



LIFE11 ENV/IT/004

PROGRESS Report

Covering the project activities from 31/10/2015 to 31/03/2017

Reporting Date

31/03/2017

**Interventi per il miglioramento delle acque e degli habitat
nella Valle del Lambro (*Lambro vivo*)**

Data Project

Project location	Municipalities of Inverigo, Nibionno, Merone and Veduggio con Colzano
Project start date:	01/06/2012
Project end date:	31/12/2017 Extension date: -
Total budget	€ 3,792,527 (Eligible € 1,422,373)
EC contribution:	€ 566,686
(%) of eligible costs	39.84

Data Beneficiary

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2. List of key-words and abbreviations (when appropriate).

- CDG ÷ Consiglio di gestione
- FWS ÷ free water surface
- FB ÷ facebook
- DG RL ÷ Direzioni generali di Regione Lombardia
- SII ÷ Servizio idrico integrato
- AATO ÷ Autorità d'ambito territoriale ottimale
- DRF ÷ Dipartimento di riqualificazione fluviale
- PVL ÷ Parco Valle Lambro
- RUP ÷ Responsabile Unico del Procedimento

3. Executive summary

3.1. General progress

During the period described in this report for most of actions we have been entrusted the work to the winning companies of the call of tender and work began.

The specific progress of actions is provided below:

- ACTION A1: since the last report there have been no developments (the action was completed in December 2013).
- ACTION B1: since the last report there have been no developments (the action was completed in April 2015 with the presentation of a final document of the Forum).
- ACTION B2: regarding the system of finishing purifier Merone, the evaluation phase of call ended on December 2015 and in January 2016 the work was assigned to DI PIAZZA VANTE s.r.l. (Udine) At the same time in November 2015 the call for the nomination of “Site Manager” was closed with the assignment to Aequa Engineering s.r.l. (Venezia). The works have begun in March 2016 and now they are in progress and the end is expected in the month of July 2017.

About the system of finishing purifier Nibionno, the phase of evaluation of call was ended in August 2015 and the work was assigned to DELTAMBIENTE Soc. Coop. Agr. (Ravenna) in October 2015. The contract with the company was signed in January 2016 and the work began in April 2016. The site manager is ETATEC STUDIO PAOLETTI (Milano), who also draw up the executive project. During the month of November 2016 the work was completed and in January 2017 began some complementary works, including the laying of informative panels; these ended in the month of February 2017.

- ACTIONS B4-B5-B6: in January 2016 the works was definitive assigned to ATI ADRIACOS Srl - Nagostinis Srl - BB Service Srl (Udine) and in October 2016 the contract was signed. The executive project was delivered and approved in December 2016. The works began in March 2017 and the end is expected in the month of March 2018. Meanwhile the call for the nomination of “Site Manager” was closed with the assignment to Studio Rosso Ingegneri Associati srl from (Torino) and in March 2016 has been assigned the assignment of “safety manager” at Eng. Cristian Conti (Lecco).
- ACTION B7: during the year 2015 have been designated the “Site Managers”, Eng. Stefano Minà (Monza) and Eng. Maria Teresa Olmeo (Sassari), and the “safety manager”, Gianmario Mauri (Monza). In January 2016 the works were definitive assigned to Costruzioni Cerri srl (Sondrio) and in March 2016 the contract was signed. The works on the river began in March 2016 and ended in November. At the beginning of 2017 began the complementary works, including the laying of informative panels; these ended in the month of March 2017.
- ACTION C1: Since the last report there have been no developments (the action was completed).
- ACTIONS C2-C3: monitoring water quality and habitat in the ante operam period ended and the last report was produced in 2015. The post operam activities will start in the 2107, after the end of all the works.

- ACTION D1: It's available online the project website www.lambrovivo.eu that provides all the information and the materials of the project. The website is constantly updated on project news.
- ACTION D2: all the panel regarding the actions B2, B4-B5-B6, B7 were installed at the end of 2015. Also, at the beginning of 2017, more panels regarding the actions B2 (Nibionno) and B7 have been installed near the works realized.
- ACTION D3: It was produced 1000 copies of brochure containing a summary of Lambrovivo project (see Annex D3_all01 attached to MIDTERM Report), distributed in various locations. The next report to the layman will directly "Layman's report" of D8 action.
- ACTION D4: since the last report were made a total of 3 issues of the newsletter. The newsletter is distributed to a mailing list that now counts about 300 addresses. It is also publicized on social groups of the project (FB, Twitter and Google+) and published on the site www.lambrovivo.eu
- ACTION D5: currently we have a profile, a page and a group on FB, a profile and a page on Google+ and a Twitter account. All socials are updated with the news related to the project and synchronized with a dedicated application.
- ACTION D6: until previous report 3 conference/seminary have been organized. The next conference will be organized after the end of the actions and probably also some public visits on the areas will be considered.
- ACTION D7: not yet started as from timetable.
- ACTION D8: not yet started as from timetable.

3.2. Assessment as to whether the project objectives and work plan are still viable

There are no specific changes regarding the project objectives. The actions planned and planned activities are confirmed as indicated in the Amendment previously approved within a delay of several months on completion of the works, which are expected to occur by the end of 2017. To have more information about these delay see the new timetable and milestones of the project.

3.3. Problems encountered

Short delays were accumulated in the early stages of some designs, while not planned expansions occurred in the request of some authorization and in the management of tenders. As for the authorizations in some cases some institutions have asked to express their outside the Services Conference to which had been regularly invited.

As for the tender procedures it has been found in only one case they were much dilated, that of the actions B4-B5-B6, because of issues raised by competitors on the team required for the executive project.

Other reasons for postponement were the variants proposed on the works, those requested some time to be written and approved (see the case of B2 Merone) and in some cases the adverse weather conditions those forced to some works suspension.

4. Administrative part

4.1. Description of the management system

The Parco Regionale della Valle del Lambro, as project coordinator, is responsible for project management.

To absolve this role, the DRF has followed a common procedure for the development of implementation actions, which consisted of synthesis:

- organize preliminary meetings with the competent authorities either directly or indirectly to the development of a single action to illustrate the original idea and subsequently coordinator obtaining all opinions;
- organize open meetings with associations and communities, in order to promote and share the project idea for the action;
- converge observations received in all the meetings, to prepare a preliminary project already shared with a stakeholders;
- activate the process for the project development and its authorization process;
- supervise the progress of the procedures and encourage all the parties involved to respect the expected timing.

During the realization of the works the DRF supported the role of the Responsible for the Procedure (RUP) monitoring the progress by means of:

- meetings between the contractor, the Site Manager office and the Safety Manager;
- regular and frequent direct inspections on the construction site;
- relationship with the landowners.

4.2. Organization chart of the project team and the project management structure

No changes have been made with respect to what previously indicated in the Midterm report in the project team.

The Project Coordinator coordinates from the top all activities covering the role of Responsible for the Procedure (RUP).

The Head of the Project is responsible for coordinating at a technical-administrative level and arrange all the activities for the correct routing of procedures and compliance with the agreed timeframe.

The Financial Manager:

- Manages all financial aspects of the project, from the cost estimate to their reporting;
- Coordinates the operational aspects of the administrative procedures.

Assistants to the Head of the Project held operational roles related to:

- Technical and administrative control of external projects;
- Direct design;
- Preparation of tender procedures;

- Experiment tender procedures;
- Timing and quality control;
- Operational support to the outermost regions;
- Communication and dissemination;
- Monitoring of the progress of the works.

Administrative personnel play a supporting role in all these activities.

The management team has found a very flexible and efficient organizational mode based on a weekly meeting of about 1-2 hours aimed at coordination of short- and long-term activities, with the participation of the project leader and his assistants and the Financial Manager . In this meeting everyone represents the progress of all individual activities, the difficulties encountered are displayed and set out the next steps and how to perform the same.

4.3. Previous reports ad amendments

Until now have been sent the following documents:

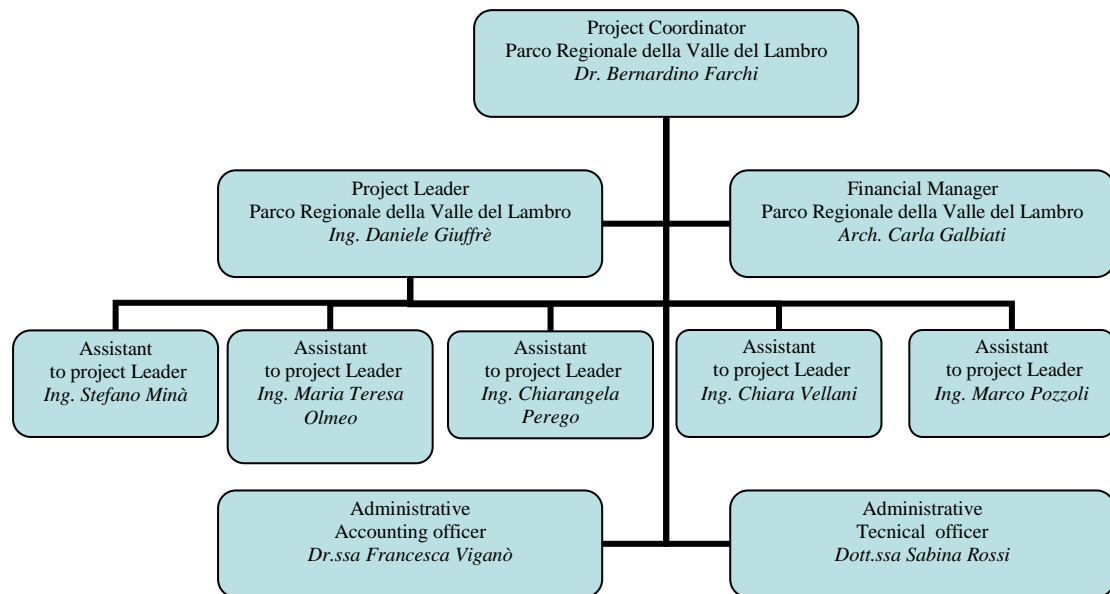
- Inception Report – 30/03/2013;
- Progress Report 1 – 31/03/2014;
- Midterm Report – 31/10/2015

At the end of 2013 it was presented an Amendment which provided in great synthesis, the entry of a co-financier (Cariplo Foundation) and 2 additional new actions (B6 and B7). The Amendment was accepted and the Progress Report 1 already contained the 2 new actions provided by the Amendment.

