



**LIFE11 ENV/IT/004**

**Inception Report**

**Covering the project activities from 01/06/2012 to 20/03/2013**

**30/03/2013**

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

Data Project

<b>Project location</b>	Municipalities of Inverigo, Nibionno and Veduggio con Colzano
<b>Project start date:</b>	01/06/2012
<b>Project end date:</b>	31/12/2017 <b>Extension date:</b> -
<b>Total budget</b>	€ 2,673,872 (Eligible € 1,531,171)
<b>EC contribution:</b>	€ 566,686
<b>(%) of eligible costs</b>	37.01

Data Beneficiary

<b>Name Beneficiary</b>	Parco Regionale della Valle del Lambro
<b>Contact person</b>	Mr Daniele Giuffré
<b>Postal address</b>	Via Vittorio Veneto, 19, Italy, 20844, Triuggio (MB)
<b>Telephone</b>	+39-0362-970605
<b>Fax:</b>	+39-0362-997045
<b>E-mail</b>	<a href="mailto:daniele.giuffre@parcовойlambro.it">daniele.giuffre@parcовойlambro.it</a>
<b>Project Website</b>	<a href="http://www.progettolambro.it">www.progettolambro.it</a>

## 1. Table of contents

2. List of abbreviations.....	3
3. Executive summary.....	4
3.1 General progress.....	4
3.2 Assessment as to whether the project objectives and work plan are still viable.....	4
3.3 Problems encountered.....	4
4. Administrative part.....	5
4.1 Description of project management.....	5
4.2 Organization chart of the project team and the project management structure.....	5
4.3 Partnership agreements status (incl. date of signature) and key content .....	6
4.4 Other questions.....	6
5. Technical part .....	7
5.1 Actions .....	7
5.1.1 Action A1 .....	7
5.1.2 Action B1 .....	8
5.1.3 Action B2 .....	9
5.1.4 Action B3 .....	11
5.1.5 Action B4 .....	12
5.1.6 Action B5 .....	12
5.1.7 Action C1 .....	13
5.1.8 Action C2 .....	14
5.1.9 Action C3 .....	14
5.1.10 Action D1 .....	14
5.1.11 Action D2 .....	15
5.1.12 Action D3 .....	15
5.1.13 Action D4 .....	15
5.1.14 Action D5 .....	15
5.1.15 Action D6 .....	16
5.1.16 Action D7 .....	16
5.1.17 Action D8 .....	16
5.1.18 Action E1.....	16
5.2 Availability of appropriate licences and authorisations.....	17
5.3 Envisaged progress until next report. ....	18
6. Financial part .....	21
6.1 Putting in place of the accounting system.....	21
6.2 Continued availability of co financing.....	21
6.3 Costs incurred (summary by cost category and relevant comments).....	21
7. Annexes .....	23
7.1 Maps, drawings, technical designs, technical memos etc. as appropriate. ....	23
7.2 Deliverables.....	24
7.3 Output indicators. Definitions. ....	25

## **2. List of abbreviations**

PRVL Parco Regionale della Valle del Lambro  
DRF Dipartimento di Riqualificazione Fluviale (River Restoration Department)  
WWP Waste Water Plant  
WFIG Water Fund Investment Group  
RL Regione Lombardia  
EA Associazione ambientalista (Environmental Association)  
SEA Associazione sportiva e ambientalista (Sport and Environmental Association)

### **3. Executive summary**

#### **3.1 General progress.**

The LAMBRO VIVO activities started on 18th June 2012 with the confirmation of the contribution. This report concerns the actions implemented until 15th December 2012 covering a 6 months period. In this period the project mainly oriented its efforts to:

- a) insert the project as a priority action in the restore plan for River Lambro basin
- b) classify the project in the RL planning of the contract of the river Lambro
- c) develop a distribution strategy identifying a wide network of stakeholders in Lambro Vivo activities, as well as previously identified in the following list:

- PRVL - Beneficiary
- Comune di Inverigo - Municipality
- Comune di Nibionno - Municipality
- Comune di Veduggio con Colzano - Municipality
- Associazione Le contrade - EA
- Associazione Orrido di Inverigo - EA
- Comitato per la difesa delle Bere e del fiume Lambro - EA
- Associazione Il Canneto – EA

The network will be further enlarged during the project life.

- e) plan and organize technical meeting to initiate the participation
- d) plan and develop preliminary design

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

No specific changes were required to the project objectives during the first period of implementation. The expected actions, their timetable and scheduled activities are confirmed.

The only changes could concern the technologies applied to reduce pollutants because, during the preliminary draft, we have examined several possibilities to those provided at the beginning of the project. In the continuation of the project will select the best solution.

#### **3.3 Problems encountered.**

There are two problems we encountered in the first phase of the project. The first problem is due to the uncertain experience of local associations with the themes of river restoration. To solve this problem we have planned for early 2013 a series of thematic meetings, managed by CIRF (Italian Center for River Restoration) that concern the issues tackled by the project.

The second problem is related to the availability of the areas. For this we have already taken steps to meet some owners. In the month of February or March we will have an advanced framework of availability. Regards to action B2 we have recently had confirmation of the availability of significant areas yet owned by the WWPs also larger than those provided, so a large percentage of this problem is yet solved.

At present these problems do not manifest the possibility of delays in the project.

