2016

End date: 31/03/2019

Actual start date: 01/06/2017

Actual end date: 31/03/2019

In July 2017, with a market survey, VA assigned a task to a private society, to support VA staff in planning and putting in place activities. The task included a detailed plan, animation / training of farmers and information to other groups of stakeholders important for the project and its purposes. The activities done are:

- 3 open meetings for the general public
- 1 public meeting for farmers
- public meetings with different stakeholders
- 20 direct individual meetings with local landowners
- 1 practical handbook (pdf) for streams vegetation management

All the activities, for each project year, are described in detail in the annex Report.

Unfortunately, in the period in which the action was carried, there was not any active and financed measure of Veneto Region Rural Development Plan (RDP 2014-2020) concerning hedges plantation and bank restoration actions for single landowners. For this reason, to avoid the risk of using unsuccessfully the action's resources, VA turned some of the meetings with farmers to other important stakeholders categories, such as fishermen, hunters, reclamation consortia, associations, and regional authorities. Moreover, VA decided to realize a not originally planned "deliverable", a vademecum/manual, in PDF format, about correct management of springs and water courses.

Personnel involved in E5 act. dedicated time to raise awareness and give technical information to RDP managers in regional authorities, and this had a great result in the application of measure 4.4.2 of Veneto RDP 2014-2020, an original measure concerning bank restoration in Veneto plain. This "collective" (i.e. many farmers coordinated by a consortia) measure's application was based also on LIFE RISORGIVE techniques and results, as showed during E5 meetings and as reported in some vademecum chapters.

Despite the uncertainty regarding the measures that the next Rural Development Plan (Veneto Region RDP 2021-2027) will adopt, we are sure that the E5 action of the LIFE Risorgive project has played an important role because:

1. As part of that action, VA contributed decisively to the success of measure 4.4.2 at the regional level, which is a good prerequisite to foresee its replication also in the new RDP edition. In fact, about 19 km of new vegetated channel banks were realized, by 5 consortia (Consorzio di Bonifica Delta del Po, Consorzio Bonifica Bacchiglione, Consorzio Bonifica Veneto Orientale, Consorzio Bonifica Veronese, Consorzio di Bonifica Adige Po). 2 of them (Consorzio Bonifica Veneto Orientale, Consorzio di Bonifica Adige Po) also implemented activities on wet lands (about 4.500 m2) within measure 4.4.3 "Structures functional to the increase and enhancement of naturalistic biodiversity";
2. By drafting the vademecum, VA has made available an operational tool containing technical contributions, useful for the regional offices in charge for possible measures of the next RDP
3. See p. 5 of the final report of the E5: in contributing to the RDP 2014-2020 measures within 16.5.1 "Collective projects" and in the related dissemination initiatives, the regional offices were directly involved and therefore action E5 contributed to strongly raising awareness

in regional employees, directly responsible in writing and planning RDP measures, about techniques, chances and issues in creating, restoring and managing channel banks.

Problems encountered and Changes applied: the target group, initially foreseen only for farmers, has been extended to other local stakeholders on the project to stimulate their active participation in the conservation of local biodiversity. It also intends to contribute to the success of the project by involving a wide range of stakeholders who can, with their activity, positively influence the green infrastructure represented by the riparian and hydrophytic vegetation systems. The action has been started with some delay because it was foreseen to start after the restoration actions. The delay is therefore due to the late start of the works. Moreover, there was a lack of RDP call in Veneto region in the period in which the action was implemented, this affecting the participation of farmers to the meetings.

**E6 Creazione itinerari di visita (responsabile: BRESS)**  
**Creation of paths and cycleways itineraries (responsible: BRESS)**

Start date: 01/10/2016      End date: 30/09/2017  
Actual start date: 01/06/2018      Actual end date: 30/09/2019

The action started during 2018 with the creation and inauguration of two trails (out of 3 foreseen). The first two trails have been used by visitors starting from summer 2018. The third one was defined and partially used, but not official inaugurated due to the delay in the land acquisition of a last parcel, that was formalized only during 2019. The third path was completed in June 2019 and has been viable ever since.

The preparation of the related leaflets and signs was temporarily interrupted in 2019, but these activities were resumed in 2020 and were finalized in September 2020 together with the "type B panels" (Act. E2), to ensure the full consistency and completeness of the messages and visual identity. New road signs have been installed along the routes. A graphical map of the new paths/cycleways was produced and can be downloaded from project website ([http://www.liferisorgive.it/wp-content/uploads/E6\\_Pieghevoli-di-presentazione-degli-itinerari\\_comp.pdf](http://www.liferisorgive.it/wp-content/uploads/E6_Pieghevoli-di-presentazione-degli-itinerari_comp.pdf)).

2000 printed copies of the map were produced; some of them have been distributed during project final event on September 29<sup>th</sup>, 2020 (which included the official inauguration and public presentation of the three routes), other are available at Bressanvido town hall and will be distributed in future public events.

Changes applied: we have realized that in the timetable of the project reported at page 132 there was a mistake. Most of the activities of the action were foreseen in the period 2016 and 2017 while actually both deliverables and milestones related were set in 2018. A correction of the table was proposed in the mid-term report.

## **E7 Implementazione contratto di risorgiva (responsabile: AQP)**

### **Resurgent Contract implementation (responsible: AQP)**

Start date: 01/07/2016

End date: 31/03/2019

Actual start date: 01/07/2016

Actual end date: 30/09/2020

The Resurgent Contract is a participatory process that has been developed during the project in order to create a shared working space between project partners, other public or private subjects interested in the initiative and all citizenship. Initially, contacts were made with the representatives of the Brenta River Contract, currently being completed, and the Groundwater Contract, developed within the LIFE AQUOR. They provided information on the operational constraints and the management problems of such instruments.

The Contract process started in July 2019, saw the first territorial table in September and subsequently developed with meetings both in presence and on the web. The participatory process ended in September 2020 with the signing of the Resurgent Contract which saw the participation of more than 36 local administrations, public bodies and local associations that signed a panel of 12 actions to be carried out in the Risorgive area in the next 5 years.

Path so far realized:

1. Meeting of Presentation in Cittadella 8 July 2019
2. Meeting in Bressanvido 9 September 2019 Presentation to local administrators
3. Meeting in Bressanvido 30 September 2019 Application of new process named MOVE (Mantenere-Organizzare-Valorizzare-Evitare)
4. Meeting in Bressanvido 9 December 2019 Territorial table
5. Meeting in Bressanvido 10 February 2020 Signing of the Document of Intent
6. Four web meetings: 21 and 28 July, 2 and 21 September 2020
7. Contract signed on September 29, 2020

Problems encountered: The restrictions imposed by the lockdown for the COVID emergency led to the suspension of face-to-face meetings in the last part of the participatory process. The meetings were carried out in web mode with a good participation of the stakeholders.

Changes applied: the slowdown in the development of the LIFE RISORGIVE project did not suggest to undertake pressing initiatives for the implementation of the Resurgent Contract which includes meetings on the territory, rural animation, raising awareness of stakeholders and sharing a new strategy for managing resurgences. With the completion of the first interventions on the resurgences of Bressanvido scheduled for the end of January 2018, (Project 2 Fontane Marzare, Project 4 Roggia Rozzolo, Project 10 Bacino Castellaro) proactive activities to define the spring contract have started, involving meetings with the population and raising awareness on the issue of biodiversity and environmental management, specifically resurgence ecosystems.

## **F1 Project Management (responsabile: BRESS) (responsible: BRESS)**

Start date: 01/10/2015

End date: 30/09/2019

Actual start date: 01/10/2015

Actual end date: 30/09/2020

We provided detailed information on the project management bodies at point 5 above. Project management meetings and the Management Board meetings were held in person (or virtually, in respect to COV19 restrictions from March 2020 on) normally every 2 or 3 months (and even monthly, in some periods).

Day-by-day project management was conducted regularly through email, skype and telephone communications with the project partners, at least every week, in order to circulate updates on project state of the art, plan future activities, collect useful info for project dissemination and promotion.

The main outputs/milestones of this activity have been:

- the Kick off Meeting, held on 03/11/2015;
- the Partnership Contract, signed on 21/03/2016;
- the daily management and coordination of the project technical activities;
- the financial management of the project budget and financial documents and the distribution of the payments to the beneficiaries.
- 6 monitoring visits, held on: 28-29/06/2016, 4-5/04/2017; 14-15/05/2018; 12-13/06/2019; 11/03/2020 (virtual); 10/11/2020 (virtual, after project end).
- 4 official Reports, including technical and financial annexed documents: First Progress Report on 19/10/2016 Mid-Term Report on 30/01/2018, then updated to 31/08/2018, Second Progress Report on 30/11/2019. Final Report on 31/12/2020.

## **F2 After LIFE plan (responsabile: BRESS9 (responsibile: BRESS)**

Start date: 01/07/2019

End date: 30/09/2019

Actual start date: 01/07/2019

Actual end date: 30/09/2020

A first draft of the AfterLIFE Plan was elaborated by BRESS and positively evaluated by the former monitor in June 2019. The final version of the AfterLIFE Plan is annexed to the present Final Report. Briefly, the AfterLIFE Plan recalls the socio-ecological needs, summarizes LIFE Risorgive main results, explains the technical and communication activities done and presents how each beneficiary will continue, after the LIFE Risorgive end: 1) applying the results of the project, 2) ensuring their wider application by others and 3) disseminating and communicating these results.

**F3      Aggiornamento indicatori di progetto (responsabile: AQP)**  
**Update of project indicators (responsible: AQP)**

Start date: 01/04/2016

End date: 30/09/2019

Actual start date: 01/04/2016

Actual end date: 30/09/2020

In May 2016 the online section of LIFE indicators was updated as required by Commission communications (completed on 12/05/2016). Since the completed actions did not concern areas that changed the actual state of natural environments, no changes were recorded in the table of specific project progress indicators. The action continued with specific investigations to verify the status of species of Community interest in the project area. The inspections of the intervention sites have been carried out and direct sampling of habitats and species could have been carried out after the completion of the works. At the end of the project, KPI data have been updated in the LIFE e-platform.