4.4. Evaluation of the management system

The current organization of project management is optimal, as regards the efficiency of the working tools, the methods of carrying out the activities and the quality of the work of the people involved.

The method adopted by the Commission for monitoring and reporting of projects is very rigid and standardized: a clear need to manage several projects at an international level, and certainly an incentive to productivity and for achieving results. It is nevertheless desirable a certain flexibility especially considering the significant differences that may be encountered between the State and the State and between different areas of European basin. Relations with the monitoring team were however always very open and collaborative.



5. Technical part

5.1. Technical progress, per task

5.1.1. Action A1

Description

The action A1 consisted in the identification and involvement of the stakeholders affected by the proposals by the PVL for the actions.

They have been identified all municipalities insistent on the river basin of Lambro, all the over-local authorities (Provinces, Mountain Communities, Region), SII Company operating in the area and any known associations operating in the fields of environmentalism, in ecology, in the local cultural diffusion ("Pro loco") and Civil Defence groups.

The action A1 involved local governments and historically associations connected to the Park through email, Dropbox®, FB Group and printed invitations.

They were also made requests to publish the meetings on institutional sites and on the bright billboards of Commons.

They were also made requests to publish the meetings on institutional sites and on the bright billboards of Municipalities.

This action ended in 2013. Overall they were contacted: 73 Municipalities, 32 Associations, 5 SII Company, DG RL 2, 3 AATO (see Deliverable A1-C1_Del07 attached to PROGRESS Report_1)

Action status:

Effective start	Effective end	Progress [%]
July 2012	December 2013	100%

Problems

The only problems were the involvement of the AATO and of the SII Company, active within the confines of the Park. While it was found an active participation of other stakeholders concerned.

To overcome this problem, during the final meetings of the Forum, it was suggested to focus on the involvement of these institutions through a direct action led by the Region as part of the River Contract.

Time schedule

The action began in mid-2012 and ended in late 2013.

Objectives

The objectives expected by this action have been successfully achieved, thanks to the high number of stakeholders involved and interested in the proposals by the Park for the action.

Deliverables as annexes

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5.1.2. Action B1

Description

The action B1, begun in 2012 and completed in 2015, has developed mainly with live meetings to share a proposals for the actions, suggested by the Park, with the stakeholders and incorporate their requests.

The meetings were held initially at the headquarters of the Park and then they became itinerant throughout the basin to better foster local participation.

All material produced in these meetings was shared and the contributions of stakeholders have also been incorporated, through shared resources such Dropbox® and FB group.

Overall, the material produced during the action, consists of 16 presentations of the Park, 1 external technical input and 9 external contributions from Associations (see Deliverable A1-B1_Del08 attached to PROGRESS Report_1).

The final feedback show a total involvement of 24 municipal administrations, 26 associations, 3 Company SII, 2 DG RL.

They have been held a total of 21 meetings, organized at first with biweekly frequency and then weekly frequency; They were detected an average of 21 appearances for each evening for a total of 474 overall attendance.

The action ended with the objective to prepare and share a document which could be signed by as many possible stakeholders.

On 7 May 2014 the Park presented a first draft of the final document from which you should have started to develop a fully shared text.

The contents of the document were subjected to a series of criticisms and it was decided to postpone further on a later meeting.

In the fall of 2014 the Park organized 4 meetings (approximately 1 per month starting in September 2014) where were sent only some Associations, the most critical ones about the contents of the document.

With components of the Associations was done a long and careful work of amendment, correction and filing, until a shared document.

To complete this step on 15 April 2015 we were organized an evening for the presentation and the signature of the document.

Amazingly, in the meeting, some the Associations that has helped amend the document they announced that they won't subscribe the document.

The document anyway was signed by 25 between organizations and associations including the LR, ATO Lecco, various municipalities, the majority of the involved Associations (see Annexe B1_all08 attached to MIDTERM Report).

Action status:

Effective start	Effective end	Progress [%]
July 2012	April 2015	100%

Problems

The main problems encountered in this action were primarily a diffidence of the projects promoted by the Park by the associations present at the Forum. This diffidence was probably caused by the Park past policy, which has implemented some project much impactful for the river and its habitat. However, this diffidence has been partially overcome by most Associations, which suggested improvements on the projects proposed by the Park or alternatives ideas on specific actions.

In the final step of the action has emerged the blatant duplicity in the behavior of some Associations who initially made it clear that you want to make a positive contribution, but in the end they decided not to sign a final document that they had helped to create, which included their requests submitted during the Forum.

This behavior has finally shown their exclusive and peaceful intention dilatory and obstructionist.

Time schedule

The action began in mid-2012 and ended in April 2015.

Objectives

For this action the objectives expected have been successfully achieved.

Deliverables as annexes

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5.1.3. Action B2

Description

The action provide the construction of two filter ecosystems for the finishing of the water discharged from the purification plant of Merone and Nibionno with phytodepuration techniques.

The action indicated included a cognitive phase (investigations and characterization the effluent coming out from the treatment plant or from other sources of pollution to be treated and their persistence), an authorization phase (get permits, concessions and availability of areas) and an operational phase (realization of definitive project and executive project).

As regards the **system of finishing purifier Merone**, in March 2013 has been delivered preliminary project (see Annex B1_all20 attached to INCEPTION Report 2013) and has been approved with deliberation of the CDG Park n.16 of 26/04/2013.

It was organized an information meeting on 03/07/201, inside the Forum (see Action B1).

On 20/11/2013 the project was also presented in Lombardy Region which made some observations and requested to be transposed into the definitive project.

On 03/03/2014 was issued the call of tender for the assignment of the definitive project of the Merone plant, then assigned to the company IRIDRA Srl of Florence. The definitive project was delivered at the end of September 2014 (see Deliverable B2_Del12 attached to MIDTERM Report).

On the definitive draft were required the expertise views at the Services Conference held on 18/12/2014. There were no prescriptions but it was pointed out very clearly that the system maintenance costs would be debited in the future to the water service rate (see Annexes B2_all23 attached to MIDTERM Report).

Later the same designers have produced the executive project (see Deliverable B2_Del15 attached to MIDTERM Report). The executive project was verified and validated in June 2015 (see Annex B2_all24 attached to MIDTERM Report).

In July 2015 an agreement for the management the structures and the area was signed between ASIL, owner of the areas, and the PVL, realizer of the work, (see Annex B2_all26 attached to MIDTERM Report).

At the end of July 2015 the tender for the work was issued (see Annex B2_all25 attached to MIDTERM Report). The call was closed on September 2015 and then was opened the phase of evaluation of tenders.

In January 2016 the work of the Merone purifier have been assigned to the company Di Piazza Vante s.r.l. (Annex B2_all33), who signed the contract on 16/03/2016. (Annex B2_all34),. At the same time in July 2016 it was issue negotiated procedure for the selection of the “Site Manager”. The call, to which were invited five engineering companies, was won by Aequa Engineering s.r.l. . (Annex B2_all35),

On 10/03/2016 the “Site Manager”, Eng. Giuseppe Baldo, proceeded to the partial delivery of work to the company Di Piazza Vante s.r.l., in order to start with the removal operations of the vegetation. (Annex B2_all36),. The final delivery of the work took place on 13/10/2016. (Annex B2_all37).

In the month of June 2016 it was authorized by the PVL a variation appraisal for the works at Merone purifier(Annex B2_all38). The variant has been requested as were necessary some further works for soil consolidation with regard to the tracks access to the site and an increase of the temporary structures for the support of the digging for the underground civil works.

In February 2017 a second variant was required to perfect some details regard to the height and position of the solids separation system and the installation of the civil works (Annex B2_all39).

The variant has been authorized by the RUP in late February 2017(Annex B2_all40).

Below the images of the construction site at Merone purifier.



Figure 1 - Submerged flow basin (above) - Free water surface system (below)

With regard to the **finishing system of Nibionno purifier**, after the comparing step with the managing body of the plant, it was organized an information meeting on 18/07/2013, inside the Forum, with the stakeholders.

The preliminary draft, delivered in May 2014 (see Deliverable B2_Del10 attached to MIDTERM Report), was approved by the CDG of the PVL on 10 June 2014 (see Annex B2_all22 attached to MIDTERM Report).

The definitive draft, entrusted by the restricted procedure on 24/07/2014, was delivered at the end of November 2014 (see Deliverable B2_Del13 attached to MIDTERM Report). This draft follow essentially the preliminary draft with some improvements related to the geometry of the tanks.

On the definitive draft were required the expertise views at the Services Conference held on 18/12/2014. At the conference some observations were expressed especially from the purification plant managers (see Annex B2_all27 attached to MIDTERM Report).

Later the same team drew up the executive project (the assignment includes all phases of design from the definitive to the executive, as the Site Management and Safety Coordination) that was delivered in February 2015 (see Deliverable B2_Del16 attached to MIDTERM Report). In the executive project have been incorporated solution to meet all the observations made by the operator of the treatment plant. The executive project was then verified and validated during the month of April 2015 (see annex B2_all28 attached to MIDTERM Report).

At the beginning of May 2015 was issued the tender for the work (see Annex B2_all29 attached to MIDTERM Report). The call was closed on 11/06/2015, and was immediately

open the evaluation phase of the tenders. In October 2015 the work of the Nibionno purifier have been assigned to the DELTAMBIENTE Soc. Coop. Agr (see Annex B2_all30 attached to MIDTERM Report).

In the month of June 2015 (see Annex B2_all31 attached to MIDTERM Report) an agreement between Valbe SERVICES SPA, owner of the areas, and the PVL, realizer of the work, for the management the structures and the area was signed.

On 29/03/2016, the Site Manager delivered the work to DELTAMBIENTE Soc. Coop. Agr (Annex B2_all41).