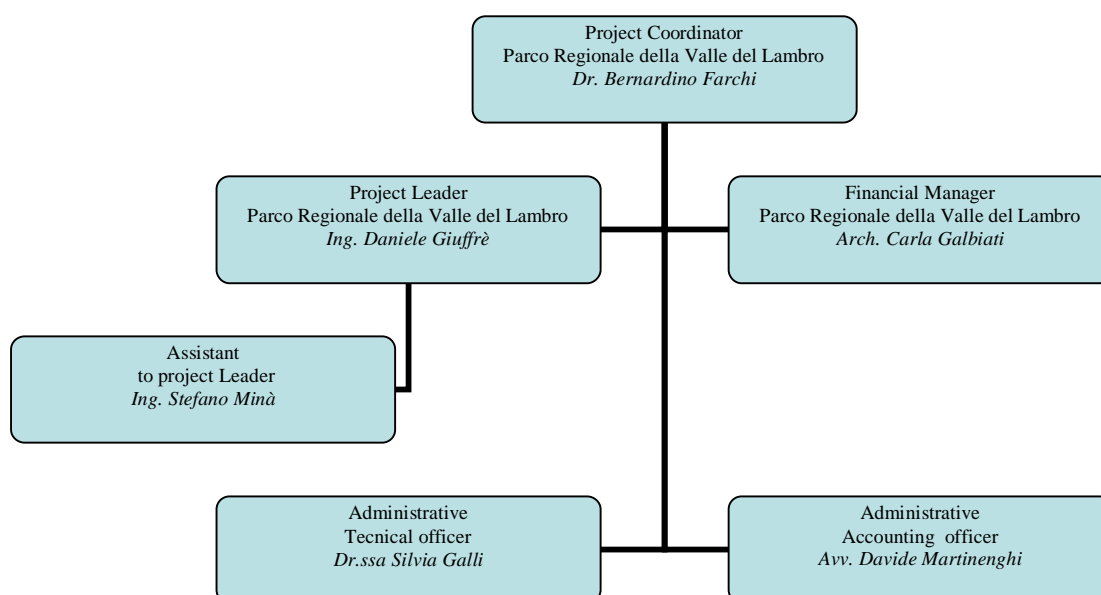
## 4. Administrative part

### 4.1 Description of project management

The Parco Regionale Valle Lambro, as project coordinator, is in charge for project management. This function has been carried out in the reporting period realizing the activities as follows:

- **Participation to the “Kick off meeting on LIFE + 11 Projects” hold in Rome (07.11.2012):**  
Project leader and financial manager attended the Kick off meeting in Rome where the Life + 2011 objectives and procedures were introduced to the Italian beneficiaries.
- **Operational meetings on technical activities:**  
**10.07.2012** – Analysis of Lambro vivo project and Activity planning.  
**06.11.2012** – Re-examination of Common provisions.  
**16.11.2012** - First monitoring visit organization.  
**06.12.2012** – Inception report formulation.
- **First monitoring visit (19.11.2012):**  
The main issues of the visit were: monitor introduction, financial/administrative procedures, dissemination issues and inception report elaboration.

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



It's necessary to point out that Project Leader, Assistant to Project Leader and Financial Manager belong to Dipartimento di Riqualficazione Fluviale (Department of River Restoration) of Parco della Valle del Lambro.

This unit was established three years ago, with Deliberazione di Consiglio di Amministrazione (E.O.) del Consorzio Parco Regionale della Valle del Lambro n. 91, October 20, 2009, to improve its structure in order to meet new hydraulic powers transferred by the Lombardy Region with several Agreements. (see annex Adm\_all01).

The Dipartimento di Riqualficazione Fluviale is composed of professionals engaged for specific projects relating to themes or river restoration on Lambro basin.

#### **4.3 Partnership agreements status (incl. date of signature) and key content**

There are no partners.

#### **4.4 Other questions**

Notice boards. We are providing to meet your needs in the next months. You will have confirm about the state of the art in the next progress report expected at the end of 2013.

VAT eligibility. We will send you the certification about ineligibility of VAT for the Park by the end of 2013.

Modification of grant agreement. We will send you in the next weeks the request for the modified grant agreement including the change of the legal status of the Park.

Networking activities. We point out to your observations that we have yet experienced at least 2 networking activities with other projects, both LIFE and not, and in particular:

- 5/7/2012: eng. Stefano Minà and Teresa Olmeo (Park consultants) visit 3 finishing plants by means of constructed wetlands in Bobbio Valley with representatives of the Piacenza WWP ("LIFE TREBBIA" project, LIFE00NAT/IT/7166, action 4);
- 19/2/2013: a student delegation of University of Tours (France) led by Prof. Karl Matthias Wantzen interested in Park LIFE project, under the supervision of eng. Stefano Minà and Pino Calardo (Park consultants) had a presentation of the entire LIFE project and had a visit on the area where the ecosystem filter on Merone WWP will be realized.

Other minor networking activities were made in this period: with Triple T. Ltd (Israel), with IRIDRA s.r.l. (Florence), with GRAIA Srl (Varese), but not considered so relevant for your issues.

As you can see we are very delighted to encourage networking activities and it will surely do the best to make it happen in the future.

## 5. Technical part

The main objectives of the present project are:

- 1) to develop a shared process for defining actions and choose solutions;
- 2) to improve the quality of surface water by removal of pollution sources, creation of filter ecosystems and increasing river self-purification processes;
- 3) to improve the habitat of the fluvial and perfluvial areas;
- 4) to increase the biological connectivity among the nearby natural areas by means of empowering and connecting the ecological regional corridors of the Lambro river;
- 5) to let students, scientists, citizens and tourists benefit from the natural areas.

### 5.1 Actions

#### 5.1.1 Action A1

**Description.** The objectives of action A1 were the start of the project and the involvement of stakeholders. The project officially began with the confirmation of the contribution of the LIFE +2011 project announced to Parco Valle Lambro on 18/06/2012.

The first subaction was the identification of the stakeholders involved in the project, and this has been done collecting all the voluntary associations that had an historical relationship with the Park and finding new ones born in the meantime all over the Lambro basin.

The second subaction was the organization of meetings the first of which took place on 10/07/2012 in the headquarters of the Park in Triuggio that involved all or part of these associations (see annex A1\_all01) and dealing with the general purposes of the River Agreement. The second took place on 12/07/2012 in the headquarters of the Park in Triuggio and was more specifically based on the LIFE+ project (see annex A1\_all02). The third took place on 14/11/2012 in the headquarters of the Park in Triuggio and (see annex A1\_all03) and the fourth on 20/11/2012 in the headquarters of Regione Lombardia in Milan (see annex A1\_all04).

The feedbacks in all these meetings were quite good and are reported in annexes of action B1.

The third subaction was the implementation of a virtual Forum in which the activities of the meetings can go ahead and can involve all the stakeholders interested in. All majors of the municipalities falling into the catchment area of the Lambro had been invited to participate to the activities of the Forum, and to facilitate them a specific account had been registered for each of them (see annex A1\_all05).

**Problems.** No particular problems were encountered in involving the historical associations and the institutions yet cooperating with the Park in this phase of the project.

**Time schedule.** The beginning of the action has been respected but its end will be delayed until the first half of the 2013 because some of the stakeholders, such as land owners interested by the project, for example, has not been identified yet. This action will naturally flow into the B1 action that more specifically deals with the involvement of the stakeholders in the decision-making process by means of meetings and operating worktables.

**Objectives.** The objectives will be achieved only at the end of the entire decision-making process, so you have to refer to the action B1.

