

**Action A3 [Environmental characterization of the study area]:** The deliverable “*Technical report on environmental study of the target area including the Minimum Vital Flow analysis*” is attached to this progress report.

**Action A4 [Recovery Plan of target species]:** All efforts to speed up the project approval are implemented by UNIPR, as detailed in Chap. 3.2 and 4.1. In particular, the engineer appointed by UNIPR is carrying out additional work requested by the competent authority for the authorizations. At the same time, the PL identified the administrative offices of UNIPR responsible for the start-up procedure. The interventions are expected to be carried out during spring-summer 2018. Delays in launching river defragmentation works are one of the main reasons for requesting an additional protocol to the project. The full *Recovery Plan* is attached to this progress report.

**Action C1 [Refurbishment of the fish hatcheries of Monchio delle Corti, Corniglio, Selvanizza]:** The allocation of Selvanizza budget to the two plants was carried out to further implement the breeding capacity of the two centres and compensate in this way for the exit of the third centre as detailed in Chap. 4.1. With reference to the estimates of the form, it has been decided to spread the resources destined to the aquaculture plants in the only two plants of Monchio delle Corti and Corniglio. This allowed additional interventions both for works partly completed, for instance the replacement of damaged parts not foreseen in the design stage, and to provide additional structures that could compensate for the non-use of Selvanizza (variance, attached, approved on 20/10/2016 with Determination of the Director of the Tuscan-Emilian Apennine National Park No. 267). Notably in Monchio delle Corti plant further works to drainage systems, that is works at tanks and at the buffer zone of water capture from Cedra and Cedrano creeks have become necessary by making a concrete flooring. An additional tank has been reclaimed in the plant, and this has been obtained successfully. The number of tanks used for the storage of breeders has therefore been increased, to keep separated specimens of Canine barbel and Common barbell. Tanks became also available for the prolonged stay of the captive breeders at the centres. All this also in the light of the difficulties faced in the ichthyogenic activities of the two species. More efficient grids were made in the tank submitted to interventions programmed in the executive project. In addition, the laying surface of a pre-existing fiberglass tank was created to increase the barbel breeding, allowing also a differentiation for several watersheds. At the fish hatchery of Corniglio further work was necessary in relation to the positioning of the new fiberglass tank, in particular it was necessary to act for the deviation of an underground water pipe that interfered with the new tank and whose presence had not emerged in the planning phase; the expansion of the area affected by the plant with the location of the new pool and the reuse of a pre-existing tank has made it necessary to expand the area occupied by the fish farm with consequent expansion of the fence. Furthermore, a new floor drain was installed to connect the sewage line, in order to make Corniglio plant more efficient and functional.

**Action C2 [Defragmentation of Enza river]:** The existing dams are functional to the Enza River Expansion Cave and therefore cannot be demolished. Barrier N. 1 which is the one located farther downstream will be left unaltered to prevent the upstream migration of invasive alien fish. The barrier initially indicated by n.2 is overwhelming by the fish fauna (rail bridge) according with the preliminary study (action A2). The defragmentation intervention, as detailed in the project referred to action A4, will therefore be carried out only on 6 barriers and not on 7, as initially envisaged by the project. However, the expected results of the project will be achieved: the same stretch of river initially planned (about 18 km) will be defragmented. The total cost will be re-formulated for the six planned intervals, also taking into account the increase in market costs and the types of projects/checks required by the competent authorities to issue authorizations and not foreseeable at the beginning.

**Action C3 [Installation of artificial substrates in the riverbed]:** Artificial substrates have been placed in new sites, parallel to the juveniles releases, as detailed in chapter 4.1. Activities will be intensified during the next breeding season (summer 2018). A map showing where these substrates were installed and the releases of juveniles were carried out, is attached to the present progress report.

**Action C4 [Ex-situ reproduction of *Barbus plebejus* and *Barbus meridionalis*]:** Barbel reproduction is the focal point of this project. As detailed in section 3.2, two types of problems have emerged during the last breeding season. All efforts will be implemented to prevent these problems in the next year. An additional breeding season will allow to achieve project goals.