In the month of July 2016 it was authorized by the PVL a variation appraisal during project execution for works at Nibionno purifier (Annex B2_all42). The variant has been requested because some works of accomodation and securing to the maintenance track were requested, and some operations in the areas of south basin and the substitution of a pipe in accordance with the plant managers.

In November 2016, the Site Manager has declared the end of the work, in the respect of the contractual times.

Below is reported the comparison between the ortho images of Nibionno purifier before and after the works (roughly dated October 2016) and some images of the basins at present.



Figure 2 - Comparison between the ortho images of Nibionno purifier before and after the works.





Figure 3 - Images of the north and south basin at Nibionno purifier

Later, in January 2017 some completion works were requested and executed in the area of Nibionno purifier. In particular a new fence was posed in place of the older one and were installed two boards for new informative panels. (Annex B2_all43)

The monitoring phase, for both action, will start after the works will be fully operating. The monitoring will be also needed in order to plan interventions to be implemented to maintain the efficiency of the systems. The aspects to consider in monitoring will concern:

- silting speed of the submerged flow basin;
- silting speed of free water surface basin;
- engraftment of planted species in submerged flow basin;
- the rate of expansion of the reeds in the free water surface basin;
- engraftment of species planted on the shores and in the area behind;
- resilience of system to ordinary flooding;
- functionality of the electromechanical structures where provided;
- adaptation of system to hydraulic stress.

Action status:

Effective start	Effective end	Progress [%]
July 2012	End of 2017	80%

Problems

Some unexpected problems arose during the authorization phase of the project of Merone, causing a delay of about a month of the publication of the tender. A second problem, was the completion of the procedures and the checks. The first aspect was exacerbated by a significant amount of offers received (44 for Nibionno) and numerous cases to check on the administrative and legal aspects.

As regards the purifier of Merone have occurred some problems connected to execution of the work, that led to the request of two variants, with a necessary increase of the realization times.

Time schedule

The action began in mid-2012 and will end at the end of 2017, considering the possibility of some suspension and final additional works. In particular the work of the Nibionno purifier was completed at the end of 2016 while for Merone is estimated to finish its work by the end of 2017, unless other unforeseen during construction.

Objectives

In terms of water quality improvement, this objective will be appreciated only when the entire system will be realized. This applies to both finishing treatments.

Deliverables as annexes

B2_all33,34,35,36,37,38,39,40,41,42,43

5.1.4. Action B3

Description

The first phase led to the identification of sources of pollution along the Orrido di Inverigo and Roggia di Villa Romano (see Deliverable B3_Del04 attached to INCEPTION Report 2013); then the action is passed to the implementation phase.

As regards to Orrido di Inverigo river the "Final report of the phase-finding" showed as the only critical element is represented by the spillway upstream to the hydrographic network. The preliminary draft on action B4 provided for the maintenance of the spillway and the creation of phytodepuration area immediately downstream of this but this met a strong, therefore it was decided to revise it and the PVL was able to obtain additional financing by Lombardy Region directed to the renaturation of the river and the elimination of persistent drains on it.

The preliminary draft of this action was delivered in July 2015 (see Annex B3_all07 attached to MIDTERM Report). This action, which is not covered by financing LIFE11 ENV / IT / 004, allows the complete disposal of the head spillway on Orrido river, provides a continuous intake of good quality water, and connects to the sewerage some houses that today delivers directly into the river.

As regards to Villa Romanò river the "Final report of the phase-finding" showed the presence of four spillways, numbered, on the municipal cartography, with progressive 5 to 8. Following further study carried out with the technical of the Municipality it was pointed out as the main problems are due to spillway 5 and 6, while there are no particular problems on others two. On first the Municipality would carried out a recent maintenance that would have temporarily solved the criticality (see Deliverable B3_Del18 attached to MIDTERM Report).

It is currently in progress the drafting of an elaborate, the Operational Programme of the Maintenance (POM - Programma Operativo delle Manutenzioni), which it will be proposed to the Municipality, current operator of the sewage system, and Valbe Services Srl, operator of main pipe and purifier of Nibionno. In the document will be proposed some operational and management solutions for the maintenance of the efficiency of the sewerage works that have showed the main troubles, including the frequency and the ownership of these operations.

In the month of April 2017 there will be some meetings between the actors of the action and the POM will be defined and undersigned within the month of July 2017.

Action status:

Effective start	Effective end	Progress [%]
October 2012	in progress	70%

Problems

The operational phase, paid to research and definition of optimal management methods, the spillway artifacts, as far as possible, was stopped to allow the actors (Municipality of Inverigo and Valbe Services SPA) to redefine their limits of competence. In addition there was also a turnover of technical staff of the municipality of Inverigo that deals with sewage and it was therefore necessary to wait for the settling due to this rotation.

Furthermore the start of the works related to action B4-5-6 was necessary to put pressure on the actors to consider an Operational Programme of the Maintenance.

Time schedule

The B3 action is delayed from that stated in the MIDTERM Report of 2015. It is expected to conclude the operational phase of the action by the end of 2017 with the definition of a new management agreement for the ordinary and extraordinary maintenance of the artifacts interested or even plan their partial or complete dismissal in the next years.

Objectives

The objective of identifying the sources of pollution has been achieved. The objective of removal of polluting sources and consequently of improving water quality and habitat will be appreciated due to the full development of the action.

Deliverables as annexes

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5.1.5. Action B4

Description

The B4 action provided the construction of two filter ecosystems on two tributaries of Lambro: the Villa Romano river and Orrido of Inverigo river. The objective of this action was the removal of pollutants in the waters due to the presence of spillway.

The action was in the preliminary draft “Area di laminazione di Inverigo – Interventi idraulici e di riqualificazione fluviale nei territori di Inverigo, Nibionno e Veduggio con Colzano” (see Deliverable B4-5-6_Del06 attached to PROGRESS Report_1), drawn up at the end of 2012, submitted, in December 2012, to the Lombardy Region and approved by PVL with CDG’s Resolution n. 7 in 05.03.2013. It was also presented to Inverigo Mayor and, in the meeting of 05.16.2013, to the community of Inverigo. The on 06.05.2013 it was presented to the Forum, at which attended the local stakeholders.

On 27.3.2014 the tender for the assignment of the definitive project of “INTERVENTI AMBIENTALI compresi nei lavori denominati Area di laminazione di Inverigo: interventi di riqualificazione fluviale nei territori di Inverigo, Nibionno e Veduggio con Colzano” was called; Action B4 was included in it. The definitive project (see Deliverable B4-5-6_Del14 attached to MIDTERM Report), which includes all B4, B5 and B6 action, was delivered in November 2014 and tested for validation in the months of November and December 2014 (see Annex B4-5-6_all04 attached to MIDTERM Report).

It has been clarified that in the project are present some works that are not included in the project LIFE: these works are well highlighted and the related costs have not been calculated in the costs relating to the LIFE project. In particular the parts that relate to the action B4 insist on the so called “area F” and “G”.

As for the action B4 the definitive project includes some important changes compared to the preliminary and respect the concept shown in the LIFE notice. These changes have been introduced as a result of a comparison with the designers who have decided to prefer some solutions rather than others. The main changes were described in the preceeding reports.

The actions planned in the definitive planning occupy a larger area than those provided in the preliminary design and occupy areas that initially had not been taken into consideration. It should be noted, however, that despite these changes the project pursues the same objectives initially declared and indeed brings some improvements because, compared to an intervention locally milder, it was possible to extend the actions on a larger surface.

The project was then submitted to regulatory approvals during the Services Conference held on 23/12/2014, during which no observations were made (see Annex B4-5-6_all05 attached to MIDTERM Report). On 31/12/2014 was issued the call of tender (see Annex B4-5-6_all06 attached to MIDTERM Report) for integrated contract (executive project and work). The call was closed in early April 2015, and was immediately open the evaluation phase of the tenders. In January 2016 (Annex B4-5-6_all07) the tender has been assigned to the ATI ADRIACOS Srl – Nagostinis Srl – BB Service Srl, who signed the contract on 21/10/2016 (Annex B4-5-6_all08).

At the same time the contract for the Site Manager and Safety Coordination have been assigned, awarded respectively on 9/02/2016 to Studio Rosso Ingegneri Associati (Torino) (Annex B4-5-6_all09), and on 1/03/2016 to Ing. Cristian Conti (Annex B4-5-6_all10).

On 23/12/2016 the designers delivered the executive draft (Del B4-5-6_Del21). The executive project does not introduce substantial differences compared to the definitive draft as for B4 action.

As for the availability of the areas were instructed Studio Mariani Corbetta and Arch. Maria Bossi to undertake contacts with the owners concerned. Overall they were contacted about twenty owners. It has been possible to sign several temporary occupation agreement, not onerous, for almost all of the owners except for an area for which will be signed a decree of servants that will be formalized and notified in March 2017.

On 22/02/2017 the Site Manager delivered partially the works to the company awarded; the end of the works is expected at the beginning of March 2018 (Annex B4-5-6_all11), but LIFE actions will be ended sooner.

The monitoring phase provided as a result of the realization of the interventions will be necessary in order to program any interventions to keep the works efficiency. The aspects to consider in monitoring are:

- silting speed of Phytodepuration basin;
- the rate of expansion of the reeds in the Phytodepuration basin;
- engraftment of planted species;
- functionality of the access areas for amphibians.
-

Action status:

Effective start	Effective end	Progress [%]
October 2012	End of 2017	75%

Problems

The main problems that occurred were the interface with the professionals responsible of the definitive project and the increases due to the tendering procedures. On the first point it must be observed that the design team, chosen by an open procedure with the most economically advantageous tender, it is very helpful at the beginning and in appearances, but in the end produced a different project from the preliminary indications more than what had been granted by the Contracting Authority.

It also shown remarkable unwillingness to produce necessary documents for the tender, despite what was clearly indicated in the contract. Finally there was also significant unavailability with the validation team.

As it regards the valuation procedures of tenders is observed that were made a number of observations regarding the professional expertise required for the team for the executive design and have been proposed some complaints by some excluded.

Very much time was lost in dealing with landowners in the definition of the agreements, in particular for the areas interested in action B4 where the only owner, a real estate company, gave very little or no feedback for months. The final solution agreed was the forced temporary occupation of the lands that will be notified by a decree of servants formalized and notified in March 2017.