Changes applied: as already communicated with the First Progress Report the responsible partner of the action is AQP, not BRESS, as indicated in the Associated beneficiary declaration, page 8/149 of the original project. This is not in line with what is reported at page 126/149 where BRESS is indicated as the responsible partner of the action. Reports n. 1, 2, 3 foreseen for 2016 and 2017 have not been produced, since they were foreseen for a later stage of action execution (error in project description), while reports 4, 5, 6 have been realized, with a change in timing due to project extension.

## **6.2 Main deviations, problems and corrective actions implemented**

As explained in the previous paragraph, the project suffered for a delay, mainly in the initial part, due to both difficulties/delays in lands acquisition – Act. B1 (properties fragmentation and complex ownership situation, landowners not willing to sell, length of the mandatory administrative steps needed for acquisition, cost of land higher than budgeted, etc.) and difficulties/delays in the executive planning of the interventions – Act. A1 (need to ensure coherence between executive projects and land availability/landowners collaboration, longer approval procedure). However, the delay has been recovered during the second part of the project, and thanks to a one-year extension till September 2020.

During Actions C1 and C2 a certain level of flexibility was applied, to adapt interventions to actual environment conditions found during works (ex. need to use more supporting material where soil resulted to be less stable than expected; small expedients to improve hydraulic efficiency of works; opportunity to bring to light an old inactive spring in Tav. 11; adaptation of species and quantities of plants for each area to real micro-stational conditions after works, to maximise rooting and survival expectancy; etc.). As for Act. C3, a series of unplanned awareness rising events have been implemented to balance the delay in the realization of the didactic spring.

Other problems and difficulties encountered during project implementation have been described in previous section, for each action, with also the corrective actions that have been implemented. The impact on delivery date of different deliverables and milestones can be seen in chapter 9.

## **6.3 Evaluation of Project Implementation**

In proposal preparation phase, difficulties and time needed to deal with single landowners and to formalize land acquisitions were probably underestimated. Problems linked to land fragmentation, inheritances, errors in cadastral data, actual land value, length of expropriation procedures, were not properly considered. On the other hand, a positive attitude of local owners and citizens towards proposed interventions was a mandatory condition for the success and future sustainability of project, especially in a place like Bressanvido, where the springs are located in the center of the town, close to the houses and main roads, and surrounded by private land. In this context, a hostile attitude of the residents would have made the restoration work more difficult and probably expensive, with negative repercussions also on the usage of the visiting paths, cleaning of the area, respect and survival of planted vegetables, and long-term maintenance.

For this reason, a collaborative and participatory approach was preferred, aimed at creating a favorable environment and increasing interest of citizens towards the Life project. This was achieved thanks to the direct involvement of local civil society organizations, primarily the Comitato Risorgive, and the possibility to exploit the many public events organized in Bressanvido to increase knowledge and awareness about resurgences and their importance.

This approach resulted to be slow and lengthy, but the success of the Resurgence Contract participatory process (Act. E7), the absence of contrast during restoration works (Act. C) and also the socio-economic monitoring (Act. D2) confirm it achieved the desired results.

AN	Objectives / Expected results foreseen in the revised proposal	Achieved	Evaluation
A1	<i>Executive planning of interventions C on resurgences</i> 26 Technical blueprints	Yes	Expected result reached, even with some delay due also to external factors
B1	<i>Acquisitions of rights of use of areas of particular relevance</i> Acquisition of 9.500 sqm	Yes	Expected result reached and overpassed: 15.204 sqm of areas of particular relevance (along resurgences) have been acquired.
C1	<i>Restoration of hydraulic functionality of the springs</i> Recover of 26 system of springs	Yes	Expected result reached, hydraulic functionality of 26 resurgence systems, corresponding to 43 spring-heads, have been restored or improved.
C2	<i>Nursery production and planting on sites to recreate habitats and green infrastructure</i> Production of 26.000 plants and planting on site	Yes	A total of 26.011 plants have been produced and planted.
C3	<i>Municipal resurgence restoration for didactic purposes</i> Recreation of a didactic spring of 120 mq	Yes	Expected result reached, the new area with didactic resurgence has been completed and is currently open and used.
D1	<i>Biodiversity monitoring to verify effects of C actions</i> 2 monitoring campaigns on various biotic indexes	Yes	Expected results reached. Monitoring activities done regularly according to project status. 3 reports completed, in 2017, 2018, 2020
D2	<i>Monitoring of socio-economic impact to verify improvements</i> 20-25 interviews and data elaboration	Yes	Expected results reached. 360 "short questionnaires" and 18 "extended interviews" collected and analyzed
D3	<i>Evaluation of ecosystem functions recovery to verify improvements</i> Six monthly monitoring campaigns on various biotic indexes	Yes	Expected results reached. Monitoring activities done regularly according to project status. 26 survey stations used 3 reports completed, in 2017, 2018, 2020
E1	<i>Notice Boards to inform people</i> 12 informative panels placed onsite	Yes (with changes)	10 "A type" notice boards prepared and installed in project area "B type" notice boards substituted by 2 multimedia totems with same targets and goals.
E2	Project website to spread information on the project	Yes	The website is visited and updated regularly
E3	<i>Networking to share best practices</i> Collaboration with 5 other projects at various level	Yes	Contacts and collaboration established with other 9 projects, of which 7 Life and 2 Interreg
E4	<i>Layman's report to inform people at project end</i> 500 copies	Yes (partially)	Layman's report prepared and distributed in electronic form. Printed copies to be realized after the end of the project at BRESS own cost.
E5	<i>Farmers training on project and use of RDP to protect rural</i>	Yes (with changes)	Activities addressed not only farmers but all stakeholders. Organized: 3 open

	<i>environment</i> 3 training meetings for 50 farms		meetings for the general public + 1 public meeting for farmers; public meetings with stakeholders: 20 direct individual meetings with local landowners aimed at increasing their awareness and knowledge on project related topics. Information about RDP usage were provided. Direct collaboration with Veneto Region for preparing relevant RDP measures. A vademecum/manual about correct management of springs and water courses was prepared and diffused in electronic form.
<b>E6</b>	<i>Creation of informative trails to increase awareness</i> 3 trails, 10 panels, 500 copies of a leaflet	Yes	3 completed and practicable trails, 35 road signs installed, 2000 printed copies of the map produced.
<b>E7</b>	<i>Resurgence Contract implementation for long term good management</i> Contract adopted among 10-15 bodies	Yes	Resurgence Contract (Contratto di Risorgiva) prepared and already signed by 36 institutions.
<b>F1</b>	<i>Project Management</i> KoM, 16 minutes of the management board, 4 obligatory reports	Yes	Expected results reached.
<b>F2</b>	After LIFE plan	Yes	Expected results reached. Document annexed to present Final Report
<b>F3</b>	<i>Project indicators update</i> 6 updates of the indicator table	Partially	KPI descriptive table compiled 3 yearly updates provided.

### Visibility of the project results

Project results are clearly visible in the whole area.

A relevant part of restored resurgences is visitable thanks to the new walking and cycling paths, that cross the entire territory of Bressanvido and are widely used by both residents and visitors. The 35 road signs disposed along the trails, together with the 10 Notice Board and the 2 Multimedia totems, ensure a clear reference to the LIFE project and invite to know more about resurgence habitats and implemented works. The "Didactic Resurgence", created alongside the main town square, allows to see and understand what a resurgence is and what are the characteristics of these habitats, even without going to visit a real resurgence in the middle of the countryside.

In case of resurgences and spring-heads located far from walking paths, results of recovery works and plants restoration are less visible for the general public, but can be appreciated by land owners.

### Results of the replication efforts

LIFE 2014 application posed minor emphasis on the need of project replication in comparison to the last calls. This is why our project foresees mainly information and networking activities. Nevertheless, some interesting replication results were achieved also during project period:

- Veneto RDP 2014-2020 measure 4.4.2 “Green infrastructures” (within the RDP measure 16.5.1 “collective projects”) explicitly promoted the replication of LIFE RISORGIVE approaches for bank restoration in other territories within Veneto Region. Thanks to this call, about 19 km of new vegetated channel banks were realized by 5 consortia.
- Experience acquired by CB-BRENTA during this project concerning “soft” restoration of minor water courses and for resurgences re-opening and maintenance, is now applied by the partner in its normal activity related to the ordinary and extraordinary maintenance of hydric bodies in 53 municipalities in the Provinces of Vicenza, Padua and Venice.
- Within Act. E5 a manual for the correct management of springs and water courses was developed. This manual has been adopted by BRESS as a guideline for correct maintenance and management of resurgences areas after project end, and by private owners. There is a strong interest in the operational guidelines summarized in the manual, because no guidance existed up to now on this issue. Veneto Region showed interest to finance the spring conservation actions experimented during the project with the next RDP 2021-2027.
- The manual has been officially presented to wide public during 2020 edition of Agriculture Fest in Bressanvido, and can be downloaded from project website. In addition, a free training on correct modalities for managing and maintaining springs and water courses was organized in 2020 by Comitato Risorgive. About 90 persons registered to the training, from Bressanvido and nearby territories, that will now be able to replicate the approaches developed and demonstrated within LIFE RISORGIVE project in their properties.
- The project inspired the creation of the project LIFE Brenta 2030, approved in 2018 call, where VA is the project partner responsible for the planting and habitat recreation along the river Brenta.

In addition to this, information, dissemination and networking activities implemented within the project, starting from the Resurgence Contract, created favorable conditions for ensuring the implementation further replication and continuation actions after project end. More details on this are reported in chapter 6.4 below.

### **Effectiveness of the dissemination activities and comment on any major drawbacks**

Various types of dissemination and training activities have been carried out which have been useful to spread the importance of defending the resurgences, the use of appropriate funds, and the objectives and actions of the project.

Different instruments resulted to be effective for different type of targets. In particular, a project website and a facebook account have been published and used to spread information about resurgences and project activities towards general public. However, number of visits and interactions with posts were limited, confirming personal contacts were necessary to really attract people interest toward a so specific topic and territory. Similarly, during the first project year we learned that invitations sent via email and involvement of category association were not effective ways to promote project events, in absence of direct contacts with potential participants. For this reason, in subsequent years it was preferred to organize project dissemination and training activities in the framework of other, bigger events held in Bressanvido, like the Agricultural Fest or “Magnalonga” event, and personal contacts and word of mouth were exploited to gather audience, in addition to official invitations and on-line promotion.