### 5.1.2 Action B1

**Description.** The goal of the B1 action was to create a participated model for decisions and design that has been already mentioned in the action A1; it was divided into a real Forum, organized on live meetings, and a virtual Forum based on a web platform.

Both the Forums at present are already active; in particular you can follow and participate especially in real time to the building of the Forum suggesting actions, sharing ideas and proposals as corollary to the Restoration Plan of the Lambro River basin and its tributaries, to be done on [www.progettolambro.it](http://www.progettolambro.it) site.

From mid-September the discussion boards involving the associations started to analyze the work done so far and the actions that will be implemented over the next two decades to clean up the river. Associations, municipalities and local authorities, who were invited to participate in the Forum, have the opportunity to express opinions, propose solutions and interventions until mid-March. If you want to have an overview of the subjects and proposals arisen out of the Forum see annexes B1\_all01 to B1\_all04.

In the later stages the Forum will be divided into four thematic groups (water quality, habitat quality, usability and flood risk), which will be the place where to discuss all possible solutions to the different problems of the river and reach a solution that is both feasible and shared by the local actors.

In september 2012 associations developed a set of guidelines that synthesized in a document deposited at the headquarter of the Park (see annex B1\_all05).

**Problems.** One of the problems that emerged from the first sessions of the Forum of associations is precisely related to the method will be used to select the entities and associations to intervene to the thematic tables. One solution would be to use the virtual forum to disclose the invitations and also request the membership to join to the meetings.

Also the involved associations showed a certain diffidence towards the projects promoted by the Park because of its past policy that allowed the realization of impacting works on the river and its habitat. A way to overcome this problem will be to involve the associations in a more stringent and operational manner.

**Time schedule.** The beginning of the action has been respected and also its end will probably be respected.

**Objectives.** The objectives will be achieved only at the end of the entire decision-making process.

**Requested integrations.** It is impossible to disconnect the activities regarding LIFE+ project and the River Lambro Agreement: they are strictly connected and represent an added value and a guarantee for each other success, so you will see until the end of the project both logos and texts.

It is true that it was not given up to now adequate visibility to LIFE+ program exposing logos and acronyms. It has already solved this setting and in the next documentations these needs will be met.

The composition of the secretariat of the Forum is finally defined and it is composed by five persons: dr Silvia Galli (official employee of the Park), arch. Carla Galbiati (consultant of the Park for the River Agreement) as administratives; dr. Pasquale Longobardi (moderator of the Forum); eng. Daniele Giuffré and Stefano Minà (consultant



of the Park for the River Agreement) as technicians (see annex B1\_all06). The scheduling of the meetings and their management protocol are indicated in annex B1\_all07. As to the composition of the workgroups, considering the strict interconnection between the themes indicated in the original project, we decided to contemplate one only group that will work on the whole proposed actions.

### 5.1.3 Action B2

**Description.** Action B2 was designed to improve the quality of the effluent outgoing from the wastewater plants of Merone and Nibionno, that actually spill their discharge directly into Lambro river apportioning a considerable and constant amount of nutrients. This fact became a particularly critical situation especially during the dry seasons when there is low flow in the river and an adequate dilution is not guaranteed.

The initial idea was to realize both for Merone and Nibionno plants two different ecosystem filters able to refine the effluent.

With the purpose of having an overview on the solutions adopted in the last years for the treatment of WWP effluent, two technicians of the River Restoration Department of the Park visited on 05/07/2012 some ecosystem filters realized downstream little WWP (from 2000 to 5000 E.I.) in Trebbia valley nearby Bobbio, province of Piacenza. These systems were realized in the '90s with LIFE+ co-financing funds and are still working with satisfactory results, although, in the opinion of the Director of the management company, they are rather expensive relatively to maintenance (about 20.000 € per year per plant, all used for mowing plants; see annexes B2\_all01 to B2\_all05).

The first plant considered has been Merone WWP, the larger and more efficient one. Several meetings has been organized during the last weeks involving the plant director and his team, with the aim of identify in detail the characteristic the finishing system should have and the goals it should achieve. In these initial meetings was also invited a representative of the Water Fund Investment Group of Israel as promoter of an innovative technology for removal of pollutants in wastewaters. The purpose was also to check the adaptability of such systems to the needs of the projects and the availability of spaces.

The first meeting took place on 26/06/2012 at the treatment plant in Merone, a second on 10/09/2012, a third on 1/10/2012. In this period the DRF of the Park collected a series of data about Merone WWP useful for next considerations. In particular:

- map of the sewerage of the drained basin (B2\_all06);
- data about the quality of influent and effluent of Merone WWP (B2\_all07);
- hydraulic characteristic of the floodway pipe of Merone WWP (B2\_all08).

At the same time were collected a series of characteristics and performances of the treatment system proposed by Israeli WFIG. A consultant of the DRF of the Park also provided a comparison between traditional wetland system and the so called "Triple-T" proposed by WFIG and a possible application of the Israeli system on the area nearby the WWP. You can find these information into the following annexes:

- presentation of the Yad Hanna Wetlands report realized by WFIG (annex B2\_all09);
- comparison between Triple-T and traditional wetlands (annex B2\_all10);
- feasibility study regarding the hypothetical Triple-T solution applied on Merone WWP (annexes B2\_all11 to B2\_all13);
- draft proposal presented by WFIG on the hypothetical Triple-T solution applied on Merone WWP (annex B2\_all14).

There is also an important consideration on the evolution of the project as originally conceived, in particular regarding Merone WWP.

The original idea was to treat the effluent with the aim of reducing its amount of pollutant, especially organic; this need would have required a very big area in the case of a traditional wetland system, due to the large flow outgoing from the plant, and a smaller one in the case of a Triple T system, but ensuring a marginal improvement of the quality of the water.

The Director of the plants highlighted instead how dangerous and harmful to the environment are usually the spillway discharge especially in case of violent and sudden storms that are becoming more and more frequent during the summer. These events induce a quick crisis of the drainage net with consequent discharge in the river of a large amount of pollutant with concentrations that in most cases can exceed by several times the ordinary concentration of the same pollutant in the effluent. Furthermore the considerable difference in temperature between the flow discharged (colder) and the water of the river (warmer) surely cause a thermal and oxygenation shock that is often lethal to fishes. For all these reasons he suggested to evaluate the chance of treating the overflow, especially the so called "first flush" (the first and more polluted water overflowed), rather than the ordinary effluent, also considering that the plant is going through a restructuration that will comport an improvement in the quality of the same, while the overflow exits from the plant without any treatment (in the future there will be only a grilling and maybe a primary treatment for overflow). The Director also provided a series of data (examples in annexes B2\_all15 and B2\_all16) to support his thesis.