Time schedule

According to the delivery of the works dated 22/02/2017 the end of the works is scheduled for March 2018, but the contract includes other action on areas not included in LIFE project. As can be observed from the time schedule, the implementation of the works relating to the

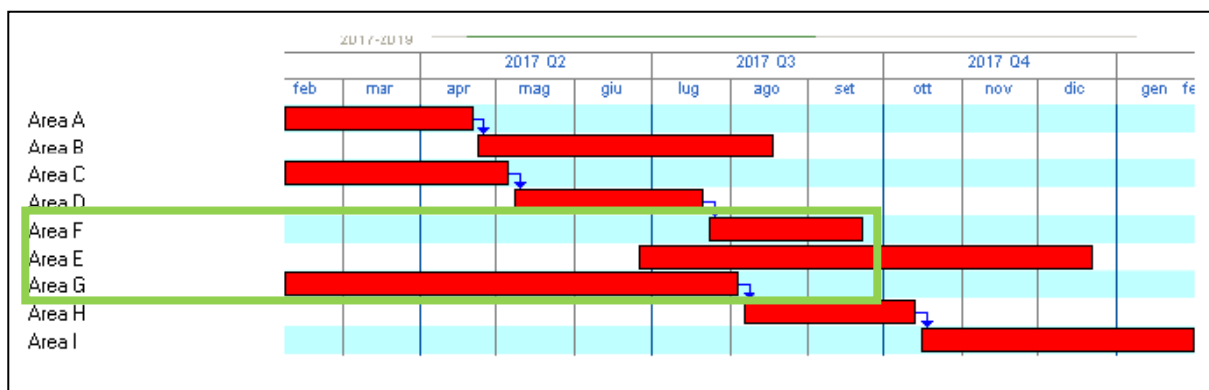


Figure 4 - Extract of timescale with an indication the areas of the action B4
 action B4 (areas F and G) is put in the first part, delaying operations not foreseen in the LIFE project.

Objectives

The objectives of improvement of river habitat quality can only be appreciated after the realization phase.

Deliverables as annexes

B4-5-6_Del21

B4-5-6_all07,08,09,10,11

5.1.6. Action B5

The B5 action initially provided the construction of a wetland along the Lambro river upstream of the Provincial Como - Bergamo by expanding an area of a noose and creating an oxbow lake on the left bank. The objective of this action was the expansion of wetlands for the settlement of amphibians and fish reproduction.

Since the B5 action is contained in the same process that also contains the B4 and B6 actions, the authorization process is exactly the one already described for the B4 action as well as the check of the availability of the areas.

It has been clarified that in the project are present some works that are not included in the project LIFE: these works are well highlighted and the related costs have not been calculated in the costs relating to the LIFE project. In particular the parts that relate to the action B5 insist on the so called "area A".

As for the action B5 the definitive project includes a number of important changes compared to the preliminary to the concept shown in the LIFE notice. These changes have been introduced as a result of a comparison with the designers who have decided to prefer some solutions rather than others.

The actions planned in the definitive project occupy a larger area than those provided in the preliminary design and occupy areas that initially had not been taken into consideration. It should be noted, however, that these changes continue to pursue the same objectives initially declared and indeed are an improvement because, compared to an intervention locally milder, it was possible to extend the actions on a larger surface.

Also for the B5 action the executive project made no changes compared to the definitive.

The monitoring phase provided as a result of the realization of the interventions will be necessary in order to program any interventions to to keep the work efficiency. The aspects to consider in monitoring are:

- silting speed of the pools;
- the rate of expansion of hygrophilous species in the pools;
- engraftment of planted species;
- functionality of the access areas for amphibians.

Action status:

Effective start	Effective end	Progress [%]
October 2012	End of 2017	75%

Problems

Refer to what is already noted for the B4 action, even for timesteps for the award of work.

Time schedule

Refer to what has already been noted for the action B4.

In order not to further delay the implementation of the action, the timescale includes the execution of the works relating to the action B5 (area A) in the first part of the work, delaying operations not foreseen in the LIFE project

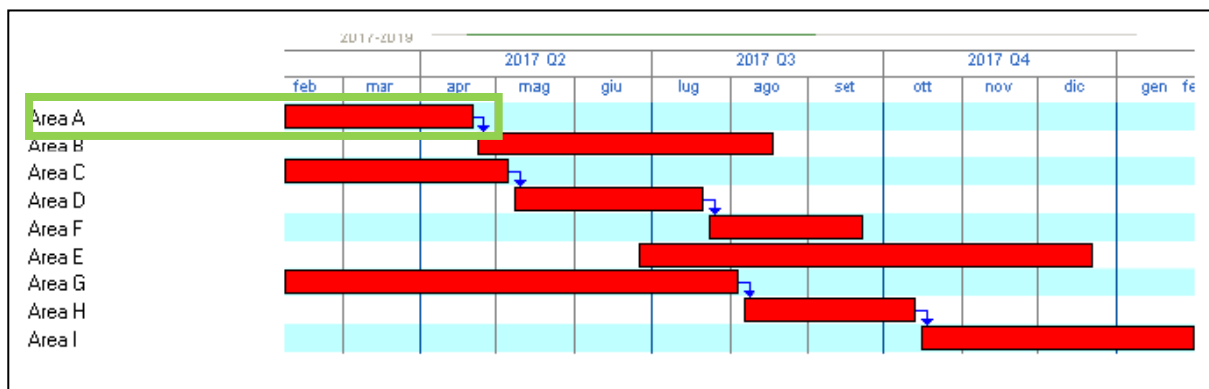


Figure 5 - Extract of timescale with an indication the areas of the action B5

Objectives

Refer to what has already been noted for the action B4.

Deliverables as annexes

See Action B4

5.1.7. Action B6

B6 action was introduced with the Amendment presented in December 2013 and initially provided the construction of a wetland along the Lambro downstream of the Provincial Como - Bergamo by expanding riverbed in the right bank. The objective of this action is also in this case the expansion of wetlands for the settlement of amphibians and fish reproduction.

The action is contained in the preliminary draft “Area di laminazione di Inverigo – Interventi idraulici e di riqualificazione fluviale nei territori di Inverigo, Nibionno e Veduggio con Colzano” (see Deliverable B4-5-6_Del06 attached to PROGRESS Report_1), drawn up at the end of 2012 and submitted, in December 2012, the Lombardy Region. Also with Resolution n. 7 of 05.03.2013 of the CDG it was approved by PVL.

Since the B6 action is contained in the same process that also contains the B4 and B6 actions the authorization process is exactly the one already described for the B4 action as well as the check of the availability of the areas.

It is clarified that in the project are present some works that are not included in the project LIFE: these works are well highlighted and the related costs have not been calculated in the costs relating to the LIFE project. In particular the parts that relate to the action B5 insist on the so called “area B,C and D”.

As for the action B5 the definitive project includes a number of important changes compared to the preliminary and the concept shown in the LIFE notice. These changes have been introduced as a result of a comparison with the designers who have decided to prefer some solutions rather than others and especially as a result of comparison with some owners who are firmly opposed to the proposed solution, requiring a less invasive action.

The actions planned in the definitive planning occupy a larger area than those provided in the preliminary design and occupy areas that initially had not been taken into consideration. It should be noted, however, that these changes continue to pursue the same objectives initially declared and indeed are an improvement because, compared to an intervention locally milder, it was possible to extend the actions on a larger surface.

The executive project, as regards to the action B6, brought changes only in the area D. In particular, it is planned a forest improvement on a narrower area compared to the definitive project, but with a greater extension and there are improvements on both banks of the Lambro; it is also no longer planned the amphibians area. All these changes were due to the unavailability of the owner to take action on major portions of the property. On the contrary others new owners showed a certain willingness to accommodate further processing on their land. Below is the comparison between the two project plans.