Personal contacts of partners, word of mouth, and networking meetings with other projects resulted to be effective ways also for reaching relevant stakeholders and potential replicators, like Veneto Region, Reclamation Consortia, local municipalities, and so on. To this end, the participatory process implemented for the set-up of the Resurgence Contract resulted to be effective also to disseminate project principles and results to other interested subjects and territories. Similarly, Networking with other projects allowed us to present the project during their events, reaching also an international audience (WetMed final Conference and RiverWiki).

As for the general public outside project territory, the walking-cycling trials created within the LIFE project have been included in the VI-bike project, an initiative of the Destination Management Organizations “Vicenzaè” and “OGD Terre Vicentine” aimed at promoting bike-tourism and sustainable tourism in Vicenza Province. The trials “Bressanvido Springs” are part of this project, already presented at various fairs.

## Policy impact

As suggested by the EASME after the joint monitoring visit in May 2018, we use this table to report the steps done relative to policy implementations:

Policy area	Objective	Relevant LIFE Risorgive action	Source of information/data Impact
Biodiversity Strategy	Halting loss of BD (ref to Form B2C)	Action D.1	<p><i>Data on species/habitats for which population has improved thanks to the project actions:</i></p> <p>We have collected data on these features for the status before the works and after the completion of the works.</p> <p>The following species resulted to be improving: <i>Cottus gobio</i>, <i>Lethenteron zanandreaei</i>, <i>Rana latastei</i></p> <p>Habitat: 91E0*, 91F0, 3260</p>
Green/blue infrastructure strategy	Delivery of ecosystem services and connectivity	Action D.3 and D.1	<p><i>ES provided within the project</i></p> <p><i>Data on species/habitats for which connectivity has improved thanks to the project actions</i></p> <p>Recreation ES in the two sites where walking paths have been completed around the springs is evidently increased, from 0 to hundreds of visitors/month.</p> <p>The sites involved are three. We can estimate in the spring, summer and autumn months an average of 150 people per day with peaks of 600 people per day on weekends.</p>
Natura 2000	Improving the functionality/ connectivity of N2000 with reference to IT 3220040 and	Actions/activities taking place inside or close to IT 3220040 and concerning	<p><i>VINCA</i></p> <p>Each project annexed includes the VINCA study. They evidenced that the impact of the interventions on the habitats of community interest are negligible and therefore not significant as there is no loss of surface or</p>

	habitat 3260	habitat 3260, including land purchase if applicable	<p>fragmentation, nor significant alterations or damage of its main ecological components. For project 1, the only included in the Natura2000 site, the study permitted to evidence mistakes in the official cartography of the habitats.</p> <p><i>Data on habitat 3260</i></p> <p>In the project areas, the renaturalization of the riverbed and the banks resulted in an extension of habitat 3260.</p> <p>As part of the verification of the presence of 3260 habitat surfaces even outside the IT3220040 site, no optimal conditions were found for which the N2000 site can be extended (at least for now). This condition could be determined by the type of hydraulic maintenance carried out by the Brenta Reclamation Consortium which would be limiting for the use of impacting machinery</p>
Water		Action D.1	<p><i>Water retention</i></p> <p><i>Diffuse source pollution</i></p> <p>The construction of small phytoremediation systems (project 3, 7, 8), the planting of small plains groves (project 1, 2, 8, 9), the planting of riparian hedges (project 1, 2, 3, 5, 8, 9, 10) has constituted the creation of natural filter systems with the capacity to retain the water that spread from the agricultural fields surrounding the canals.</p> <p>If we compare the environmental data collected before the project interventions (2017) and those collected in the last year of monitoring (2020), the Ecological Status, which takes into account all the Biological Quality Elements (EQB) investigated and the 'chemical-physical index LIMeco, is improved for one third of the investigated sites. For the remaining sites (67%) the Ecological Status does not change compared to that calculated for 2017; no site has a deteriorated ecological status.</p>
Rural development policy	Promoting the integration of BD.- friendly agro-measures among farmers	Action E.5	<p><i>Surveys</i></p> <p><i>Dialogue with Regione Veneto</i></p> <p>The partnership, and in particular VA, succeeded in prepare with the Veneto Region two calls of the Rural Development Plan to finance measures similar to the one financed by LIFE, open to reclamation consortia as part of measure 16.5.1 "Collective projects"</p>

			initiative: 4.4.2 "Introduction of green infrastructures" and 4.4.3 "Structures functional to the increase and enhancement of naturalistic biodiversity". It's expected that similar measure will be included also in next RDP 2021-2027. In addition, Veneto Region technicians showed interest to finance the spring conservation actions experimented during the project with the next RDP.
Climate (no KPI)	Climate regulation Adaptation	C actions	<i>Monitoring activities.</i> The project envisaged the natural and morphological requalification of 43 resurgence sources; of these 18 (42%) have been completely reopened to facilitate the emergence of water from the groundwater and increase the supply of the underlying canal. The project interventions allowed the recovery of the flow rate in 42% of cases, and the maintenance / improvement in the remaining 58%. The support of the flow rate in the hydrographic network of the springs helps to contain the negative effects of the heat bubbles that develop in densely populated areas and to provide a sort of mitigating adaptation of the current climatic trends characterized by a slow but progressive increase in ground temperature.

We confirm the support of the project to the policies already mentioned in previous reports:

- The project implemented actions coherent with the objective 2 of the 2020 European Strategy for Biodiversity, which asks to maintain and strengthen the green infrastructures, the ecosystems (in this project, the ecosystems linked to spring environments) and the services they supply (i.e. water production and purification, conservation of genetic pools, supply of recreational areas, improvement of the landscape, climate mitigation);
- The project carried out actions to improve the effectiveness of spring systems as infrastructure to achieve the objective of "Water" Directive (2000/60/EC) of preventing the deterioration of the quality and quantity of water bodies as a result of the reduction in nutrients quantity (particularly, nitrates) originated by farming;
- The project improved suitability and usability of the sites for didactic and recreational purposes, by local and foreign visitors. This aim is coherent with the objective of the COM(2010) 352 on "Promoting diversification of the supply of tourist services" and with the planned action "encourage the integration into tourism strategies of 'natural' heritage";
- The action is coherent also with the EU adaptation strategy to climate change (COM (2013) 216 final), applied to the status and the natural resilience of the spring habitats, and with the EU Regulation n.1305 / 2013 concerning rural

development (the project contributed to one of the objectives of the regulation which is to stimulate the supply of ecosystem services in rural areas).

#### **EU added value of the project and its actions (ref. Grant Agreement form B3)**

In form B3 we explained that the project completion would have represented a first step to promote the best practice gathered among the Veneto Plain.

As explained above, various replication actions have been activated and this result can be considered achieved. 5 reclamation consortia and 34 farms from different parts of Veneto Region (Verona area, Bacchiglione area, Eastern Veneto, Po estuary, Po-Adige area) implemented RDP measure 4.4.2 concerning bank restoration in Veneto plain: 19 km of new vegetated channel banks were realized. 2 reclamation consortia (Consorzio Bonifica Veneto Orientale and Consorzio di Bonifica Adige Po) and 6 farms also implemented actions aimed at protecting natural biodiversity through creation or improvement of wet areas and related ecosystem and services for local fauna. Further initiatives are expected to be supported by RDP 2021-2027.

In Brenta area, project best practices are being directly replicated by CB-BRENTA and by VA through Life Brenta 2030 project.

The “manual about correct management of springs and water courses” and linked training activities, together with the Resurgence Contract implementation phase, further contribute to promote the best practice gathered within the project among the Veneto Plain.

## **6.4 Analysis of benefits**

#### **Environmental benefits - Direct / quantitative environmental benefits:**

The project interventions led to the creation of small strips of plain woods (habitat 91F0) for an area of 4660 square meters and strips of hygrophilous forest (habitat 91E0 \*) for a total area of 3146 square meters. The recomposition of the undergrowth with the planting of riparian nemoral species (9370 seedlings) has consolidated and differentiated the structure of the arboreal bank component in numerous springs. The structural improvement effect was also achieved within the canals, involving habitat 3260, with the planting of aquatic hygrophilous species.

The presence of 19 fish species was verified, of which 5 of conservation interest (*Barbus plebejus*, *Cottus gobio*, *Sabanejewia larvata*, *Lethenteron zanandreae*, *Cobitis taenia*); the re-naturalization interventions (laying of boulders along the banks, construction of current deflectors) were positive for the bullhead and lamprey as well as for other benthic species. The improvement, in 50% of the sites, of the values of the ISECI fish index was verified (comparison 2017-2020).

The construction of the reproductive pond for amphibians (project 8) has led to evident effects for the *Rana latastei*, a species of conservation interest, of which eggs and adults were found in the verification samples carried out in 2019-2020.

The interventions of renaturalization of the riverbeds and redevelopment of the riparian ecotone have resulted in an improvement in the quality of water and ecosystems which was found in the improvement of 33% of the sites of application of the IBMR macrophytic index, in the improvement of 33% of application sites of the STAR ICMi macroinvertebrate index and in the improvement of 33% of the application sites of the LIMeco chemical index. The maintenance techniques of the resurgence canals, after the design interventions, were collected in the management manual to be disclosed among the managing bodies of similar territorial realities. The activities of naturalistic recomposition and maintenance of

the canals and buffer strips can fall within specific funding lines of the Rural Development Plan.

Activities for monitoring the quality of aquatic environments, eco-sustainable management of the morphology and vegetation of the springs with dissemination of good practices, the organization of educational and environmental education activities centered on the springs are specific actions that fall under the Resurgence Contract.

### **Qualitative environmental benefits**

In future years, a maintenance and improvement of the state of the redeveloped habitats is expected which will be determined by the natural evolution and stabilization of the new plants supported by the eco-compatible maintenance that will be done by the volunteers of the Committee of the Risorgive di Bressanvido and by CB-BRENTA. By improving the conditions of the physical environment following the design interventions (construction of plant buffer systems, morphological renaturalization of the river beds and reopening of the springs) there will also be positive effects on the faunal components of the aquatic ecosystem, especially for fish and amphibians.