At the moment the decision of the Park is more oriented on the treatment of the overflow, more dangerous and harmful (there have been evidences in this in the successions of summer fish kills happened in the last years). The more suitable technical solution will be decided probably by means of an open tender competition based on a preliminary design that will be realized in the first weeks of 2013.

Regarding to the plant of Nibionno it will also be object of a partial restructuration that however will not improve significantly the quality of the effluent. For this reason is still in vogue the hypothesis of treating the effluent but probably in a different position respect to the one presented in the original idea. Up to now the only information collected on this second subaction are:

- data about the quality of influent and effluent of Nibionno WWP (B2\_all17 to B2\_all18);
- layout of the project of the restructuration of Nibionno WWP (B2\_all19).

The next steps for Nibionno plant will be quite similar to those adopted for Merone plant, scheduling some meetings with the management team of the plant and refining with them objectives and availability of lands.

**Problems.** The main problem encountered up to now regarding to the plant of Merone was to redirect the focus on the new request made by the responsible of the plant, surely more useful and interesting for the achievement of the quality objectives of the river.

The succeeding problem, still existing, is the choice between a more natural and with a lower efficiency technology option, such as the ecosystem filter, and a more artificial solution, similar to Triple T system, that would guarantee better results and in less time.

This problem will be faced and overcome by means of a tender based on a preliminary design in which the participants will choose the better solution they believe can optimize the results and minimize the costs.

**Time schedule.** There was a little late in time schedule because it would have been better to have a preliminary project yet done for both the plants; the reasons for this delay were explained above. Considering the problem encountered up to now there will be an expected delay also for the end of the action that probably will extend in the first half of 2015.

**Objectives.** The next objective will be the drafting of the preliminary design for both Merone and Nibionno plants, and this will be completed in the first half of the 2013. No objectives in terms of quality of the water should be appreciated until the entire system will be realized.

**Requested integrations.** As to the technical solution finally adopted in the preliminary project for Merone (see annex B2\_all20) we chose to present a system based on a primary basin with the function of accumulation, homogenization and sedimentation, and a secondary treatment type Free Water Surface mixed with Filter Forestry Systems. This last decision was adopted to meet the most the actual intended land use and existing habitat, that is very rare in this Natural Park, and also considering that a more technological solution would encounter a lot of bureaucratic and consensus obstacles. The Free Surface was also preferred to the Submerged one considering its greater adaptability to high flows.

You will also see that the final cost of the action is increased compared to the initial declared: we assure you that all the extracosts will be covered by the Park and no integration will be requested to the Commission.

The case of Nibionno plant is a bit more complicated because it is less functional and performant, the decision path started recently (the first meeting with the representatives of the plant, Province and sewerage company was on 18/02/2013) and the availability of funding for the upgrade of the plant is not sure. We expect to face it just finished the preliminary design for Merone.

As to the availability of lands both the plants assured and demonstrated us that all the surrounding appliances have already been acquired by them in the past.

#### 5.1.4 Action B3

**Description.** The action B3 started ahead of schedule. The technicians of DRF of the Park have completed the first subaction consisting in the identification of the sources that put the burden on the river interested, Villa Romanò river and Orrido di Inverigo river.

This phase was supported by the technicians of the municipality of Inverigo who provided the drawings of the river net and the sewerage (see annex B3\_all01).

On 15/11/2012 there was a meeting at Inverigo town hall in which mayor and the interested aldermen were informed about the state of the art of the project, and the technicians of the commune provided some specific information.

On 20/11/2012 and 23/11/2012 both technicians of Inverigo municipality and DRF of the Park carry out inspections to watch the live situation (see annex B3\_all02 to B3\_all06).

The next step will be the activation of all the administrative and technical procedures necessary for the removal of these sources.

**Problems.** No particular problems were encountered in identifying the sources of pollution burdening on the rivers indicated.

**Time schedule.** The time schedule has been anticipated but prudentially the deadline of the action will remain the same.

**Objectives.** The objective of the identification of the sources of pollution is completed. Now the next objective will be represented by the subaction necessary to the removal of the provision of pollutant and this will be reached only at the end of the entire action.

**Requested integrations.** As to the state of the art of the river you can see annex B3\_all07. As to the next scheduled actions we intend: ask to Nibionno WWP (manager of the sewer system) the repair of not working sewer overflow structures; ask to Inverigo Municipality an agreement concerning their regular maintenance.

#### 5.1.5 Action B4

**Description.** Action B4 is to refer two ecosystems filter on two tributaries of the River Lambro in the City of Inverigo.

The two streams are interested in the canal of Villa Romanò and the Orrido of Inverigo.

The purposes of ecosystems filter are to: remove the pollutants poured by the sewerage occasionally remove the pollutants poured in case of rain and also stabilize the flow rates of lean.

The action has already been developed in the preliminary project of the Park of the Lambro Valley in December 2012.

The ecosystem filter on canal Romanò will be realized where they meet the two supply branches of the canal, with the purpose to treat the organic substances from the first three discharges of overflows on the course of water (see annex B4\_all01).

The ecosystem filter on Orrido will be realized just before the confluence of the River Lambro and will serve to bring down the contributions from the latest overflow and from discharge of the lakes fishing (see annex B4\_all02).

**Problems.** During the preliminary project there have not been specific problems for the development of the B4.

**Time schedule.** The action B4 was anticipated with respect to the provisions of the Timetable stated in Technical Application Form. In fact, the action B4 should have started in the second quarter of 2013. The action will then be developed in the future design phase (final project and executive project).

**Objectives.** The two ecosystems filter will surely reachable the objectives of removing total or partial of pollutants on two rivers. In the future to completely solve the problem of pollutants will need to adapt the sewer system.

#### 5.1.6 Action B5

**Description.** The action B5 is to achieve a wetland area in floodplain upstream of the SP 342, at a bend designed in the past by a work of artificiality, in the towns of Nibionno and Inverigo. The action B5 is important for: improving the deviation previously realized on the riverbed, for removing the roadbed improper along the banks and creating areas to allow water to spread in the area.

The action has already been developed in the preliminary project of the Park of the Lambro Valley in December 2012 (see annex B5\_all01).