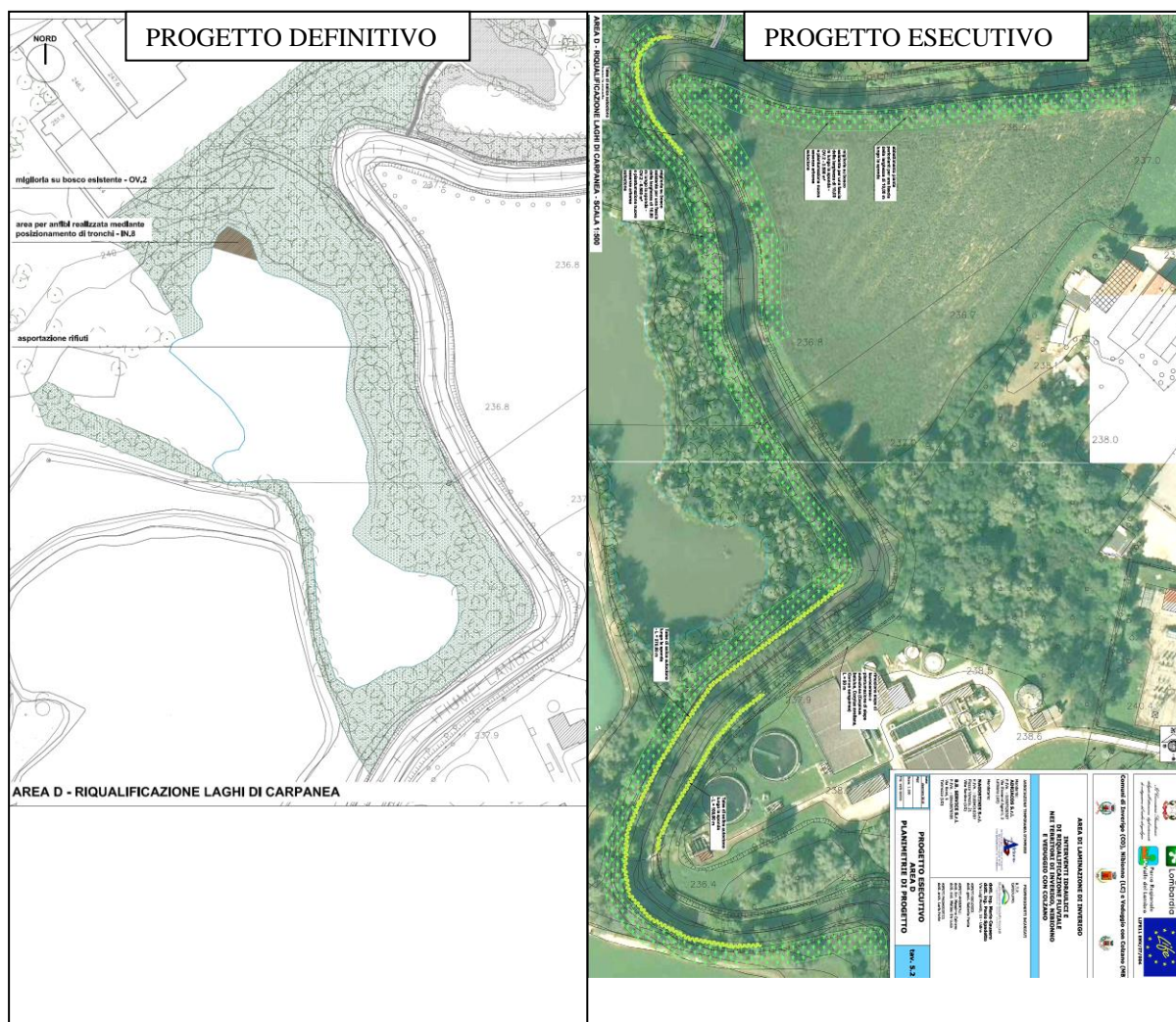


Figure 6 - comparison of definitive project and executive project - Action D

The monitoring phase provided as a result of the realization of the interventions will be necessary in order to program any interventions to keep the work efficiency. The aspects to consider in monitoring are:

- silting speed of the basins C and D;
- the expansion rate of the reeds in the basins C and D;
- engraftment of planted species;
- functionality of the access areas for amphibians.

Action status:

Effective start	Effective end	Progress [%]
October 2012	End of 2017	75%

Problems

Refer to what is already noted for the B4 action, even for timesteps for the award of work.

Time schedule

Refer to what has already been noted for the action B4.

In order not to further delay the implementation of the action, the timescale includes the execution of the works relating to the action B6 (areas B-C-D) in the first part of the work, delaying operations not foreseen in the LIFE project

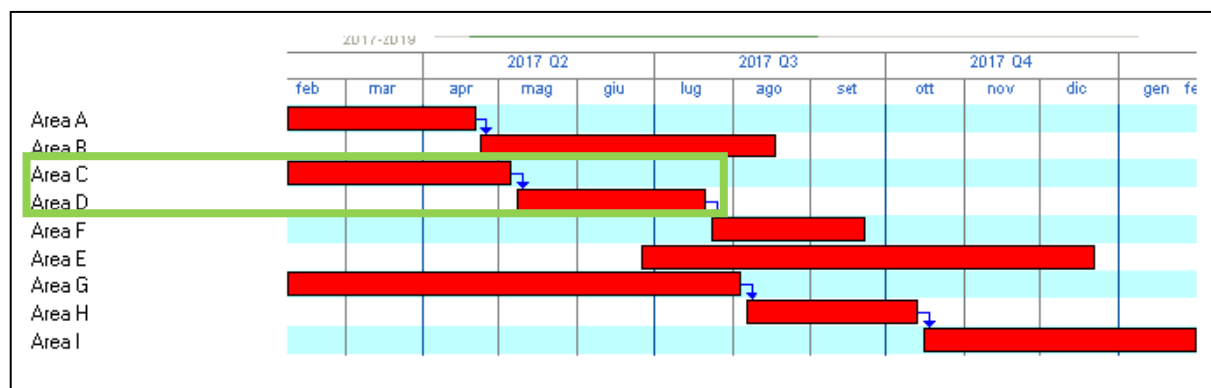


Figure 7 - Extract of timescale with an indication the areas of the action B6

Objectives

Refer to what has already been noted for the action B4.

Deliverables as annexes

See Action B4

5.1.8. Action B7

Description

The B7 action was introduced with the Amendment presented in December 2013 and provides for river restoration actions in the final section of Roggia Cavolto, between the Lake of Baggero and crossing of Battisti road in the City of Merone. Specifically were planned actions for river habitat improvement, renaturation of the river, creation of alternative routes of river and actions for the phytoremediation of water.

A first proposal for action B7 was submitted on 11.09.2013, inside the Forum (see Deliverable B1_Del08 attached to PROGRESS Report_1).

The preliminary draft was presented in October 2014 (see Deliverable B7_Del11 attached to MIDTERM Report) and approved by the CDG of PVL on November 12, 2014 (see Annex B7_all01 attached to MIDTERM Report). This included, in short, the restoration of the banks with bioengineering elements, the reprofiling of the river bottom with creation of fish ladders and path.

There have been changes between the first proposed and the preliminary draft that have mitigated the intervention consistency maintain its objectives. In particular, the original proposal provided for the complete removal of all artificializations on river banks and the bottom, but the designers, both in the preliminary and in the definitive-executive phase, have considered this unsafe for the stability of the banks and preferred the hiding of them.

The definitive-executive project, entrusted on 12/12/2014, was delivered in March 2015 (see Deliverable B7_Del17 attached to MIDTERM Report) and did not foresee any major changes compared to the preliminary draft.

The project has been validated on 4/05/2015 (see Annex B7_all02 attached to MIDTERM Report), approved by the Board of the Park on 5/05/2015 (see Annex B7_all03 attached to MIDTERM Report). It was submitted to the Services Conference on 3/06/2015 (see Annex B7_all04 attached to MIDTERM Report) and, after the hydraulic authorization received by the City of Merone (see Annex B7_all05 attached to MIDTERM Report), it was issued the call of tender on 3/07/2015 (see Annex B7_all06 attached to MIDTERM Report). The call was closed on 3/08/2015, and was immediately open the evaluation phase of the tenders. In January 2016 the tender has been assigned to Costruzioni Cerri srl (Sondrio) (Annex B7_all07), who signed the contract on 16/03/2016 (Annex B7_all08).

In April 2015 it was also assigned the contract for the Safety Coordination to the surveyor Gianmario Mauri (Monza). (Annex B7_all09).

On 29/03/2016, the Site Manager proceeded to the delivery of the work at Costruzioni Cerri srl (Annex B7_all10) and on November 2016 it was declared the end of the work, respecting the contractual times.

Later, in January 2017, started a completion works on Cavolto river; in particular were planted several aquatic plants for the improvement of water quality, some boards for new informative panels were laid and some parts of a fence have been replaced. (annex B7_all11)

Below the images of Cavolto after the end of the works.



Figure 8 - Images of Cavolto river

Action status:

Effective start	Effective end	Progress [%]
September 2013	March 2017	100%

Problems

The design process was very fast. The only reason to slow down, resolved in two weeks, was the hydraulic authorization request to the municipality of Merone.

Even the works had no particular problems.

Time schedule

The action B7 had a certain delay respect to the TIMETABLE contained in the MIDTERM Report (the end of the action was fixed for mid-2016).

Objectives

The actions of renaturation of the river and the creation of fish ladders will entail a substantial improvement of river habitat quality, in particular as regards the fish populations and amphibians. In addition, the hidden of the artificially modeled banks increased the landscape value of Cavolto.

Deliverables as annexes

B7_all07,08,09,10,11

5.1.9. Action C1

Description

Action already completed.

The action of monitoring the stakeholders has developed partly in parallel with the action B1 and concerned:

- checking of the presences at the forum through the participation signature sheets;
- annotation of the contributions from the participants through drafting of minutes;
- presentations made by participants at the forum.

Beyond that access to the website were also monitored while no further contributions on the blog arrived.

This action, being closely linked to the action B1, can be considered completed in 2013 and one only final report of involvement of stakeholders was produced (see Deliverable A1_C1_Del07 attached to PROGRESS Report 1).

Action status:

Effetctive start	Effetctive end	Progress [%]
October 2012	December 2013	100%

Problems

The main problems were seen in the involvement and monitoring of the virtual forum on the blog; this obstacle was overcome when started the weekly meetings of the Forum.

Time schedule

The action began late 2012 and ended in the end of 2013.

Objectives

For this action it is believed that the objectives have all been achieved.

Deliverables as annexes

-

5.1.10. Action C2-C3

Description

The monitoring phase called "ante operam" ended in accordance with the monitoring plan presented in deliverable C2-3_Del02.

The monitoring was organized by identifying for each area of intervention the survey stations, located in strategic points considered for the study and knowledge of the current status of the aquatic ecosystem and the subsequent assessment of the effects of the works. The surveys have been observed during the year 2013. The number of points, their location and the measured parameters are included in the document "Relazione monitoraggio acque ed habitat 2013" (see Deliverable C2-3_Del05 attached to PROGRESS Report 1).

The monitoring confirmed data collected in recent years that describe a quality of the water in slow improvement in time and however at a sufficient level. The analysis confirmed the spatial deterioration of water quality caused by purifier discharges, while for secondary tributaries has been confirmed the presence of substances introduced by spillways of the sewage system.

Because of the delays of the works it has been decided to extend some surveys even in 2015, in particular those relating to water quality. The monitoring of 2014 showed a considerable improvement of the physico-chemical state of the water, but this fast change is probably due to the considerable rainfall occurred during the year and to the consequent dilution effects and run-off. This led to an improvement of the chemical quality of the water, but not necessarily to an improvement in organic quality that lingered at previous levels, although disappeared some effects related to anaerobic conditions and the granulometry of the bottom and banks became more varied. Confirmed the worsening of the water quality at the discharge of purifier: the upstream station of Merone purifier increased the level of quality while the downstream station is at the same level as in 2013. More details are provided in the document "Relazione monitoraggio acque ed habitat 2014" (see Deliverable C2-3_Del09 attached to MIDTERM Report).

The monitoring of 2014 show an improvement for three of the monitored stations. In particular there has been an improvement in the quality of water at Nibionno purifier that went from sufficient level sufficient to good level, while at Merone purifier and the Cavolto water quality remained at the same level as in 2014. Finally, there have been improvements with regard the water of Orrido di Inverigo that in 2015 reached a high level of water quality. More details are provided in the document "Relazione monitoraggio acque ed habitat 2015" (Deliverable C2-3_Del19).