Positive effects have already been detected by some biological indicators of the quality status of aquatic environments but will certainly improve following the stabilization of ecosystems that have been strongly transformed by the design interventions.

With the Resurgence Contract, the foundations were laid for an effective and lasting collaboration between 36 public administrations, territorial bodies and local stakeholders in the resurgence belt to undertake concrete actions in the area of knowledge (monitoring), in the area of reduction of environmental pressures (management and control of water in the canals), in the area of environmental improvement (eco-sustainable management and nature conservation), in the area of culture (museum and environmental teaching activities). The commitment that the local Resurgence Committee of Bressanvido has contracted with the municipal administration for the maintenance of the LIFE intervention areas should not be underestimated in order to ensure the full success of the interventions with the function of active territorial supervision.

The project, of a demonstrative nature with experimental connotations, has not eliminated the threats but has helped to propose innovative approaches to contain diffuse pollution, to provide a manual for the management of aquatic resurgence environments, to raise awareness in the agricultural world on agricultural techniques environmentally friendly with the aim of improving territorial planning and eliminating sources of pressure and threats, something that could happen slowly in future years. The direct involvement of the population by means of the road infrastructures that flank the LIFE intervention areas, sensitize people to the beauty and richness in biodiversity of the territory, favoring greater environmental awareness and greater respect for nature.

In future years, the maintenance of the project areas will be fundamental, which will be developed by the BRESS and other project partners with a specific annual funding (an estimation of € 33.500 in the next five year) which will be accompanied by the operational actions contained in the Program Agreement by the Local bodies and stakeholders who will be able to find specific sources of financing in the local (Municipalities and Provinces), Regional and Community areas.

### **Economic benefits**

The creation of new business or new jobs opportunities was not a direct goal of the project. Nevertheless, indirect benefits for recreational sector in Bressanvido (environmental guides, restaurants, bike tourism, ...) are expected, thanks to the growing visibility of the

territory and of visiting paths realized within the project.

As told, the trials are used both by local residents and by visitors, for sport and recreational activities. Visibility was achieved also through sector blogs (ex. <https://venetoforkids.it/le-risorgive-di-bressanvido-vicenza/>) and through the yearly public events organized in Bressanvido (Festa della Transumanza: <http://www.transumanza.it/>, Magnalunga, and Festival dell'agricoltura: <https://www.youtube.com/watch?v=UHVwEyoY6Ug> <http://www.festivalagricoltura.it/>).

Moreover, they have been included in longer bike-tourism routes, and are mapped in sector specialized sites:

- <https://www.alltrails.com/explore/map/anello-dei-fiumi-kml-9b1c93a>
- [https://it.wikiloc.com/percorsi-mountain-bike/da-poianella-a-bressanvido-tra-le-risorgive-33195541?fbclid=IwAR0VlzACQkMO\\_sgrO4n90NYbGWLNaVjcDbM1a\\_slat4jnRBsOZnfAaLFOfM](https://it.wikiloc.com/percorsi-mountain-bike/da-poianella-a-bressanvido-tra-le-risorgive-33195541?fbclid=IwAR0VlzACQkMO_sgrO4n90NYbGWLNaVjcDbM1a_slat4jnRBsOZnfAaLFOfM)

### **Social benefits**

The newly created paths along the resurgence systems are significantly used by both residents and visitors, with an average of 150 people per day in Spring, Summer and Autumn, and peaks of 600 people in sunny the weekends. We can therefore assume that they help to promote healthy lifestyles by providing opportunities for physical and sporting activities in the open air (moreover, in a context that allowed distancing and compliance with health rules even in a particular year such as 2020). In addition, the resurgences are particularly suitable and appreciated by families with children, who are one of the main targets for combating the risks of childhood obesity linked to poor physical activity.

A further activity aimed at verifying and increasing the usability of the paths by people with different types of disabilities, and at promoting inclusive approaches in the promotion of the territory and in the creation of business opportunities, was included in the project for the continuation and replication of the actions of the LIFE Risorgive presented in December 2020 by BESS, VA and some neighboring municipalities to Cariverona Foundation.

### **Replicability, transferability, cooperation**

Information and awareness rising activities carried out within the project had a positive impact not only on Bressanvido, but also among nearby territories. This is confirmed by the high number of private and public institutions signing the Resurgence Contract, but also by the many projects and/or proposals that are being developed in the area, focused on environment protection, valorization of green infrastructures, sustainable land usage, etc.

To this end, several municipalities and organisations have contacted BRESS and other project partners to learn more about the project and replication possibilities, among which:

- Sandrigo Municipality is interested in realizing a phyto-depuration area and connected awareness and education activities. This project would benefit from the experience and knowledge acquired during the LIFE project on the construction of small phytoremediation systems along resurgence water courses (Act. C1, projects 3, 7, 8), and on our experience on awareness rising and communication activities.
- Quinto Vicentino Municipality contacted BRESS to verify possibilities for the protection and valorization of springs and protected areas in its territory. In

addition, the municipalities of Quinto Vicentino, Bolzano Vicentino and Bressanvido are cooperating to integrate and link the cycling paths of their territories (among which those realized within the LIFE project) creating a larger network, thus increasing both visibility and cyclo-touristic relevance of these trials, with expected positive impacts and business opportunities for the area.

- Dueville and Villaverla joined BRESS and VA in preparing a proposal for a new project for protection and valorization of resurgences, that would allow to replicate in their territories some restoration approaches of LIFE RISORGIVE and to jointly ensure communication and education activities, long-term maintenance of spring habitats, citizens involvement, socio-economic sustainability.
- In April 2020 a group of Piedmontese municipalities, through two experts from ARPA Piemonte and the Province of Vercelli previously involved in the WETNET project (networking partner of LIFE Risorgive), contacted BRESS and AQP to collect information on implemented activities, and to verify the replicability in the territory of the Piedmont rice plain, through another LIFE project or other type of funds.

In addition to this, VA disseminated the techniques and operating procedures for the correct management of the springs to the technicians of the land reclamation consortia, the regional structures that oversee the agro environmental measures of the RDP and farmers. As told, there is a strong interest in the operational guidelines summarized in the manual, because no guidance existed up to now on this issue, and Veneto Region showed interest to finance the spring conservation actions with the next RDP 2021-2027.

Finally, the Resurgence Contract, already signed by 36 organizations (including public and private authorities, non-profit organizations, for-profit enterprises, education institutions, etc.), explicitly provides for the implementation of replication and continuation actions not only in Bressanvido, but in the entire area of the Vicenza and Padua mid-plain. These activities shall be implemented using own funds of involved organizations, and/or external funds to be provided by third parts (i.e. RDP 2021-2027 calls, private donors like Cariverona Foundation, Regional funds or calls, etc.). 12 type of measures are included in the Resurgence contract, some of which are direct continuation/replication of LIFE actions, other will contribute to increase the environmental impact and long-term sustainability of implemented activities.

A summary is provided in the following table.

Action	Coherence with general objectives (1)	Type of Action (2)	Interested subjects	Period	Estimated budget (3)
A.1 Monitoring of the ecological quality and the naturalistic conditions of the resurgence environments	<ul style="list-style-type: none"> <li>•Risks mitigation</li> <li>•Improvement</li> </ul>	<ul style="list-style-type: none"> <li>•Monitoring &amp; investigations</li> </ul>	Aquaprogram, ARPAV, Istituto Agrario "A. Parolini" di Bassano del Grappa (VI), Comitato Risorgive, PABAT, Ass.ne La Sorgente	2021-2025	Studies & Services: 40 to 209 k€
A.2 Implementation of data collection and management system on springs	<ul style="list-style-type: none"> <li>•Risks mitigation</li> <li>•Improvement</li> </ul>	<ul style="list-style-type: none"> <li>•Monitoring &amp; investigations</li> <li>•Communication &amp; training</li> </ul>	Aquaprogram, ARPAV, ViAcqua, Acegas ApsAmg	2021-2025	Studies & Services: 40 to 209 k€
B.1 Promoting the natural or	<ul style="list-style-type: none"> <li>•Improvement</li> </ul>	<ul style="list-style-type: none"> <li>•Studies &amp; projects</li> </ul>	Consorzio di bonifica Brenta, Consorzio di	2021-2025	Studies & Services:

controlled recharge of the aquifers	<ul style="list-style-type: none"> <li>•Sustainable Use</li> <li>•Valorisation</li> </ul>	<ul style="list-style-type: none"> <li>•Governance &amp; other activities</li> </ul>	bonifica Alta Pianura Veneta, Veneto Agricoltura, Acegas ApsAmg		40 to 209 k€ Investments: 209 k€ to 5,225 M€
B.2 Rationalizing the use of water by saving water and reducing waste	<ul style="list-style-type: none"> <li>•Sustainable Use</li> </ul>	<ul style="list-style-type: none"> <li>•Communication &amp; training</li> </ul>	ViAcqua, Acegas ApsAmg, Municipalities	2021-2025	Studies & Services: Up to 40 k€
B.3 Counteracting the abandonment of waste in springs (frequent control and periodic cleaning)	<ul style="list-style-type: none"> <li>•Improvement</li> </ul>	<ul style="list-style-type: none"> <li>•Communication &amp; training</li> <li>•Governance &amp; other activities</li> </ul>	Bressanvido, Other Municipalities, Comitato Risorgive, PABAT, Ass.ne La Sorgente, Ass.ne Equistiamo	2021-2025	Studies & Services: Up to 40 k€
B.4 Strengthening control over wildlife harvesting activities (hunting and fishing)	<ul style="list-style-type: none"> <li>•Sustainable Use</li> </ul>	<ul style="list-style-type: none"> <li>•Governance &amp; other activities</li> </ul>	PABAT, Ass.ne La Sorgente, Ass.ne Bacino Zona B	2021-2023	Studies & Services: Up to 40 k€
B.5 Promoting resurgences-friendly agriculture (stable lawns, buffer strips, etc.)	<ul style="list-style-type: none"> <li>•Improvement</li> <li>•Sustainable Use</li> </ul>	<ul style="list-style-type: none"> <li>•Communication &amp; training</li> <li>•Governance &amp; other activities</li> </ul>	Veneto Agricoltura, Ordine Agronomi e Dottori Forestali di Vicenza, Federazione Regionale Ordini Agronomi e Dottori Forestali del Veneto, Associazioni di categoria (Coldiretti Padova, Coldiretti Vicenza), ARPA	2021-2025	Studies & Services: 40 to 209 k€ Investments: 209 k€ to 5,225 M€
C.1 Managing the morphology and vegetation of resurgences in an eco-sustainable way with the dissemination of good practices	<ul style="list-style-type: none"> <li>•Improvement</li> <li>•Sustainable Use</li> </ul>	<ul style="list-style-type: none"> <li>•Communication &amp; training</li> <li>•Governance &amp; other activities</li> </ul>	Veneto Agricoltura, Consorzio di bonifica Brenta, Consorzio di bonifica Alta pianura Veneta, Comitato Risorgive, PABAT, Ass.ne La Sorgente, Ass.ne Bacino Zona B, Ordine Agronomi e Dottori Forestali di Vicenza, Federazione Regionale degli Ordini Agronomi e Dottori Forestali del Veneto, Ass.ne Biologi del Veneto, Ordine Architetti di Vicenza, Associazioni di categoria (Coldiretti Vicenza e Coldiretti Padova).	2021-2023	Studies & Services: 40 to 209 k€ Investments: 209 k€ to 5,225 M€
C.2 Conservation projects for the habitats and flora and fauna of the resurgences	<ul style="list-style-type: none"> <li>•Improvement</li> <li>•Sustainable Use</li> </ul>	<ul style="list-style-type: none"> <li>•Studies &amp; projects</li> <li>•Governance &amp; other activities</li> </ul>	Veneto Agricoltura, Consorzio di bonifica Brenta, Comuni firmatari (Caldogno, Bolzano V.no), , Aquaprogram srl, Comitato Risorgive, Ordine degli Agronomi	2021-2025	Studies & Services: up to 40 k€ Investments: 209 k€ to 5,225 M€