To create the wetland first we remove boulders placed on the bottom of the flume and boulders of the bank on the left bank, located on the flume. Then we will lower the level of the islet, at the center of the meander natural and artificial, to allow more frequent flooding. Then we will sweeten the banks to facilitate a wider band of pertaining of the river and we will plant and aquatic species of indigenous trees within the islet.

In order to achieve the wet area, then we will proceed with the lowering of about one meter of the entire surface and with the lowering of its slope, to ensure that the work will be as natural as possible.

The whole area will also be naturalized again thanks to the planting of arboreal species along the entire perimeter.

In addition there is also the formation of a space dedicated to the rescue of fish during the occurrence of a pollution incident, in particular, it will consist of a dead channel powered by regurgitation of the current on valley (backwater) and positioned along the left bank of the river. This configuration will prevent that any pollutants in transit in the current can become established in the dead channel and in this way will be maintained a protected environment in which the animals may take refuge pending exhaustion of the phenomenon of pollution.

Finally, you will protect the newly built cycle path, replacing the stones previously removed from the banks, in a far back area along the left bank of the river, this will leave you free rein to natural course of water.

**Problems.** During the preliminary project there have not been specific problems for the development of the B4.

**Time schedule.** The action B4 was anticipated with respect to the provisions of the Timetable stated in Technical Application Form. In fact, the action B4 should have started in the second quarter of 2013. The action will then be developed in the future design phase (final project and executive project).

**Objectives.** The two ecosystems filter will surely reach the objectives of removing total or partial of pollutants on two rivers. In the future to completely solve the problem of pollutants will need to adapt the sewer system.

**Requested integrations.** The annex reported is an advanced version of the preliminary project that was pre-examined by the Lombardy Region and will be submitted to the discussion of the Forum in the next weeks. For these reasons you don't have to consider it a final version and the timeline for the next deliverables will remain the same.

### 5.1.7 Action C1

**Description.** The action C1 consists in monitoring the participation of stakeholders and was evaluated mainly by means of the time sheets of the meetings, the number of accesses to the website and the virtual forum. The results were the following (see annexes C1\_all01 to C1\_all04):

- an average of **about 25** different participants in the live meetings;
- **2746** single visitors to the website in the last **6** months;
- **91** enrolled in the virtual forum in the last **6** months.

**Problems.** The main problem occurred has been to involve as many people in the virtual forum. It is very probable that people interested in the project is not particularly accustomed to the use of the social networks because of their age, although the choice of the virtual forum was aimed to achieve that portion of potential young stakeholders.

**Time schedule.** The monitoring of the participation of stakeholders has gone hand in hand with the corresponding actions aimed in their involvement. It started in early July 2012 and will end at the end of 2013.

**Objectives.** The objective is to involve at least a hundred people into the entire participatory process. People currently involved are in total **91**.

### 5.1.8 Action C2

**Description.** The activity started in the fourth quarter of 2012 and the first phase was mainly dedicated to collect data from WWP (see annexes B2\_all07, B2\_all17 and B2\_all18; more details will be presented in the “relazione monitoraggio acque 2012” – see deliverables). The second phase, based on field measurements, will start in 2013 and will be organized monitoring a series of points near the placement of the concrete action (upstream and downstream). More details (number of points, their location, parameters measured) will be reported into the document “relazione iniziale monitoraggio acque” – see deliverables.

**Problems.** No particular problems were encountered up to now.

**Time schedule.** Respected.

**Objectives.** They will be reached only at the end of the monitoring programme.

**Requested integrations.** You can find all the answers to your questions in the annexes C2-3\_Del02 and C2-3\_Del03. You can also find the estimation requested to the consultant involved in this activity (C2\_all01) and that of the laboratory for the analysis (C2\_all02).

### 5.1.9 Action C3

**Description.** The activity started in the third quarter of 2012 and the first phase was mainly dedicated to collect historical data about birds, fishes and macrobenthos (more details will be presented in the “relazione monitoraggio habitat 2012” - see deliverables). The second phase, based on field censuses, will start in 2013 and will be organized monitoring a series of points near the placement of the concrete action (potential habitat for birds, fishes and macrobenthos). More details (number of points, their location, species surveyed) will be reported into the document “relazione iniziale monitoraggio habitat” – see deliverables.

**Problems.** No particular problems were encountered up to now.

**Time schedule.** Respected.

**Objectives.** They will be reached only at the end of the monitoring programme.

**Requested integrations.** You can find all the answers to your questions in the annexes C2-3\_Del02 and C2-3\_Del03. You can also find the estimation requested to the consultant involved in this activity (C2\_all01 and C3\_all01).

### 5.1.10 Action D1

**Description.** A website has been implemented with the domain [www.progettolambro.it](http://www.progettolambro.it) containing most of the materials prepared for the River Agreement and so also for the LIFE+ project. It will be continuously updated as new steps will be done and new material will be available.

**Problems.** There have not been particular problems for the implementation of this action.

**Time schedule.** Completely respected.

**Objectives.** Up to now we have had **3000/yr.**

**Requested integrations.** What has been requested will be implemented and applied in the month of April 2013, and also all the produced deliverables up to now will be published.

#### **5.1.11 Action D2**

Not yet started according to proposed time scheduling.

**Requested integrations.** What has been requested will be produced and installed not before the beginning of 2014, considering that only at that date we will have a certain definition of all the projects and so some design materials will be available.

#### **5.1.12 Action D3**

**Description.** The activity is not yet started.

**Problems.** The main problem was linked to the difficulty in the involvement of specialized professions due to the delay of the accounting in the budget of the Park. This forced the actual short team of DRF to face these activities in a very reduced time.

**Time schedule.** There was a little delay. The first relation will be produced and published online within 31/01/2013.

**Objectives.** They will be demonstrated only at the end of the action.

#### **5.1.13 Action D4**

**Description.** A newsletter has been implemented starting from september 2012 and it is downloadable on [www.progettolambro.it](http://www.progettolambro.it) site. The mailing list is under construction and probably will be activated at the beginning of the 2013.

**Problems.** There have not been particular problems for the implementation of this action except for the definition of the contacts of the mailing list, not yet done.

**Time schedule.** There was a little delay.

**Objectives.** The number of the contacts of the mailing list will be indicated in the next report.

**Requested integrations.** We will improve the contents of the newsletter and give more space to the report of the meetings of the Forum, as requested.

#### **5.1.14 Action D5**

**Description.** A blog has been implemented starting from september 2012 and it is accessible on [www.progettolambro.it](http://www.progettolambro.it) site.