The habitat quality monitoring was developed with similar methodology to that of water quality. The investigations were conducted for each area of actions, localized in strategic points for the study and for the knowledge of the current state of the habitat and the subsequent assessment of the effects of the works.

For the year 2014 the surveys showed in the area of Merone purifier the presence of indicator species of good quality of forest and perfluvial habitats. Among all surveyed areas this has the best ecological value.

Even the Area 2 (loop upstream of SP 32, so called "area A", involved in action B5) hosts a good number of species; also in this case the species are indicators of good quality of habitats. To signal the presence of *Ardea alba* and *Ardea cinerea* that found in this area a great area to feed.

Area 4 (Cavolto, action B7) was one of the best in the breeding season, but in the winter does not have the optimal characteristics for wintering species not linked to urban areas.

In addition all three areas are significant for bats; in these areas the species surveyed are able to find food and to hunt. Species connected to forest environments find also shelters for use in various biological stages of their lives and especially in the period of migration.

More details are provided in the document “Relazione monitoraggio acque ed habitat 2014” (see Deliverable C2-3_Del09 attached to MIDTERM Report).

In 2015 only bats were surveyed. The results confirm the situation of 2014 with a greater number of registered individuals. More details are provided in the document “Relazione monitoraggio acque ed habitat 2015”.

Action status:

Effetctive start	Effetctive end	Progress [%]
October 2012	In progress	80%

Problems

The only problems were due to the delay of the realization of the works that brought to the consequent delay of the phase of monitoring.

Time schedule

The timing of the "ante operam" phase had a delay linked to the realization of the work. It was decided to continue with the "ante operam" phase even in the year 2015, while in 2016 there was a pause of the monitoring because all areas were affected by the construction sites.

Monitoring will resume in 2017 with the beginning of the "post-operam" phase; it will start with the areas of Nibionno and Merone purifiers and the area of Cavolto.

The action of monitoring will continue in 2018 when all the work will be finished and will be able to appreciate their contribution.

Objectives

The objectives will be achieved at the end of the monitoring program.

Deliverables as annexes

C2-3_Del19

5.1.11. Action D1

Description

The D1 action provide the creation of a website dedicated to the LIFE11 ENV/IT/004 project. Up to May 2014, we used an existing domain (www.progettolambro.it) on which some pages were devoted to the publication of LIFE documents.

Since May 2014 all contents of Lambrovivo project have been reported on a new website www.lambrovivo.eu created specifically for the project.

The website is regularly updated with the main design steps, technical publications, newsletters, news on events and other useful content. On the site shows the logo of the project and the LIFE logo.

It's shows an image of the homepage.

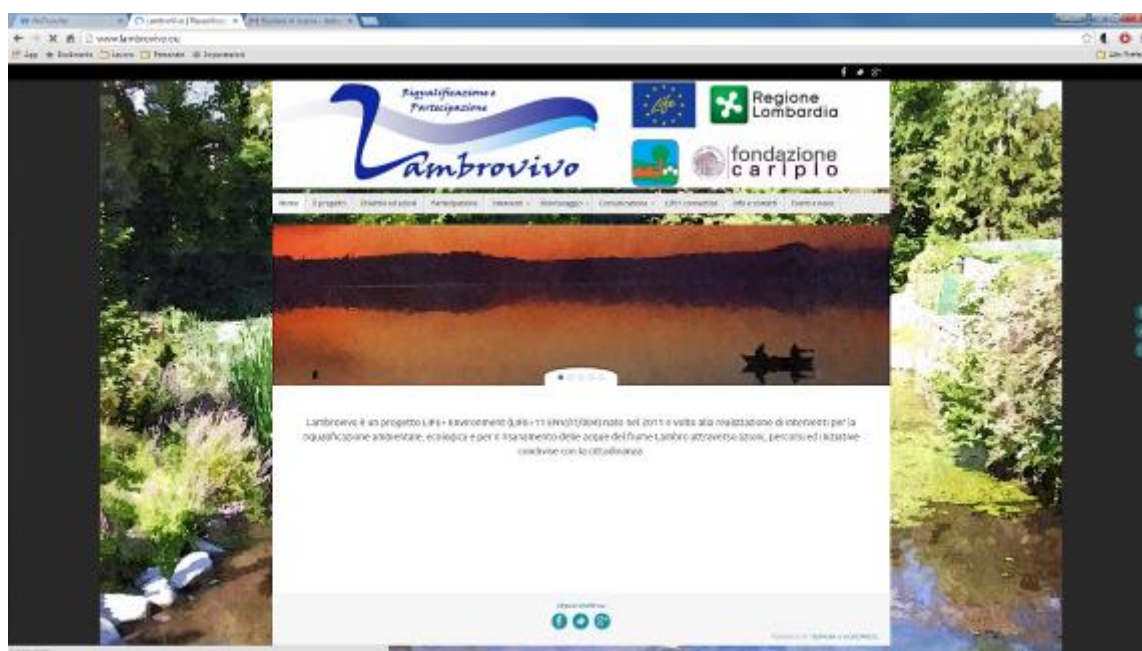


Figure 9 –Homepage of website “Lambrovivo”

Action status:

Effetctive start	Effetctive end	Progress [%]
April 2012	In progress	85%

Problems

There were no particular problems for D1 action.

Time schedule

The development of the D1 respects TIMETABLE shown on Amendment 2013 LIFE11 ENV / IT / 004.

Objectives

The website www.progettolambro.it has counted more than 3000 visitors. To date the website www.lambrovivo.eu has counted 2019 visitors.

Deliverables as annexes

-

5.1.12. Action D2

Description

The D2 action provides the construction of informative panels to illustrate the project and the expected results.

Some panels of all action implemented have been made, some for outdoor laying and some for indoor laying.

In particular were made:

- ACTION B2: n.2 outside panels e 4 indoor panels;
- ACTION B4: n.2 outside panels e 2 indoor panels;
- ACTION B5: n.1 outside panels e 2 indoor panels
- ACTION B6: n.1 outside panels e 3 indoor panels;
- ACTION B7: n.1 outside panels e 1 indoor panels.

The panels were installed in the month of October 2015 near the areas of action; the indoor panels will be placed in spaces made available by the PVL and the Municipalities concerned. It has requested the landscape authorization for laying the boards (see Deliverable D2_all03 attached to MIDTERM Report). The authorization was received on 16/04/2015 (see Deliverable D2_all04 attached to MIDTERM Report)

All the panels were already exposed temporarily to Agrinatura Exhibition at Lariofiere (Erba) from 1 to 3 May 2015 (see Annex D2_all05 attached to MIDTERM Report).

Below are show some pictures of the panels.



Action status:

Effetctive start	Effetctive end	Progress [%]
October 2013	In progress	85%

Problems

There were no particular problems for D2 action.

Time schedule

The D2 action is delayed respect to the TIMETABLE shown on Amendment 2013 LIFE11 ENV/IT/004.

Others supports for some new panels were laid in the areas B7 and B2 Nibionno and other are expected to be laid in areas B4-B5-B6 amd in B2 Merone. The panels and their contents are under construction.

Objectives

The aim of attracting the attention of citizens on current projects to be realized was reached; to demonstrate this are reported some vandalism on the installed panels expressed in protest sentences overwritten regarding the illustrated works, especially in the points more crowded.

Deliverables and annexes

-

5.1.13. Action D3

Description

It was produced 1000 copies of brochure containing a summary of Lambrovivo project (see Annex D3_all01 attached to MIDTERM Report), distributed in the following location:

Inverigo:

City hall – Via Enrico Fermi, 1

Library - Via Carlo Bianchi

Nibionno:

City hall – Piazza Caduti, 2

Library – Via Fiume, 2

Swimming pool – Via Gaggio, 1

Merone:

City hall – Via Appiani, 22

Library – Via Isacco, 1

Triuggio:

City hall – Via Vittorio Veneto, 15

Field office of PVL– Viale Susani, 52

The brochures were also distributed at the stand of the PVL to "Agrinatura" Exhibition which was held at Lariofiere (Erba) from 1 to 3 May 2015. (see Annex D3_all02 attached to MIDTERM Report)

The distribution went on until exhaustion of copies.

The next report to the layman will directly “Layman's report” of D8 action.

The brochures have been printed on recycled paper and showed the project logo and the LIFE logo.

Action status:

Effetctive start	Effetctive end	Progress [%]
February 2015	October 2015	100%

Problems

There were no problems for D3 action.

Time schedule

The D3 action is delayed respect to the TIMETABLE shown on Amendment 2013 LIFE11 ENV/IT/004. It was decided to make a single brochure to be distributed at the location indicated and that the next publication will be the Layman's report.

Objectives

The objectives will be achieved at the end of the action.

Deliverables as annexes

-

5.1.14. Action D4

Description

The D4 action provides the creation of a newsletter to be distributed to a mailing list.

The mailing list has already been created through the A1 and B1 actions and today has nearly 300 addresses: the contacts of the Municipalities involved by the projects, the Associations, Civil Defence Associations, some Water Services Companies, the ATO involved and many other followers.

The mailing list is managed with a Google Group (Forum Lambro Settentrionale) that allows to send to the same addresses both direct messages and email.

Since 2012 were published 14 newsletters that from 2015 have semi-annual frequency. All newsletter published from 2015 are attached. (Annexes D4_all03)

The newsletters show the project logo and the LIFE logo.

Action status:

Effetctive start	Effetctive end	Progress [%]
October 2012	In progress	80%

Problems

There were no problems for D4 action.

Time schedule

Currently publishing has become very regular and complete.

Objectives

The mailing list has about 300 contacts.

Deliverables as annexes

D4_all03

5.1.15. Action D5

Description

The D5 action provides the creation of a blog to have direct contact with the stakeholders. Initially it had been activated a traditional blog at www.progettolambro.it domain. This blog has been abandoned due to hacker attacks and low attendance.