**Action C6 [Round table with stakeholders for the sustainable management of water resource and to contrast poaching]:** The process of implementation and development of the agreement is already defined in the *Memorandum of Understanding for a sustainable and unitary management of fisheries and protection of fish stocks in the Po river*. To make it simple, the agreement provides in particular for the establishment of a coordination table with some functions, among which to elaborate and update a program of actions, as defined in art. 2 of the same protocol. To date, the Coordination Table has been formed and has summoned several times (almost every month) and has elaborated the Action Program in its first version, containing 11 actions. Some actions have begun, for example the establishment of an interregional Council for the sustainable and unitary management of fishing and protection of the Po river fish stocks, which is already operating in line with the functions attributed to it. For more information, please refer to the following documents (attached): 1) Memorandum of understanding for a sustainable and unitary fishery management and protection of fish stocks in the Po river 2) Action program 3) Memorandum of understanding for establishment of an interregional consultation on sustainable and unitary fishery management and protection of fish stocks in the Po river "CONSULTA PESCA PO". The anti-poaching protocols for the three areas contain proposals that have come out of the meetings of the joint process, in which there were mainly associations that carry out activities in the sport fishing, control and surveillance of the territory and the environment, i.e. those subjects to whom address priority in the process itself. They are therefore the stakeholders to whom we have proposed the signing of the anti-poaching agreements, starting from those who were present at the meetings. At the moment, not all the aforementioned (formally constituted) associations have signed the agreements, therefore it is considered appropriate to leave them still open for further subscriptions. It is also pointed out that it is considered not to propose them to any subject, since the protocols provide for defined commitments, with respect to which probably not all the subjects can follow up. For this reason, depending on the nature of the commitments, they tend not to be proposed to public administrations, except for the Life BARBIE project partners, although the extension to some subjects, for example Municipalities, may have been assessed, which may have been particularly attentive and sensitive to the topics dealt with, as well as structurally able to assume the commitments contained in them. It should be added that the contingent situation is such that some key institutions in these activities - such as the Provinces and the Italian Forestry body, traditionally involved in these issues, - are currently undergoing profound transformations in their institutional set-up, which make it difficult to involve these activities. The future activities are those defined in the two articles (4 and 5) that concern the commitments, left to the free voluntary adhesion of the subscribers, since at the moment there are no specific economic resources dedicated.

**Action E2 [Project website]:** The project website was made more appealing and user friendly.

**Action C2 [Defragmentation of Enza river]:** We note positively on the EU's affirmation.

**Action C7 [Control of allochthonous barbell species]:** The action will be extended until the end of the project covered others site according with the Recovery Plan. Other exotic species control actions will be carried out next spring 2018.

**Action E1 [Notice boards]:** The installation of the notice boards has been postponed to accurately identify the most suitable installation sites and the most suitable type of supports on which to place the panels. Right now the graphics of the panels have already been identified; the information panels will be no. 10 and will be placed in places of maximum visibility, particularly enjoyed by the public, both general and school children, avoiding sensitive places for the project; it is expected to be installed by April 2018. The installation sites can be grouped by type: fish hatcheries involved in the project, visitor Centers of EGPB, places involved in the project along routes particularly enjoyed by the public.

**Action E2 [Project website]:** The Project website will be made more appealing with the addition of photographic documentation, especially in the news section.

**Action E4 [Environmental education programme]:** We suppose the forums organized for local population were unsuccessful because we didn't identify a specific target of people nor include the forums in more structured events. We'll plan different kinds of activities for 2018, like: events addressed to specific targets (as families, nature lovers, etc); events handled with the local fishing associations; activities organized in the context of scientific events (i.e. The European Researchers' Night).

**Action F1 [Project Management]:** All efforts to improve management efficiency will be implemented. A request of project extension (II project amendment) will be drawn up in the coming months and a draft protocol will be sent to the monitor of our project before the official submission.