**Problems.** The hacker attack that caused a delay on the operations, faced with the change of domain ad security level. Also the participation to the blog, especially by the associations, is not so satisfactory; this will be faced promoting in a more passionate manner this instrument.

**Time schedule.** There was a little delay because during its implementation an hacker attack occurred that caused a large amount of junk content. Then the web administrator was obliged to change domain and security level.

**Objectives.** Actually we have **91** contacts registered on the blog.

**Requested integrations.** We will improve the contents of the blog and give more visibility to the action concerning the LIFE project as requested.

### 5.1.15 Action D6

**Description.** The activity is not yet started.

**Problems.** The main problem was linked to the difficulty in the involvement of specialized professions due to the delay of the accounting in the budget of the Park. This forced the actual short team of DRF to face these activities in a very reduced time.

**Time schedule.** There was a little delay. The first convention will be organized in mid-January.

**Objectives.** They will be demonstrated only at the end of the action.

### 5.1.16 Action D7

Not yet started according to proposed time scheduling.

### 5.1.17 Action D8

Not yet started according to proposed time scheduling..

### 5.1.18 Action E1

**Description.** This LIFE project will be led by the DRF of the Park. Actually it consists of 3 persons, all engineers, but it will be necessary to increase the number up to 6 persons, or further delays will be probable. The administrative and financial sides have been assigned to other offices of the park, in particular the Accounting and the Administration: this is the team that deals with the project. Related timesheets are reported in annexes E1\_all01 to E1\_all04.

Into annex E1\_all05 the initial output indicators are reported.

The more technical activities are treated directly by the DRF, among these:

- forum management, participation, conduction and reporting;
- field inspections;
- data collection;
- numerical modeling and calculations;



- preparation of the projects (drawings and texts);
- participation in the meetings for authorizations;
- implementation and maintenance of the website;
- preparation of the newsletter.

The other activities were carried out by the other offices, such as:

- time spent on the project by employees and consultants and related costs;
- mail and communications sorting;
- other reportings.

**Problems.** It will be necessary to increase the number of persons dedicated to the project. At the moment all persons involved also deal with other works and are unable to devote enough time to some of the activities proposed. We intend to engage at the beginning of the 2013 2 part-time consultants that will ease this situation.

**Time schedule.** Completely respected.

**Objectives.** The objectives have been almost all caught, with few delays that will be repaired in the next months.

**Requested integrations.** You can find all the answers to your questions in the annex E1\_all06.

## 5.2 Availability of appropriate licences and authorisations

No authorizations or licenses were needed at the moment.

**Requested integrations.** For actions B2 and B5 the following authorizations will be required:

- landscape permit (released by the Park after listened the Superintendency to cultural heritage);
- hydraulic clearance (released by AIPO, the hydraulic authority);
- authorization to the transformation of land use (released by the Park);
- authorization to discharge (released by the Province);
- authorization for works in the riverbed (released by the Province);
- possible environmental impact assessment (released by the Region).

For actions B4 the following authorizations will be required:

- landscape permit (released by the Park after listened the Superintendency to cultural heritage);
- hydraulic clearance (released by the municipality);
- possible authorization to the transformation of land use (released by the Park);
- possible environmental impact assessment (released by the Province).

Among all the longest procedure is the landscape permit that requires at least 60 days for the Superintendency to express its opinion.

To ensure the speeding up in obtaining the authorizations will be of course adopted the institution of the Conference of Services (act 241/1990 and modifications).

Up to now none of these authorizations have been obtained, also considering that they presuppose a definitive or executive project.

### **5.3 Envisaged progress until next report.**

The next proposed progress report will be presented within the 31/12/2013. Until that date the foreseen objectives that will be reached are:

- A1: completion of the action with the involvement of the residual stakeholder not yet contacted;
- B1: completion of the action with the approval of participated lines of action, pre-feasibility studies or even preliminary projects for all the implementation actions;
- B2: redaction and approval of preliminary and nomination for the definitive project for both WWP;
- B3: completion of the action with the resolution of sewerage troubles faceable with simple maintenance and adaptation of the artifacts and removal of the unauthorized discharges;
- B4 and B5: redaction and approval of preliminary and nomination for the definitive project;
- C1: completion of the action with the final results about the participation to the Forums (real and virtual one);
- C2 and C3: start of the second phase of the monitoring plan by means of field inspections with measurement of the proposed parameters;
- D1, D4 and D5: prosecution of the actions with the maintenance of the web platform (site and blog/virtual Forum) and redaction and forwarding of newsletters;
- D2: start of the action at the end of the 2013;
- D3 and D6: start of the actions at the beginning of the 2013;
- E1: prosecution of the action necessary to the progress and success of the entire project.

Tasks/ Activities		2012				2013				2014				2015				2016				2017						
		1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T			
Overall project schedule	Proposed	Start		O				Mid-Term		O							O	End implementation			Final report			O				
		Progress reports:			X				X				X				X				X							
	Actual			O																								
Action A1	Proposed		■	■	■	■																						
	Actual		■																									
Action B1	Proposed		■	■	■	■	■	■	■	■	■	■	■	■	■	■												
	Actual		■																									
Action B2	Proposed		■	■	■	■	■	■	■	■	■	■	■	■	■	■												
	Actual		■																									
Action B3	Proposed			■	■	■	■	■	■																			
	Actual		■																									
Action B4	Proposed				■	■	■	■	■	■	■	■	■	■	■	■												
	Actual		■																									
Action B5	Proposed									■	■	■	■	■	■	■												
	Actual		■																									
Action C1	Proposed		■	■	■	■	■	■	■	■	■	■	■	■	■	■												
	Actual		■																									
Action C2	Proposed		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
	Actual		■																									
Action C3	Proposed		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
	Actual		■																									
Action D1	Proposed	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
	Actual	■																										
Action D2	Proposed								■	■	■	■	■	■	■	■												
	Actual								■																			
Action D3	Proposed		■	■	■	■	■	■	■	■	■	■	■	■	■	■												
	Actual		■																									
Action D4	Proposed		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
	Actual		■																									
Action D5	Proposed		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
	Actual		■																									



## 6. Financial part

### 6.1 Putting in place of the accounting system.

The Parco Regionale della Valle del Lambro has its own accounting system, according to rules for public agency which allows traceability and charge of income and expenditure. Timesheets are updated monthly and validated by project coordinator.