Subsequently, the following channels have been activated

On Facebook:

- a page on Lambrovivo project (<https://www.facebook.com/lambrovivo>) with 219 like;
- a group on Lambrovivo (<https://www.facebook.com/groups/forumlambro/>) with 149 members. The group is animated by frequent external interventions.

On Google+:

- a profile on Lambrovivo project (<https://plus.google.com/u/1/115962849021387044760/posts>) with 35 followers (views no more available);
- a page on Lambrovivo project (<https://plus.google.com/u/1/b/105048334229606485379/105048334229606485379/posts>) with 11 followers (views no more available);

On Twitter is active a Lambrovivo profile (@Lambrovivo) with 36 follower and 47 tweet.

All pages on FB, Google+ and Twitter are synchronized with the Hootsuite® that lets post messages on multiple platforms.

All pages show the project logo and the LIFE logo.

Action status:

Effetctive start	Effetctive end	Progress [%]
October 2012	In progress	80%

Problems

The publication on the social network has encouraged greater participation and involvement.

Time schedule

The development of the D5 respects TIMETABLE shown on Amendment 2013 LIFE11 ENV / IT / 004.

Objectives

The objectives will be achieved at the end of the project. the results are satisfactory:

Deliverables as annexes

-

5.1.16. Action D6

Description

The D6 action provides the organization of workshops and informational meetings for the LIFE project by the coordination staff.

On 3/07/2013 was organized an evening on the subject of constructed wetlands. During the event Mr. Conte of IRIDRA Company Srl explained a presentation entitled “Presentazione e discussione sulle tecniche e le possibili applicazioni della fitodepurazione per il miglioramento della qualità delle acque e dell’habitat dei fiumi” (see Deliverable B1_Del08 attached to PROGRESS Report 1).

On 15/11/2014 was held a conference at the library of Sovico (Viale Brianza 4), organized by PVL and the Association “Amici del Lambro di Sovico” entitled “*Lambro 2.0: recuperare acque di buona qualità ripartendo dal sistema fognario*”. Participated as speakers: Eleonora Bettenzoli (AEEGSI), Elena Arena (UATO Lecco), Marta Giavarini (UATO Como), Marco Lacalamita (UATO Monza), Viviane Iacone (Lombardy Region), Stefano Minà (PVL) and other parties involved in the management of water services (see Annex D6_all01 attached to MIDTERM Report).

On 7/03/2015 was held a conference at the Urban Center of Monza organized by the PVL and Legambiente (Monza) entitled “*Lambro pulito Lambro sicuro: sicurezza idraulica e qualità delle acque del fiume*”. The topic of the conference was the hydraulic safety and environmental quality of the Lambro river. Participated as speakers Mario Clerici (Lombardy Region), Stefano Minà (PVL), Marco Lacalamita (UATO Monza), Valeria Marchesi (ARPA), Dario Fossati (Lombardy Region), Gaetano Lamontagna (AIPO), Francesco Nicolodi (AIPIN), Damiano di Simine (Legambiente Lombardia), Atos Scandellari (Legambiente Monza) (see Annex D6_all02 attached to MIDTERM Report).

The next conference will be organized after the end of the actions and probably also some public visits on the areas will be considered.

Stato azione:

Inizio effettivo	Fine effettiva	Completamento [%]
January 2013	In corso	65%

Problems

There were no particular problems in developing the action D6.

Time schedule

The development of action D6 meets the timelines stated in TIMETABLE contained in Amendment 2013 LIFE11 ENV/IT/004.

Objectives

The objective of dissemination has been successfully achieved.

Deliverables as annexes

-

5.1.17. Action D7

The D7 action hasn't started yet as shown in the TIMETABLE attached in the Amendment 2013 LIFE11 ENV/IT/004.

Action status:

Proposed start	Effetctive end	Progress [%]
October 2017	-	0%

5.1.18. Action D8

The D8 action hasn't started yet as shown in the TIMETABLE attached in the Amendment 2013 LIFE11 ENV/IT/004.

Action status:

Proposed start	Effetctive end	Progress [%]
October 2017	-	0%

5.2. Envisaged progress until next report

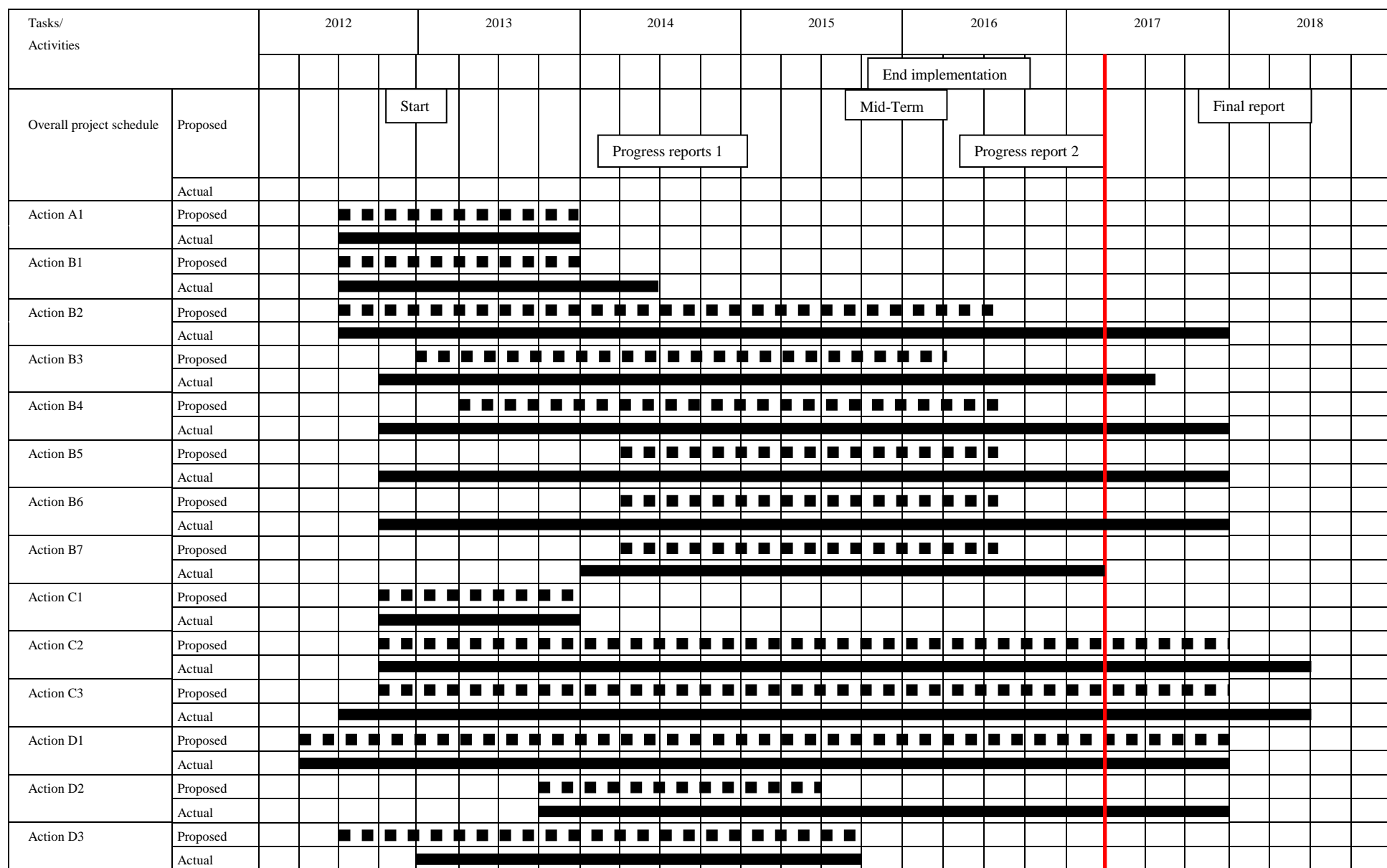
In the next months will probably will requested an extension to the end of the project to complete a “post operam” monitoring. If this will be approved the next report will be a 3rd progress in which the end of the works and the beginning of the monitoring will be reported. Otherwise the next progress report will be the “Final report” that will be presented after the end of the project, at the beginning of 2018.

In the next few month will be achieved the following steps (actions not included means already completed):

- action B2: for Merone the completion of the works within the month of July 2017 and then any possible complementary works;
- action B3: drawing up the Operational Programme of the Maintenance (POM - Programma Operativo delle Manutenzioni), with the Municipality, current operator of the sewage system, and Valbe Services Srl, within the month of July;
- actions B4-B5-B6: LIFE work in progress will be all completed by the end of 2017;
- actions C2-C3: in 2017 the “post operam” phase of monitoring will be started for B2 and B7 actions that will continue in 2018 (in the case of the approval of the extension) also for all other actions;
- action D1: update of the website with information and photos of the construction sites of the works;
- action D2: laying of new panels near the areas of B2 and B7 action in the next months;
- actions D4-D5: publication of new newsletter every six months and administration and maintenance of blogs;
- action D6: organization of a new conference within the end of 2017 and eventually some visits during spring/summer 2018.

As previously said since the timing of realization of some actions have had some delay than shown in the MIDTERM report, in June will be requested an extension of the LIFE project; in particular it will be requested the postponement of the end date of the project in mid-2019 in order to fully implement the monitoring action (D1 and D2).

Below is shown the new timetable updated to the current progress, including updating of deliverables, of expected reports and timing of actions.



5.3. Impact

As regards to the action B2, which involves the construction of filter ecosystems for the finishing of outgoing water from treatment plants of Merone and Nibionno, the expected impacts on the environmental components can only be appreciated as a result of the action implementation phase. It is expected to make improvements in terms of quality of the water leaving the plants (see Annex B2_all20 sent with Inception Report 2013 LIFE11 ENV/IT/004), improving river habitat, riparian and increased biodiversity. Also it presented the project proposal has been taken into account by the technical staff of Cermenate purifier that currently is considering a similar project for their facility.

The B3 action, which led to the identification of discharges along Orrido di Inverigo and Villa Romano rivers, has identified the sources of environmental pollution of the two rivers. The full development of the action, which will consist in the removal or drainage of discharges, will allow an objective improvement of water quality, river habitat and increased biodiversity. These impacts will not be appreciated as a result of the planned measures.