			e Dottori Forestali di Vicenza, Federazione Regionale degli Agronomi e Dottori Forestali del Veneto.		
D.1 Preserving the historical memory of the resurgences in the Museum of San Pietro in Gu (PD)	<ul style="list-style-type: none"> <li>•Sustainable Use</li> <li>•Valorisation</li> </ul>	<ul style="list-style-type: none"> <li>•Communication &amp; training</li> </ul>	Comune di S. Pietro in Gu, other Municipalities, Ordine Architetti, Urbanisti, Paesaggisti e Conservatori di Vicenza, Veneto Agricoltura, Consorzio di bonifica Brenta, Ordine Agronomi e Dottori Forestali di Vicenza, Federazione Regionale degli Ordini Agronomi e Dottori Forestali del Veneto, Ass.ne Biologi del Veneto, Associazioni di categoria agricole (Coldiretti Padova e Coldiretti Vicenza), Comitato Risorgive.	2021-2025	Studies & Services: up to 40 k€ Investments: 40 to 209 k€
D.2 Didactic and environmental education on resurgences	<ul style="list-style-type: none"> <li>•Sustainable Use</li> <li>•Valorisation</li> </ul>	<ul style="list-style-type: none"> <li>•Communication &amp; training</li> </ul>	Comune di S. Pietro in Gu, other Municipalities, Ordine Architetti, Urbanisti, Paesaggisti e Cconservatori di Vicenza, Veneto Agricoltura, Consorzio di bonifica Brenta, Ordine Agronomi e Dottori Forestali di Vicenza, Federazione Regionale degli Ordini Agronomi e Dottori Forestali del Veneto, Ass.ne Biologi del Veneto, Ass.ne Equistiamo, ViAcqua, AcegasApsAmg, Comitato Risorgive, Aquaprogram srl	2021-2025	Studies & Services: 40 to 209 k€
D.3 Making the springs usable with cycle and pedestrian paths, facilitation of sports and outdoor activities	<ul style="list-style-type: none"> <li>•Sustainable Use</li> <li>•Valorisation</li> </ul>	<ul style="list-style-type: none"> <li>•Communication &amp; training</li> <li>•Governance &amp; other activities</li> </ul>	Bressanvido, Other Municipalities, CONI – FIO (Federazione Italiana Orienteering), Ordine Architetti, di Vicenza, Ordine Agronomi e Dottori Forestali di Vicenza, Federazione Regionale degli Ordini Agronomi e Dottori Forestali del Veneto, Ass.ne Biologi del Veneto	2021-2025	Studies & Services: 40 to 209 k€ Investments: 209 k€ to 5,225 M€

*(1) General objectives of the Resurgence Contract. Considered options and abbreviations:*

- *Risks mitigation: mitigation and adaptation to hydrogeological risks*
- *Improvement: environmental improvement*
- *Sustainable Use: sustainable use of environmental resources*
- *Valorisation: touristic and recreational valorisation of the environment*

(2) *Types of Action. Considered options: Structural action; Non-structural action - studies & projects; Non-structural action - monitoring & investigations; Non-structural action - communication & training; Non-structural action - governance & other activities*

(3) *Estimated budget. Considered options: < 40.000 €; ≥ 40.000 € and ≤ 209.000 €; ≥ 209.000 € and ≤ 5.225.000 €; ≥ 5.225.000 €*

## **Best Practice lessons, and Innovation and demonstration value of the project**

The most relevant and interesting best practices implemented within the project was those related to banks management and reprofiling, with solutions that proved to be able to concretely reconcile hydraulic functionality and habitat conservation. These include:

- *Construction of vegetated sub-banks* to protect the foot of the bank: the re-profiling of the banks with lesser slopes and the planting of suitable shrub species has proven to be a particularly effective solution for the reconstruction of a riparian habitat capable to ensure phytodepuration, support for animal and vegetable biodiversity, protection from erosion.
- *Morphological renaturation interventions.* In the stretches of the canal subject to strong pressure from intensive agriculture, which have undergone a decrease in the section, a progressive straightening of their longitudinal development and an elevation of the banks, it is possible to identify renaturalization interventions that allow to increase the ecosystem value of the course of water. This can be done by restoring sinuous paths, following where possible the old river beds and the original morphology of the land. In this case, the recalibrated banks must have a gentle slope (around 30%) in order to favor the establishment of a well-differentiated hygrophilous riparian ecotone. Alternatively, it is possible to intervene with the creation of lateral diversions with variable slopes. These areas constitute important microhabitats useful as reproductive sites for ichthyofauna and amphibious fauna as well as sites for the rooting of hygrophilous vegetation that supports trophic chains of aquatic invertebrates.
- *Environmental re-naturalization for fauna.* The simplification of ecosystems leads to the colonization of a few species that will be present with a large number of individuals. On the other hand, all actions aimed at increasing the presence of microhabitats have the direct consequence of an increase in the number of species that will occupy different niches in the water body. For this purpose it is possible to create diversions of the water flow with plant material found on site, or it is possible to introduce deflectors which help to vary the speed of the flow with consequent natural sedimentation phenomena. As part of the project, it was also shown how it is possible to create shelters under and near the banks, useful both as protection for the fish fauna and as possible anti-erosion and protection elements of the bank itself.

Coherently with the original Application Form, the main value-added of LIFE Risorgive project was the implementation and testing of these approaches in small water courses, as

resurgence systems are.

The monitoring activity confirmed the effectiveness of these approaches also in these conditions, while the demonstrative and practical nature of the intervention resulted to be of particular importance to obtain the attention of the reclamation consortia, which are the only subjects formally appointed and authorized to intervene along the waterways.

As already told, 5 reclamation consortia already started replicating these approaches in other Veneto areas within the RDP measure 4.4.2 interventions. All other reclamation consortia from Veneto region have been or are being informed of these practices and their effectiveness through project dissemination activities, through the Resource Contract preparation process (ANBI Veneto - the Association of Reclamation Consortia from Veneto region, is one of signing institutions) and through the Manual developed with action E5.

Similarly, project feasibility and achievements are visible to other municipalities, landowners and all interested stakeholders.

### **Policy implications**

As already told, given the success of measures 4.4.2 and 4.4.3 within last RDP calls, it is expected that similar measures green infrastructures introduction (along minor water courses) and for the enhancement of naturalistic biodiversity will be included also in next RDP 2021-2027. In addition, Veneto Region showed interest to include in next RDP also measures/instruments specifically aimed at financing spring conservation actions in line with LIFE Risorgive experience.

VA is in contact with Veneto Region technicians in charge for the definition of these parts of the Rural Development Plan, and will continue cooperating with them with to promote the scaling-up of project experiences at regional level.

As for other aspects, during project implementation the new regulation on projects approval for areas subordinated to landscape restrictions entered into force on July 2016 caused some difficulties, mainly for the need to wait for some clarifications on actual procedures. Generally speaking, the entry into force of new regulations, especially on complex issues as it was for Law Decree 126/2016, often creates a period of uncertainty due to the lack of experience, established practices and clarifications or appropriate operational tools.

Similarly, the fragmentation of land ownership, the fact cadastral data were often outdated or not correct, the complexity of the procedures and costs associated with land acquisition practices, is another difficulty that is common to many land protection projects. Indeed, fragmentation of properties is an obstacle to the implementation of coordinated protection actions, and the interest of private owners can hinder or be in contrast with wider environmental interests. From this point of view, as in the case of the LIFE project, the acquisition of land or of use rights by a public entity could be the best solution to ensure coordinated management for environmental purposes. However, it would be necessary to find ways or forms to make this less expensive, both in terms of time and money, for public bodies.

## 7 Project Specific Indicators

*In the case of the Final report, please enter the final actual values of the KPIs for your project in the online KPI database (<https://webgate.ec.europa.eu/eproposalWeb/kpi>) making sure that values reported are justified and consistent with the environmental, economic and social benefits reported in the preceding section. In this section please provide an analytical comparison with the targets at the beginning of the project.*

Project KPI, as reported in the online database, are summarized in the following table, together with some explanatory notes.