### 6.2 Continued availability of co financing.

There are no co-financing.

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

The following table summarises the expenses in the period June 2012 – December 2012 according to the budget allocation:

**Requested integrations.** Updated to 28<sup>th</sup> February 2013.

Budget breakdown categories	Total cost in €	Costs incurred from the start date to 28.02.2013 in €	% of total costs
1. Personnel	86,912	5,529	0,21%
2. Travel and subsistence	25,000	0	0%
3. External assistance	542,000	3,332	0,13%
4. Durable goods			0%
Infrastructure	1,477,601	0	0%
Equipment	69,000	0	0%
Prototype	0	0	0%
5. Land purchase / long-term lease			0%
6. Consumables	21,250	0	0%
7. Other Costs	351,939	0	0%
8. Overheads	100,170	1,560	0,06%
<b>TOTAL</b>	<b>2,673,872</b>	<b>10,421</b>	<b>0,39%</b>

During the first 7 months of project, costs concerns project personnel according to the preliminary activities realised in several actions.

The reason of the relevant underspending is exposed hereafter:

- EU contribution have been accounted at the end of November with the last change of budget and so only from that moment we started entrusting work assignment of external assistance specifically referred do LIFE+ project;
- moreover the payment box has been closed since 7<sup>th</sup> December 2012;
- the actions started up to now required consultants that in the first months of activity were committed on the basis of existing contracts signed before the confirmation of the contribution of the European Union; these contracts will expire with the end of the year 2012 and will not be accountable for EU. The next contracts, to sign in these days, instead will report all LIFE+ indications and will be accountable for EU.
















































Given the above, we expect to expend and exceed the 150% of the prefinancing (about 340.000 €) towards the first half of 2014.

Action number and name	Foreseen costs	Spent so far	Remaining	Projected final cost
Action A1 - "Avvio del progetto e coinvolgimento degli stakeholders"	5,976	1,419	4,557	
Action B1 - "Creazione e sviluppo di un modello decisionale e di progettazione partecipato."	55,610	1,958	53,652	
Action B2 - "Realizzazione di ecosistemi filtro per il finissaggio delle acque in uscita dai depuratori di Merone e Nibionno con tecniche di fitodepurazione. "	1,673,980	1,666	1,672,314	
Action B3 - "Individuazione e riduzione delle fonti inquinanti lungo alcuni affluenti minori del Lambro critici per la qualità delle acque in comune di Inverigo."	34,230	1,666	32,564	
Action B4 - "Realizzazione di ecosistemi filtro lungo alcuni affluenti minori del Lambro critici per la qualità delle acque in comune di Inverigo."	313,180	-	313,180	
Action B5 - "Creazione di un'area umida permanente lungo l'asta del Lambro nei comuni di Nibionno ed Inverigo."	118,950	-	118,950	
Action C1 - "Monitoraggio della partecipazione degli stakeholders"	2,510	577	1,933	
Action C2 "Monitoraggio della qualità delle acque."	101,020	-	101,020	
Action C3 - "Monitoraggio della qualità dell'habitat"	67,220	-	67,220	
Action D1 - "Implementazione sito web del progetto"	7,000	-	7,000	
Action D2 - "Realizzazione pannelli informativi LIFE+"	7,000	-	7,000	
Action D3 - "Realizzazione relazione per i non addetti ai lavori"	6,672	-	6,672	
Action D4 - "Realizzazione mailing list e newsletter".	6,234	661	5,573	
Action D5 - "Realizzazione blog"	1,250	-	1,250	
Action D6 - "Realizzazione convegni e seminari informativi"	6,000	-	6,000	
Action D7 - "After LIFE+ Communication"	0	-	0	
Action D8 - "Layman's report"	4,000	-	4,000	
Action E1 - "Gestione del progetto e monitoraggio avanzamento lavori"	162,870	914	161,956	
Overheads	100,170	1,560	98,610	
<b>TOTAL</b>	<b>2,673,872</b>	<b>10,421</b>	<b>2,663,451</b>	

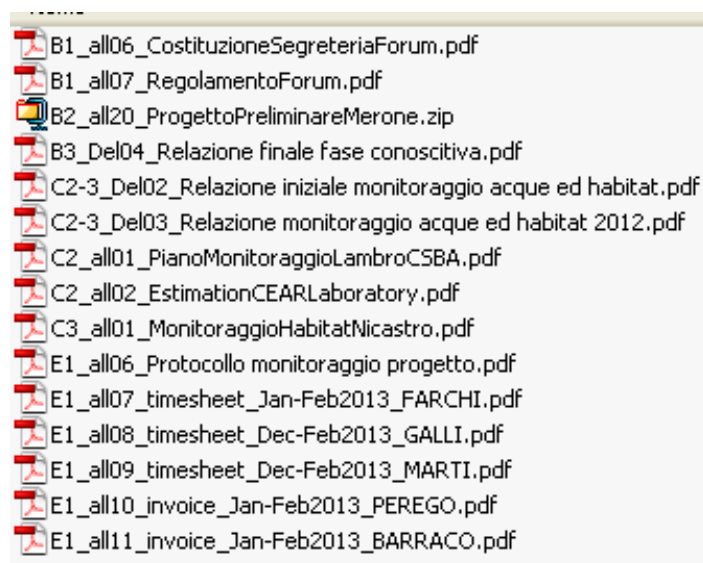
## 7. Annexes

### 7.1 Maps, drawings, technical designs, technical memos etc. as appropriate.

Hereunder a list of all the annexes is reported.