The action B4 (filter ecosystems on the Villa Romano and Orrido of Inverigo rivers) will have positive impacts in terms of improving water quality, both in terms of river habitat improvement and the entire ecosystem. These improvements can only be assessed at the end of the action, when the filter ecosystems will be full working.

The interventions of the B5 and B6 actions (wetlands along the river Lambro) will have positive effects on existing ecosystem, in particular they will bring an improvement in the quality of habitat and increase biodiversity. Also in this case the expected impacts will be appreciated after the realization of the interventions.

As for the B7 Action, which provides for the renaturation of the final part of the Cavolto river, expected impacts relate to the river habitat improvement, increasing biodiversity, improving water quality and the qualitative and economic revaluation of riparian area.

Regarding the actions of monitoring the quality of water and habitat, it is expected that they will have an indirect impact on the environmental aspects required for other actions. Accurate knowledge and riparian habitat river and of the Lambro river water quality is the starting point for assessing the impacts in a manner expected from works more attentive and focused, as well as an opportunity to have a complete knowledge framework of the territory affected by the projects.

5.4. Outside LIFE

There are some ongoing projects, external to LIFE financing, which interact and implement the activities provided for. In particular:

- ACTION B2 are to be upgraded sewage treatment plants by the managing bodies. These actions will allow you to send to the flow rate decreasing siphoning upstream of the sewage treatment. In particular for Merone WWTP the upgrade is in progress, will end at the end of 2017, and will allow to send to the ecosystem filters a more diluted rain flow; for Nibionno WWTP the upgrade will probably start at the latest in 2018 and this will allow to send to the ecosystem filters a better wastewater, both in terms of flow and concentration. This coupled effects will bring to an objective increase in the quality water of Lambro river.
- ACTION B4: the elimination of the discharge is expected on the Orrido of Inverigo river in conjunction with some interventions of the sewerage network arrangement. This intervention,

eliminating the major source of pollution of the river, will improve water quality. Actually the project of this intervention on the sewerage system (a 3rd lot of a multipurpose action) is at the phase of executive project, while the 1st and the 2nd, directly conducted by Parco Valle Lambro, are provisionally awarded to a company with a suspension of the procedure related to the outcomes of 3rd lot, as requested by Regione Lombardia.

5.5. LIFE networking

The first networking activity has been undertaken at the project with a visit to two wetland systems implemented under the Trebbia project Integrated project - LIFE00 NAT/IT/007166 5/07/2012.

It was subsequently decided to include in the newsletter provided between the activities of this project a section dedicated to LIFE related projects, called its "LIFE CONNECTION". In each issue of the newsletter it was reported the synthesis of a related project. the following related projects have been identified:

ARTWET - Mitigation of agricultural nonpoint-source pesticide pollution and phytoremediation in artificial wetland ecosystems - LIFE06 ENV/F/000133

TREASURE - Treatment and re-use of urban stormwater runoff by innovative technologies for removal of pollutants - LIFE06 ENV/DK/000229

RII - Redevelopment Integrated Hydraulic - environment of the rivers belong to the foothills of Emilia Romagna band - LIFE11 ENV/IT/243

REWETLAND - Widespread introduction of constructed wetlands for wastewater treatment of a Pontine Marshes - LIFE08 ENV/IT/406

LOTWATER - Innovative demonstration project for local treatment of combined sewer overflows enabling the implementation of the Water Framework Directive - LIFE03 ENV/DK/000053

TRELAGHI - eutrophic reduction through natural technics of three little italian lakes waters - LIFE02 ENV/IT/000079

REBORN - Redevelopment Naturalistic for hydraulic-Integrated Environmental Sustainability Channel Emiliani - LIFE13 ENV/IT/000169

In July 2014 LIFE + RII and REBORN projects organized a conference which LAMBROVIVO participated as an auditor in relation to the compensation issue of flooding.

On 21/05/2015 in Collecchio (PR) starting from the initiative of LIFE CONFLUPO and BARBIE an operational networking meeting was organized which involved, in addition to the promoters, LIFE CSMON, LAMBROVIVO, MAKING GOOD NATURA, MERMAINDS, RII, RINASCE and TROTA. The meeting has laid some foundations for broader cooperation between all parties involved. LAMBROVIVO on that occasion brought a second time for networking to take to the National Conference on River Restoration, which took place in Reggio Calabria between 27 and 30 October 2015 (see the website dedicated to the event). The event was attended by representatives of the LIFE + projects RII, TROTA, RINASCE, BARBIE, AQUALIFE, RINASCE, SOS TUSCAN WETLANDS, as well as representatives of LAMBROVIVO project.

A subsequent meeting was organized by the Life CONFLUPO in collaboration with the Life BARBIE in Boretto Po on 29/02/2016. Here AdbPo and 4 regions involved in the

management of the river Po (Piedmont, Lombardy, Emilia Romagna, Veneto) signed a memorandum of understanding "for a sustainable and unified management of fisheries and the protection of fish stocks in the river Po". At this LAMBROVIVO the project did not take part.

However, from the results of this meeting ensued one else at the headquarters of the Lombardy Region in Milan on 19/09/2016. Partners of the following projects have attended or participated remotely: ACQUALIFE, BARBIE, CONFLUPO, CSMON LIFE, GESTIRE, IP GESTIRE 2020, LAMBROVIVO, MAKING GOOD NATURA, RII, RINASCe, TROTA.

6. Financial part

6.1. Costs incurred (summary by cost category and relevant comments).

Below is shown general overview of the costs incurred until 30/03/2017:

Budget breakdown categories	Total cost in €	Costs incurred from the start date to 30.03.2017 in €	% of total costs
1. Personnel	86.912	71.178	81,90%
2. Travel and subsistence	0	0	
3. External assistance	500.159	474.367	94,84%
4. Durable goods			
Infrastructure	3.081.206	846.068	27,46%
Equipment	22.500	19.044	84,64%
Prototype	0	0	
5. Land purchase / long-term lease	0	0	
6. Consumables	8.750	6.438	73,58%
7. Other Costs	0	3.651	
8. Overheads	93.000	50.000	53,76%
TOTAL	3.792.527	1.470.745	38,68%

It is noted a significant increase of the infrastructure costs: this is due to the completion of works of the B7 action “*Rinaturazione del tratto finale della Roggia Cavolto*” and a part of B2 action “*Realizzazione di ecosistemi filtro per il finissaggio delle acque in uscita dai depuratori di Merone e Nibionno con tecniche di fitodepurazione*”.

For B2 action, the works of Nibionno purifier were completed, while the works of Merone purifier are built about 25% and was paid the amount of the 1st SAL (work progress status).

It is expected a further and final increase of infrastructure costs for the start of the works on B4 B5 and B6 areas and the progress of works to Merone purifier.

For the first time appeared the voice “Other Costs” relating on burdens and contributions for the calling of tenders and building practices of the actions that were not initially planned in the budget. In this cost item we will also be counting the costs for the mandatory publication of call of tenders in the newspapers and on the Official Gazette of the Italian Republic.

Below is shown the detail of the costs incurred until 30/03/2017:

Action number and name	Foreseen costs	Spent so far	Remaining	Projected final cost
Action A1 - Avvio del progetto e coinvolgimento degli stakeholders.	5.976	5.590	386	€ 5'590
Action B1 - Creazione e sviluppo di un modello decisionale e di progettazione partecipato.	15.610	15.972	-362	€ 15'972
Action B2 - Realizzazione di ecosistemi filtro per il finissaggio delle acque in uscita dai depuratori di Merone e Nibionno con tecniche di fitodepurazione.	1.908.219	913.668	994.551	€ 1'908'219

Action B3 - Individuazione e riduzione delle fonti inquinanti lungo alcuni affluenti minori del Lambro critici per la qualità delle acque in comune di Inverigo.	8.896	5.825	3.071	€	8'896
Action B4 - Realizzazione di ecosistemi filtro lungo alcuni affluenti minori del Lambro critici per la qualità delle acque in comune di Inverigo.	594.294	23.254	571.040	€	594'294
Action B5 - Creazione di un'area umida permanente lungo l'asta del Lambro nei comuni di Nibionno ed Inverigo (1/2)	240.816	14.540	226.276	€	240'816
Action B6 - Creazione di un'area umida permanente lungo l'asta del Lambro nei comuni di Nibionno ed Inverigo (2/2)	313.250	21.781	291.469	€	313'250
Action B7 - Rinaturazione del tratto finale della Roggia Cavolto	291.640	206.946	84.694	€	291'640
Action C1 - Monitoraggio della partecipazione degli stakeholders.	2.010	725	1.285		725
Action C2 - Monitoraggio della qualità delle acque.	40.910	41.506	-596		41.506
Action C3 - Monitoraggio della qualità dell'habitat.	68.880	15.331	53.549	€	68'880
Action D1 - Implementazione sito web del progetto.	3.230	1.000	2.230	€	3'230
Action D2 - Realizzazione pannelli informativi LIFE+.	8.030	5.832	2.198	€	8'030
Action D3 - Realizzazione relazione per i non addetti ai lavori.	6.672	4.399	2.273	€	6'672
Action D4 - Realizzazione mailing list e newsletter.	5.484	3.908	1.576	€	5'484
Action D5 - Realizzazione blog.	1.750	900	850	€	1'750
Action D6 - Realizzazione convegni e seminari informativi	6.000	4.376	1.624	€	6'000
Action D7 - After LIFE+ Communication	1.720	0	1.720	€	1'720
Action D8 - Layman's report	5.720	0	5.720	€	5'720
Action E1 - Gestione del progetto e monitoraggio avanzamento lavori.	170.420	135.192	35.228	€	170'420
OVERHEADS	93.000	50.000	43.000	€	93'000
TOTAL	€ 3'792'527	1.470.745	2.321.782	€	3'791'217

6.2. Financial audit

On 02/05/2016 the audit was instructed in the person of Dr. Michele Pozzoli (Monza). At the moment three meetings with the Financial Manager and the audit were organized respectively on 21/07/2016, 17/01/2017 and 14/03/2017.