Indicator	Begin Value	End Value	5 years after end	Comments / Explanation
1.5. Project area/length				
Conservation or improvement of the status of an area or segment	0 mq	45240 mq	45240 mq	Area interested by the recovery intervention on the 26 resurgence systems
1.6. Humans (to be) influenced by the project				
Persons with improved capacity or knowledge due to project actions	0	180	400	Farmers, land owners, technicians of local authorities and Consorzio di bonifica, residents/volunteers, and other sector operators whose competencies for correct
Persons whose lives were directly, positively impacted by MAIN envir. actions of project	0	5000	5500	Number of residents of Bressanvido territory, residents of nearby territories and persons working in the area, who directly benefit from the improved ecosystem services
Persons who may have been influenced via dissemination or awareness raising project-actions	0	15000	40000	Persons reached through communication, dissemination and awareness rising activities (annual "Festival dell'Agricoltura", website, presence in local events, etc.), during and after project period.
7.1. Ecosystem assessment				
Ecosystem Assessment	856 ha	856 ha	856 ha	The project affects 43 springs in microareas within the site, not easily valuables in terms of surface.
Ecosystem Trend	Some deterioration	Improving	Improving	
Ecosystem Condition	Moderate	Good/ favourable	Very good/ high	
7.2. Ecosystem services assessment				
Ecosystem Service Trend	Some deterioration	Improving	Improving*	*Improving in comparison to initial values. Mainly stable in comparison to the end of the project
Ecosystem Service Condition	Moderate	Good/ favourable	Good/ favourable	
7.3. Natural and semi-natural habitats				
3260-Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation				
Annex I Habitats Directive	26	26	26	
Habitat Trend	Stable	Improving	Improving	

Habitat Condition	Unfavourable - inadequate	Favourable	Favourable	
91F0-Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior or Fraxinus angustifolia, along the great rivers (Ulmenion minoris)				
Annex I Habitats Directive	0	4660 mq	4660 mq	*Improving in comparison to initial values. Mainly stable in comparison to the end of the project
Habitat Trend	Unknown	Improving	Improving*	
Habitat Condition	Unknown	Favourable	Favourable	
91E0*-Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)				
Annex I Habitats Directive	0	3146 mq	3146 mq	*Improving in comparison to initial values. Mainly stable in comparison to the end of the project
Habitat Trend	Unknown	Improving	Improving*	
Habitat Condition	Unknown	Favourable	Favourable	
10.2. Involvement of non-governmental organisations (NGOs) and other stakeholders in project activities				
Private for profit	2	4	7	Latterie Vicentine + Vi.Acque involved from the very beginning and regularly updated on project progresses and results. Aegua Engineering involved in Resurgence Contract process.Acegas, SWF and ETIFOR involved after project end for Contract signing ando other follow-up activities. Selle Royal involved in the very final part, for after-life valorization of cycling paths.
Public body/bodies	0	16	18	Regione Veneto + 5 Reclamation Consortia (Consorzio di Bonifica Delta del Po, Consorzio Bonifica Bacchiglione, Consorzio Bonifica Veneto Orientale, Consorzio Bonifica Veronese, Consorzio di Bonifica Adige Po) + Comune di Sandrigo e Comune di Pozzoleone where directly involved in dissemination activities aimed at promoting good restoration practices and at creating a link with PSR instruments. ANBI Veneto, Comuni di Caldogeno, San Giordio in Bosco, Carmignano di Brenta, San Pietro di Gu, Costabissara, Dueville, Fontaniva, Bolzano Vic.no directly participated in the preparatory process and signed the Resurgence Contract. Comune di Villaverla and University of Padua involved after project end.
NGO	2	11	16	Resurgences Committee (civil society association to protect and enhance the resurgences) and

				PABAT Association (fishermen association) were both very active in all project activities throughout project life. SIGEA, Equistiamo APS, Bacino B, La sorgente, Legambiente, FISO, ABV, FODAF Veneto, APV: other associations which participate to project activities and subscribed the Resurgence Contract. LIPU, Cooperativa Margherita ONLUS, Pro Loco Bressanvido, UNPLI prov. Vicenza and Surgery for Children involved for post-life activities after project end.
Other civil society organisations	1	6	7	Organizations directly involved in preparatory process and signing the Resurgence Contract. Some of them also directly contribute to project awareness rising and dissemination activities.
<b>11.1. Website (mandatory)</b>				
No. of unique visits	0	10000	15000	
<b>11.2. Other tools for reaching/raising awareness of the general public</b>				
Publications/ reports	0	4	4	<ul style="list-style-type: none"> <li>- Leyman's report</li> <li>- Resurgences Contract</li> <li>- manual for the correct management of springs and water courses</li> <li>- Final report on C1 actions (available on the website)</li> </ul>
Other media (video/broadcast)	0	5	6	<ul style="list-style-type: none"> <li>- VA: Bressanvido resurgences, Life project</li> <li>- The Resurgences of Bressanvido</li> <li>- ANBI VENETO: What are the water resurgences?</li> <li>- A charming nature trail through the resurgences of Poianella and Bressanvido</li> <li>- Habitat restoration achieved through the reproduction of local plants</li> </ul>
Print media	0	2000	2000	Maps of visiting trials
Events/exhibitions	0	6	11	<p>3 public training events (2017, 2018, 2019) carried out in the context of Az. E5 and aimed at operators in the sector and farmers</p> <p>3 specific public events on the Life project carried out during the three editions of the Agriculture Festival 2018, 2019 and 2020 and aimed at a more general audience</p> <p>NB: to these are added various other</p>

				public moments of presentation of project activities, both in the context of the various editions of the Festival, as well as Networking activities and as public moments in other periods of the year, including the technical meetings of act. E5 and all participatory meetings for the drafting of the Resurgence Contract.
Displayed information (poster, info. boards)	0	12	12	10 Type A Notice Boards 2 Multimedia Totems
<b>12.1. Networking (mandatory)</b>				
Students (in higher education)	0	59	160	The intention is to replicate the school-work alternation project and the involvement of schools in general. Also from this point of view, the Parolini Agricultural Institute signed the Risorgiva contract
Pupils (of school age)	0	85	300	Normally between 2 and 5 classes of children, in particular from the schools of Bressanvido and surrounding areas, carry out educational outings or workshops related to resurgence habitats. Even considering the current restrictions, one can easily estimate over 200 children in 5 years
<b>12.2. Professional training or education</b>				
Members of interest groups	0	88	150	48 interested farms, land reclamation authority, regional offices, local associations, involved in the transfer of project skills and resurgence maintenance procedures and involved on project issues (Action E5 and communication activities ) + 40 municipalities, local authorities, public bodies, associations directly involved in Resurgence Contract preparation process (Action E7). The number of involved subjects will further increase after project end, through after-life activities
<b>13. Jobs</b>				
Jobs	0	2	0	2 additional personnel have been involved by partner VA for project implementation. Other job positions could have been created in external service providers involved in project implementation, but we don't have visibility on these numbers. Long-term job creation in partners' bodies

				or in stakeholders directly involved in project implementation was not a direct goal of the project. Nevertheless, indirect benefits for recreational sector in Bressanvido (environmental guides, restaurants, bike tourism, ...) are expected, but it's not possible to quantify
<b>14. Contribution to Economic growth</b>				
Running cost/operating costs during the project and expected in case of continuation/replication/transfer after the project period	0	1.208.233 €	1.800.000 €	In December 2020, an application for funding was submitted to Cariverona Foundation for the implementation of follow-up activities, replication and enhancement of what has been done with the Life Risorgive project with a budget of € 534,000. Also based on the commitments made by the various signatories of the Resurgence Contract, over a period of 5 years and also considering the neighboring municipalities, an investment of further € 600,000 over project total cost seems adequate.
Future funding - Beneficiaries' own contribution	-	-	33.500 €	Amount that will be allocated, on a yearly basis of 2.000 €, from the Municipality of Bressanvido, plus an estimation of other 2.500 €/year of own resources for promotion, dissemination, and follow-up activities. AQP will use own resources, estimated in 16.500 euro in 5 years, to ensure periodic inspections to the humid areas, monitoring activities and promotion of the project results in meeting/conferences. VA will dedicate at least 500 €/year to the production of plants for the restoration of resurgence habitats.
Future funding - Grants, subsidies	-	-	427.600 €	Grants requested to Cariverona Foundation "HABITAT" Call for proposals to finance activities aimed at protect and valorize not only Bressanvido' resurgences but also those in the neighboring municipalities. Activities foreseen include structural interventions, promotion and communication.
Future funding - Project finance	-	-	106.900 €	Own funding of Bressanvido, VA and other participants in case the project submitted to "HABITAT" call is approved and implemented
<b>14. Contribution to Economic growth</b>				

Transfer	-	-	-	Transfer of project results and outcomes to neighboring territories is ensured mainly through the Contratto di Risorgiva, a voluntary agreement for the protection and maintenance of resurgences signed by 36 public and private entities from Veneto plain (Vicenza and Padua provinces)
Replication	-	-	-	Replication activities in other similar environment mainly in Veneto plain has been promoted (and achieved) and will be pursued in future, mainly through the activities of partners CB-BRENTA and VA, also mobilizing funds from RDP 2014-2020 and RDP 2021-2027
Continuation	-	-	-	Activities in Bressanvido area will be continued, mainly in the framework of Contratto di Risorgiva. A specific proposal for additional activities has been submitted in December 2020 in the framework of the Foundation Cariverona HABITAT Call for proposals.

Comparison between the targets set at the beginning of the project, and results actually achieved.

Note: It has to be underlined that the structure of KPI when submitting the proposal was different from those used afterwards.