-  A1\_all01\_Convocazione forum Associazioni\_avvio\_10\_lug\_2012.pdf
-  A1\_all02\_Convocazione\_seduta\_avvio\_12\_lug\_2012.pdf
-  A1\_all03\_Invito\_incontro\_2012\_11\_14.pdf
-  A1\_all04\_Invito\_comitato\_2012\_11\_20.pdf
-  A1\_all05\_Lettera sindaci piano azioni.pdf
-  Adm\_all01\_Delibera istituzione DRF e all.pdf
-  B1\_all01\_verbale\_Forum\_associazioni\_2012\_07\_10.doc
-  B1\_all02\_verbale\_12-07-2012.doc
-  B1\_all03\_Verbale\_CdF\_Forum delle associazioni\_14nov12.doc
-  B1\_all04\_report\_tavolo tecnico CdF\_20\_11\_2012.doc
-  B1\_all05\_Contributo associazioni TOTALE.pdf
-  B2\_all01\_2012-07-05 12.39.25.jpg
-  B2\_all02\_2012-07-05 12.13.09.jpg
-  B2\_all03\_2012-07-05 12.16.56.jpg
-  B2\_all04\_2012-07-05 12.19.29.jpg
-  B2\_all05\_2012-07-05 12.29.15.jpg
-  B2\_all06\_Cartografia collettori\_vasche di 1°pioggia.pdf
-  B2\_all07\_Gen-Set 2011\_Asil Spa\_Dati Impianto In-Out.xls
-  B2\_all08\_Scolmatore\_lambro\_merone\_allegato.doc
-  B2\_all09\_TRIPLE-T - Yad Hanna Wetlands report.pdf
-  B2\_all10\_CONFRONTO FITO-TRIPLE-T revisione 1.pdf
-  B2\_all11\_Merone - Fattibilità - Tav1 A4.pdf
-  B2\_all12\_Merone - Fattibilità - Tav2 A4.pdf
-  B2\_all13\_Merone - Fattibilità - Tav3 A4.pdf
-  B2\_all14\_Triple-T - DRAFT Proposal Presentation for Merone v1.1 2012\_09\_10.pdf
-  B2\_all15\_Portate05060708091011\_rev2011\_12\_31\_Parco.xls
-  B2\_all16\_Analisi portate sfiorate.pdf
-  B2\_all17\_Per parco Valle Lambro\_2010.pdf
-  B2\_all18\_Per parco Valle Lambro\_2011.pdf
-  B2\_all19\_Planimetria progetto VALBE.pdf
-  B3\_all01\_Rete fognaria comunale-r06 Layout1 (1).pdf
-  B3\_all02\_2012-11-20 10.08.15.jpg
-  B3\_all03\_2012-11-20 10.52.27.jpg
-  B3\_all04\_2012-11-20 11.14.48.jpg
-  B3\_all05\_2012-11-23 09.17.23.jpg
-  B3\_all06\_2012-11-23 10.35.53.jpg
-  B4\_all01\_Ecosistema filtro Roggia Romanò.pdf
-  B4\_all02\_Ecosistema filtro Orrido.pdf
-  B5\_all01\_Area umida a monte della SP342.pdf
-  C1\_all01\_foglio presenze\_forum\_associazioni\_2012\_07\_10.pdf
-  C1\_all02\_Foglio presenze 12-07-2012.pdf
-  C1\_all03\_Firme 2012\_11\_14.pdf
-  C1\_all04\_presenze\_CTLS\_20nov2012.pdf
-  E1\_all01\_timesheet\_Jul2012\_GALLI.pdf
-  E1\_all02\_timesheet\_nov\_dec\_2012\_GALLI.pdf
-  E1\_all03\_timesheet\_nov\_dec\_2012\_MARTINENGHI.pdf
-  E1\_all04\_timesheet\_Jul2012\_MARTINENGHI.pdf
-  E1\_all05\_Initial output indicators.xlsx

And hereunder is also a list of all the annexes added as integrations.



## 7.2 Deliverables

Among the annexes you can find the only deliverable realized up to now (C1\_Del01). The residuals expected within 31/12/2012 will have a little delay and will be sent within 15/02/2013.

Hereafter a short presentation of the deliverables expected is reported.

### Action A1:

- as to the first and only deliverable (Fascicolo informativo finale), originally scheduled by the end of 2012, by reason of the actual end of the action we expect to deliver it within 30/06/2013.

### Action B3:

- as to the first deliverable (Relazione finale fase conoscitiva), originally scheduled by the end of 2012, we expect to deliver it with a little delay but within 15/02/2013;
- as to the intermediate deliverable (Relazione finale fase operativa), originally scheduled within 31/03/2013, we expect to deliver it within 30/06/2013;
- as to the final deliverable (Relazione finale), originally scheduled within 30/09/2013, by reason of the actual end of the action we expect to deliver it within 31/12/2013;

### Action C2:

- as to the first deliverable (Relazione iniziale monitoraggio acque), originally scheduled by the end of 2012, we expect to deliver it with a little delay but within 15/02/2013;
- as to the second deliverable (Relazione monitoraggio acque 2012) it will be sent within 15/02/2013.

### Action C3:

In analogy with the deliverables expected for action C2 the followings are expected:



- the new first deliverable (Relazione iniziale monitoraggio habitat) will instead be anticipated from the original scheduling (30/06/2013) to the same date expected for the first deliverable of action C2 (15/02/2013);
- the second deliverable (Relazione monitoraggio habitat 2012) will be sent together with the previous within 15/02/2013;

Progress report:

The next progress report is expected to be sent within 30/11/2013.

Other progress reports will be sent at the end of every year: 30/11/2014, 30/11/2015, 30/11/2016.

Midterm report:

Considering the actual date for the exceeding of the 150% of the prefinancing, the correspondent Midterm report (one only) is expected to be sent within 30/06/2014 (it will replace the two midterm reports incorrectly proposed in the application form).

### **7.3 Output indicators. Definitions.**

For each item of the output indicators a definition is hereafter provided.

#### *Part 1 - Preparatory actions*

For each project are needed:

- 1 feasibility study (“studio di fattibilità” in italian);
- 1 permit study (“progetto preliminare” in italian);
- 1 environmental impact assessment studies (“studio di fattibilità ambientale” in italian);
- 1 detailed engineering study (“progetto definitivo/esecutivo” in italian);
- 1 management plan (“piano di manutenzione delle opere” in italian).

Project are 3 overall (actions B2, B4 and B5), therefore 3 for each of those mentioned above are expected.

In addition some activities of monitoring are expected, one ante operam and one post operam for both water and habitat quality. In particular 2 for each of those mentioned above are expected: one for water and one for habitat quality.

Related indicated costs are for external assistance (mainly design) , other costs and overheads.

#### *Part 2 - Concrete actions*

Under the voice “Pilot plants” are reported the ecosystem filters proposed both for Merone and for Nibionno WWP (2 in total, action B2).

Under the voice “Successful implementation of demonstration actions” are reported the ecosystem filters proposed on Lambro tributaries (2 in total, action B4) and the wetland area proposed on Lambro river (1 in total, action B5).

Related indicated costs are for infrastructures, other costs and overheads.

*Part 3 - Awareness raising and communication*

Indicators are the number of conferences expected to be done (6 in total), media and other communication and dissemination work and publications.

Related indicated costs are mainly for external assistance.