			Target value set at the beginning of the project	Actual value achieved at the end of the project	Comment / Explanation
Habitats Directive habitats (1)	3260	ha  Conservation status  Trend	2,30  UI  Improving	2.30  FA  Improving	It was not possible to measure the surface of the aquatic habitat improved with the project interventions as these were concentrated in the riparian areas and only partially in the submerged surfaces, typical of the 3260 habitat. It is only possible to estimate an increase of 15% of the surface of the habitat that has undergone an improvement
Habitats and/or Birds Directives species (2)	Cottus gobio, Lethenteron zanandreae, Cobitis taenia, Rana latastei, Triturus cristatus, Anas	No. of specimen	7,00	7,00	In field inspections and biological sampling, Anas querquedula and Triturus cristatus have never been observed. On the other hand, the presence of the species of community interest Barbus plebejus and Sabanejewia larvata was observed

	<i>querquedula</i> , <i>Alcedo atthis</i> <i>Cottus gobio</i> , <i>Lethenteron zanandreae</i> , <i>Cobitis taenia</i> , <i>Rana latastei</i> , <i>Triturus cristatus</i> , <i>Anas querquedula</i> , <i>Alcedo atthis</i> <i>Barbus plebejus</i> <i>Sabanejevia larvata</i>	Conservation status Conservation status Conservation status Conservation status Conservation status Conservation status Conservation status Conservation status Conservation status	UA UA UA UA UA UA UA - -	FA FA UA FA UN UN FA UA UA	    Not found in inspections Not found in inspections  Found, additional to original targets Found, additional to original targets
Natural or semi-natural ecosystems targeted (3)	<b>Rivers and lakes</b>	ha ecosystem status Trend	5,75 UI S	5,75 UI S	
Natural biodiversity: endangered non-domestic autochthonous species and varieties other than Habitats and Birds Directives species (4)	<i>Orsinigobius punctatissimus</i> , <i>Bufo bufo</i> <i>Orsinigobius punctatissimus</i> , <i>Bufo bufo</i> <i>Orsinigobius punctatissimus</i> , <i>Bufo bufo</i> <i>Gasterosteus aculeatus</i> <i>Esox cisalpinus</i> <i>Gasterosteus aculeatus</i> <i>Esox cisalpinus</i>	No. of specimen Conservation status Conservation status Trend Trend Conservation status Conservation status Trend Trend	2,00 UB UI D S - - - -	4,00 UB UA D S UI UI I D	Besides <i>Orsinigobius punctatissimus</i> , <i>Bufo bufo</i> also <i>Gasterosteus aculeatus</i> and <i>Esox cisalpinus</i> are in pain  Found, additional to original targets Found, additional to original targets Found, additional to original targets Found, additional to original targets

**Legend:**

**(1) Habitats Directive habitats:**

# Insert in the 'Values' fields the conservation status per habitat type: favourable (FA); unfavourable - inadequate (UI); unfavourable - bad (UB); unknown (UN)

# Insert in the 'Values' fields the trend per habitat type: improving; stable; declining

# Insert in the 'Impact on project level' fields the trend difference: plus; minus

**(2) Habitats and/or Birds Directives species:**

# Indicate in the 'Descriptors' field of the corresponding row the Latin name of each targeted species

(see Annexes to the Habitats and Birds Directives)

# For each additional species insert three rows (one for the species, one for the conservation status and one for the trend)

# Insert in the 'Values' fields the status of the species targeted: favourable (FA); unfavourable - inadequate (UA); unfavourable - bad (UB); unknown (UN)

(3) Natural or semi-natural ecosystems targeted:

# Insert in the 'Values' field the status of the ecosystem using the same terminology as for protected habitats: favourable; unfavourable - inadequate; unfavourable - bad; unknown

# Insert in the 'Values' field the trend per ecosystem using the same terminology as for protected habitats: improving; stable; declining

(4) Natural biodiversity: endangered non-domestic autochthonous species and varieties other than Habitats and Birds Directives species:

# Insert in the 'Values' field the number of specimen.

# Insert in the 'Values' fields the status of the species targeted: favourable (FA); unfavourable - inadequate (UI); unfavourable - bad (UB); unknown (UN)

# Insert in the 'Values' fields the trend per species: improving (I); stable (S); declining (D)

During project course, the extended set of indicators was considered and monitored. Final data have been updated in the KPI Webtool. However, a technical problem in the definition/correction of the biogeographical region (point C.1.1) and of the Ecosystem Services (point C.1.4) prevents us from finally submitting the values through the tool. The technical helpdesk has been informed and is working to solve the problem.

## 8 Comments on the financial report

### 8.1 Costs incurred (summary by cost category and relevant comments)

Table 8.1a

Budget breakdown categories	Budgeted costs In €	Costs incurred from the start date to 30/09/2020 in €	% of Budget
PERSONNEL	406.853	353.799,36	86,96 %
TRAVEL	25.100	5.766,33	22,97 %
EXTERNAL ASSISTANCE	395.700	420.919,23	106,37 %
Durable goods - INFRASTRUCTURE	45.000	43.395,40	96,43 %
Durable goods - EQUIPMENT	-	1.284,19	
Durable goods - PROTOTYPES	-		
LAND PURCHASE/LEASE/ONE-OFF COMPENSATION	58.951	84.854,84	143,94 %
CONSUMABLES	151.075	191.349,36	126,66 %
OTHER direct costs	6.500	8.454,33	130,07 %
OVERHEADS	72.114	68.710,10	95,28 %
TOTAL	<b>1.161.293</b>	<b>1.178.533,14</b>	<b>101,48 %</b>

### 8.2 Accounting system

In order to ensure appropriate management of financial resources and efficient reporting of expenses incurred, the necessary procedures for financial management and reporting of all financial flows of the project have been carried out, in accordance with all current provisions and regulatory and administrative practices that apply to private entities such as AQP, and public as BRESS, CB-BRENTA, VA. At the headquarters office BRESS created the dossiers dedicated to the accounting and administrative documentation related to the project.

The financial resources are managed through the administrative and accounting procedures already in place within the same bodies, and therefore subject to what is provided for by Italian law. With regards to the economic resources destined to cover the costs of the personnel of the body employed in the project activities, these are managed directly through the procedures in force adopted by the office of the staff of the same body. The partnership agreements signed by the parties envisage the commitment by the partners to provide BRESS, as Coordinating Beneficiary, with documents proving the progress of the expenses, each for their own responsibility.

Project accounting systems, of an analytical type for the clear identification of cost centers, have been implemented according to national rules and common provisions.

The aforementioned systems allow to clearly outline the costs dedicated to the project and each transaction is subject to verification that controls the flow of funds, the regularity of payments of social security contributions, the certification of suppliers. The Unique Project Code (CUP) set up by BRESS is: C27B15004500001. Proof of expenses are sent each quarter by each of the beneficiaries to the coordinator who checks the reported data comparing

them with the sums included in the project budget approved by the Commission.

**Q01: Is there a separate account for project cost management?**

No, because Italian Municipalities (and all public entities in general) are entitled to operate on one single account by law. No interest accrues on the sums of the aforementioned account. An analytical cost system is in use, all the expenses incurred show the acronym of the project and the CUP number.

**Q02: Is the project mentioned in the invoices?**

The project code is always reported in the invoices, as well as the corresponding action. In particular, where the supplier should be unable to indicate the acronym of the project, the stamp / manual reference to the project is applied. At central level, project staff regularly check the invoices and the presence of the project code.

**Q03: Has a single person been identified to approve the costs incurred for the project?**

Yes. See annexed file "Cost centers"

**Q04: Are timesheets used for recording the hours dedicated to the project?**

The hours dedicated to the project are shown on the timesheet (model provided by the Commission) as the units of measurement indicated are the hours, the Timesheets are compiled daily and delivered monthly.

**Q05: How are timesheets signed?**

The collaborator signs the timesheet at the end of the month and the supervisor, the figure who attests the performance inside each beneficiary, usually counter-count within 5 days. In case the compiler is also the supervisor his timesheet is countersigned by the Administrative Manager (the mayor in case of BRESS)

**Q06: How are travel reimbursements calculated: tickets, fuel, etc.?**

Each beneficiary uses its internal regulation. In case of absence the beneficiary applies the LIFE program general rules.

Reimbursement based on list of the expenses sustained is envisaged for travel costs. The use of the private vehicle is allowed in cases of absence / non-profitability of the use of other means, with the repayment of kilometers (the rate calculation per Km is calculated on the basis of existing internal regulations). The aforementioned tariff is inclusive of any and all costs related to the use of the vehicle, excluding motorway tolls.

For the permanent staff, a mission statement relating to the project is presented to the internal supervisor, with detailed indication of the expenses (eg motorway tolls, train tickets and / or public transport, receipts / fiscal receipts for meals).

Each employee must fill in a specific table for the mission or transfer treatment where details are given both the dates, the locations and the reasons for the mission; the model must be countersigned for authorization.

For missions involving the cost of food, accommodation, fuel, a commitment to preventive expenditure must be made, which must be approved by Management Determination. The expenses must be appropriately certified by means of invoices, receipts, etc.

What above explained does not apply to AQP which, by internal regulation, does not need of preventive authorization for missions related to the project.

If the service vehicle supplied to the institution is used, the fuel costs for movements relating to the project actions are made through the use of fuel vouchers purchased directly by the Authority through a transparent tender procedure, in compliance with the beneficiary regulation related to the supply of goods and services. Therefore, this is a cost item relating to the purchase of an asset, clearly differentiated with respect to staff travel expenses. Fuel is therefore not included in the Travel category but in the Consumables

category, as has already happened in other LIFE projects.

**Q07: What is the selection criterion for the lenders?**

Regarding the assignment of tasks in external assistance, the Accounting Regulations provide for a threshold of 40,000 euros under which it is possible to proceed with a direct assignment. However, for all purchases of goods and services we proceeded with the request and evaluation of at least 3 offers or curricula (preferably already present in the supplier list). The criterion of choice for the workers follows the rules of the public administration (for BRESS, VA, CB-BRENTA) and the internal regulations of AQP.

**Q09: Is there a record of durable goods?**

Yes, there is a register of durable goods.

**Q10: Is the purchased material clearly identifiable?**

Yes, through the LIFE sticker applied to the purchased good.

### 8.3 Partnership arrangements (if relevant)

Financial transactions between the coordinating beneficiary and the associated beneficiaries have taken place to transfer the advance payment according the rules established in the partnership agreements. Financial reporting is carried out by each beneficiary updating the official LIFE forms and sending it every three months to BRESS with copy of the documents evidencing the expenses. Consolidated cost statement is prepared checking and merging the individual beneficiary cost statements, every three months, after checking that the cost sustained were already foreseen in the project budget and asking clarifications to the beneficiary if necessary.

### 8.4 Certificate on the financial statement

According the amendment n.1, sent by the Commission, independent audit is not longer necessary for LIFE RISORGIVE since no beneficiary foresees an EU contribution higher than 325.000 €.

### 8.5 Estimation of person-days used per action

In order to have an overview of the use of budgeted person-days by group of actions, we provide here below estimates of % of person-days spent compared to the budgeted numbers.

A. N.	Action Name	Budgeted Costs (Excl Overheads)	Budgeted Hours	% of Budget Spent	% of Hours Spent
	<b>TOTAL</b>	<b>€ 1.089.179</b>	<b>15811</b>	<b>101,90 %</b>	<b>81,58%</b>
<b>A1</b>	Progettazione esecutiva degli interventi sulle risorgive	€ 41.418	230	90,27 %	19,57%
<b>B1</b>	Acquisizioni diritti d'uso di aree di particolare rilevanza	€ 60.851	72	149,80 %	232,64%
<b>C1</b>	Interventi di ripristino della funzionalità idraulica	€ 412.165	7848	99,71 %	59,85%

<b>C2</b>	Produzione vivaistica ed impianto nei siti ...	€ 75.104	3031	107,48 %	110,23%
<b>C3</b>	Ripristino risorgiva comunale	€ 80.000	0	103,21 %	n.a.
<b>D1</b>	Monitoraggio della biodiversità	€ 31.968	194	77,06 %	66,49%
<b>D2</b>	Monitoraggio impatto socio-economico	€ 10.785	144	92,74 %	87,50%
<b>D3</b>	Valutazione recupero funzioni ecosistemiche	€ 30.368	194	123,89 %	181,96%
<b>E1</b>	Notice Board	€ 52.200	108	95,84 %	114,35%
<b>E2</b>	Sito web di progetto	€ 6.900	72	79,81 %	89,58%
<b>E3</b>	Networking	€ 5.900	72	32,85 %	80,56%
<b>E4</b>	Layman's report	€ 2.570	22	24,38 %	81,82%
<b>E5</b>	Formazione degli agricoltori	€ 22.210	36	89,89 %	102,08%
<b>E6</b>	Creazione itinerari di visita	€ 10.050	216	74,58 %	71,76%
<b>E7</b>	Implementazione contratto di risorgiva	€ 23.818	302	106,12 %	115,56%
<b>F1</b>	Project Management	€ 210.022	3125	99,83 %	90,92%
<b>F2</b>	After LIFE plan	€ 950	36	103,32 %	83,33%
<b>F3</b>	Aggiornamento indicatori di progetto	€ 11.900	72	101,95 %	259,72%

Comment on the table above: the table above shows the % of budget and hours spent in relation to the budgeted (foreseen) ones. Some activities are in line with forecasts, while for others there have been deviations.

As explained above for BRESS and AQP in point 8.1, the Action A1 have a low consumption of personnel because initially the member of the city council and directors' costs were not reported.

The implementation of Action B1 resulted to be much more complex and time-consuming than foreseen in the original proposal.

For Action C1, as indicated in previous financial section, CB-BRENTA transferred part of the planned budget to additional staff to the external service so the percentage of hours spent is significantly lower. In addition, BRESS transferred hours from C1 and C2 to C3, where by mistake they were not originally foreseen.

Monitoring activities (D1, D2, D3) are more or less in line with the original plans. Action D3 required more effort than activities D1-D2, and in general a few more hours of staff were spent due to the one-year extension of the project.

Action E (Public awareness and dissemination of results) took a few more hours than expected mainly for the E1 and E7 activities.

Actions F1 and F2 are in line with the budget but action F3 relating to the KPI required more hours than initially assumed, also for the difficulties in understanding the type of documents/information to be provided.

## 9 Deliverables and milestones

We provide below the list of deliverables and milestones foreseen by the project.

### Deliverables

Ac.N.	Responsible	Deliverable name	Foreseen deadline Amendment	Completion date	Annexed
A1	AQP	N. 26 progetti esecutivi (actually 11 referred to 26 spring systems)	28/09/2016	31/12/2017	Already submitted with the Progress Report on November 2018
B1	BRESS	N. 26 atti di acquisizione (atti di servitù/compravendita o decreto di esproprio)	31/12/2018	29/09/2020	X
C1	CB-BRENTA	N. 26 report interventi di ripristino	31/03/2019	29/09/2020	X
C3	BRESS	Progetto preliminare	29/02/2016	31/12/2017	Already submitted with the Progress Report on November 2018
C3	BRESS	Progetto definitivo	31/03/2016	31/12/2017	Already submitted with the Progress Report on November 2018
C3	BRESS	Progetto esecutivo	21/04/2018	Oct. 2018	Already submitted with the Progress Report on November 2018
D1	AQP	1° report intermedio	30/09/2017	30/09/2017	X
D1	AQP	2° report intermedio	30/09/2018		X
D1	AQP	Report finale	30/09/2020		X
D2	AQP	Schema questionari	31/12/2017	31/12/2017	X
D2	AQP	Report finale	30/09/2020	Dec. 2020	X
D3	AQP	1° report intermedio	30/09/2017	30/09/2017	X
D3	AQP	2° report intermedio	30/09/2018		X
D3	AQP	Report finale	30/09/2020	Dec. 2020	X
E1	BRESS	Progetto grafico pannelli tipo B	30/04/2019	Sep. 2020	X
E1	BRESS	Progetto grafico pannelli tipo A	30/06/2017	31/12/2017	Already submitted with the Progress Report on November 2018
E3	BRESS	Report annuali pubblicati nel sito web di progetto (non si prevede versione a stampa)	31/12/2016	Not done see motivation in action	
E3	BRESS	Report annuali pubblicati nel sito web di progetto (non si prevede versione a stampa)	31/12/2017	See above	

<b>E3</b>	<b>BRESS</b>	Report annuali pubblicati nel sito web di progetto (non si prevede versione a stampa)	31/12/2018	See above	
<b>E3</b>	<b>BRESS</b>	Report annuali pubblicati nel sito web di progetto (non si prevede versione a stampa)	30/09/2019	See above	
<b>E4</b>	<b>BRESS</b>	Pubblicazione del layman's report	30/11/2020	Dec. 2020	X
<b>E6</b>	<b>BRESS</b>	Pieghevoli di presentazione degli itinerari	30/12/2018	Sep. 2020	X
<b>E7</b>	<b>AQP</b>	Contratto di risorgiva	31/09/2019	Sep. 2020	X
<b>F1</b>	<b>BRESS</b>	Contratto di partenariato	31/03/2016	21/03/2016	Already submitted with the Progress Report on November 2018
<b>F2</b>	<b>BRESS</b>	After LIFE plan	30/12/2020	Dec. 2020	X
<b>F3</b>	<b>AQP + BRESS</b>	1° report progressivo	31/12/2016	Not done see motivation in action	
<b>F3</b>	<b>AQP + BRESS</b>	2° report progressivo	30/06/2017	As above	
<b>F3</b>	<b>AQP + BRESS</b>	3° report progressivo	31/12/2017	As above	
<b>F3</b>	<b>AQP + BRESS</b>	4° report progressivo	30/06/2018		X
<b>F3</b>	<b>AQP + BRESS</b>	5° report progressivo	31/12/2019		X
<b>F3</b>	<b>AQP + BRESS</b>	6° report progressivo	30/06/2020	Dec. 2020	X

## Milestones

<b>Ac. N.</b>	<b>B. Resp.</b>	<b>Milestone name</b>	<b>Foreseen deadline</b>	<b>Completion date</b>
<b>A1</b>	<b>AQP</b>	Affidamento incarico progettazione esecutiva	30/10/2015	18/11/2015
<b>B1</b>	<b>BRESS</b>	Classificazione del territorio oggetto di acquisizione come 'Zona F'	15/01/2019	28/09/2020
<b>B1</b>	<b>BRESS</b>	Completamento procedure di acquisizione dei terreni	31/12/2018	28/02/2018
<b>C2</b>	<b>VA</b>	- Avvio delle operazioni di impianto nel sito	30/09/2017	30/10/2017
<b>C2</b>	<b>VA</b>	- Raggiungimento del 50% della produzione totale prevista	30/09/2017	30/09/2017
<b>C2</b>	<b>VA</b>	- Ultimazione delle operazioni di impianto nel sito	30/09/2019	31/03/2019
<b>C3</b>	<b>BRESS</b>	Progettazione esecutiva della risorgiva	21/04/2018	25/07/2018
<b>C3</b>	<b>BRESS</b>	Avvio lavori di scavo e modellazione	31/11/2018	20/12/2018
<b>C3</b>	<b>BRESS</b>	Messa a dimora specie arbustive/arboree	31/03/2019	30/06/2019
<b>D2</b>	<b>AQP</b>	Affidamenti incarichi esterni	30/09/2017	30/09/2017

<b>E1</b>	<b>BRESS</b>	Completamento posa pannelli tipo A	30/09/2018	Sep. 2018
<b>E1</b>	<b>BRESS</b>	Completamento posa pannelli tipo B	31/03/2019	Sep. 2020
<b>E2</b>	<b>BRESS</b>	Acquisizione spazio hosting web	31/01/2016	03/02/2016
<b>E2</b>	<b>BRESS</b>	Pubblicazione del sito web	31/03/2016	01/04/2016
<b>E3</b>	<b>BRESS</b>	Primo invio ad altri progetti di richiesta contatto	30/06/2016	22/06/2016
<b>E5</b>	<b>VA</b>	Prima giornata formativa	28/02/2017	29/09/2017
<b>E5</b>	<b>VA</b>	Seconda giornata formativa	25/09/2018	25/09/2018
<b>E5</b>	<b>VA</b>	Terza giornata formativa	30/09/2019	05/10/2019
<b>E6</b>	<b>BRESS</b>	Inaugurazione ufficiale degli itinerari di visita	31/10/2018	29/09/2020
<b>F1</b>	<b>BRESS</b>	Organizzazione del Kick Off Meeting	31/10/2015	03/11/2015
<b>F1</b>	<b>BRESS</b>	Firma del contratto di partenariato	31/03/2016	31/03/2016
<b>F2</b>	<b>BRESS</b>	Inizio predisposizione After LIFE plan	01/07/2019	01/07/2019
<b>F3</b>	<b>AQP</b>	Pubblicazione 1° report obbligatorio	30/10/2016	Not done see motivation in action
<b>F3</b>	<b>AQP</b>	Pubblicazione report finale	30/12/2020	