

Deliverable Action F1. Informe anual de la gestión del proyecto (III)

MANAGEMENT ANNUAL REPORT 2018

1. INTRODUCTION

The general objective of the CONVIVE LIFE project is to improve the conservation status of habitats and species of community interest in estuaries, through the implementation of actions evidencing the ecological and functional restoration (hydrodynamic) of the ecosystem, **which** allows to guarantee the environment's sustainability through the promotion of the **COEXISTENCE** of the preservation elements of Red **NATURA** 2000 with the development of different anthropic uses: cultural-educational, tourist and productive.

This global objective can be divided into five specific objectives:

- Restore a favourable conservation status of some estuarine habitats of community interest in the Natura 2000 Network of Cantabria.
- Reduce direct pressure on biological diversity, hence improving the conservation status of estuarine habitats and species of community interest, sensitive to those pressures.
- Promote the sustainability of productive, educational-cultural and tourist activities development in estuarine systems, minimizing its effects and promoting the preservation of the biodiversity within these ecosystems.
- Improve the actions development of estuarine ecological restoration in the Atlantic Biogeographical Region, promoting a participative planning approach, knowledge management and results dissemination.
- Improve the habitat conservation for the estuarine protected birds on the whole of the littoral Natura 2000 Network area in Cantabria, through the design and drafting of an inundation management plan on coastal lagoons (both natural and anthropic)

The project is being developed in four estuaries (Tina Menor, Oyambre, Joyel and Victoria), which are integrated in two different SAC (ES1300003 and ES1300007) and one SPA (ES0000143).

Four species and eight habitats of community interest are targeted by the project. The birds *Platalea leucorodia*, *Ardea purpurea*, *Recurvirostra avosetta* and *Ixobrychus minutus*, all of them protected by the Bird Directive (Dir. 2009/147/CE), are involved in the project through the improvement of the conservation status of their habitats and the upgrading of the information for the evaluation of their own conservation status. The community interest habitats 1110, 1130, 1140, 1150*, 1310 and 1320 will improve their conservations status through the remove of anthropogenic pressures (e.g. hydrodynamic barriers, the non-native species *Baccharis halimifolia* and macroalgae opportunistic species). Moreover, the habitats 1330 and 1420, which nowadays are in a non-favourable status, will be restored in a good conservation status.

The expected results are:

- Restoration of a favourable conservation status of the 1330 and 1420 community interest habitats (currently not favourable), on the Natura 2000 network of Cantabria by the removal of 17.3 ha of *Baccharis halimifolia* that currently occupy the potential niche of those community interest habitats.

- Improvement of the 1110 community interest habitats conservation status (*Sandbanks permanently covered with marine water in shallow waters*), 1130 (*Estuaries*), 1140 (*Mudflats or sandflats not covered with water in low tide*), 1310 (*Annual pioneering vegetation with Salicornia and other species from muddy and sandy areas*) and 1320 (*Spartina swards*) on the whole of the Natura 2000 network of Cantabria by the elimination of hydrodynamic pressures (e.g. dikes). The removal of the hydrodynamic barriers allows to control the proliferation of the non-native species *Baccharis halimifolia* and, furthermore, the improvement of the conservation status of 30 ha of community interest habitats, which nowadays are suffering alterations in the flowing dynamics.
- Improvement of the marine bird life habitat conservation status, with special emphasis on the habitat to the species of community interest *Platalea leucorodia* (Spatula), *Ardea cinerea* (Grey Heron) and *Ardea purpurea* (Purple Heron), through the elimination of pressures to which these are sensitive and the design of a water level management plan in the coastal lagoons.
- Update of the community interest species inventory in the Natura 2000 sites in the littoral area of Cantabria, updating the declaration official forms of the SAC.
- Restoration of the favourable connectivity state in the Oyambre estuary (SAC ES1300003) by means of the removal of the dike that currently restrains the tidal flow.
- Improvement in the connectivity of the Joyel estuary (SAC ES1300007, ZEPA ES0000143), achieving compatibility between the cultural and ethnographic heritage conservation, in this case the Santa Olaja mill, and keeping a good conservation status of the habitats and species of community interest.

It is important to note that this project is being developed in estuarine systems that are managed by several administrations and private companies (like the fish farm Sonrionansa S.L. in Tina Menor estuary). Thus, the Government of Cantabria, through its Dirección General del Medio Natural, Medio Ambiente y Pesca, is involved in the management of the study sites and the Ministerio de Agricultura, Alimentación y Medio Ambiente of the Spanish government, through La Autoridad de Demarcación de Costas, is also involved due to its public role in the management of the public maritime-terrestrial domain of the coastal and estuarine areas. The participation of so many administrations in the management of these spaces hinders the development of some concrete actions. Nevertheless, it is possible to achieve the goals of the CONVIVE project following the appropriate administrative procedures.

2. EXECUTIVE SUMMARY

All the actions scheduled for 2015-2018 in the approved proposal have been initiated.

The preparatory actions (A) are all completed

Actions A1, A2 and A4 were completed according to schedule. On the other hand, the completion of the construction projects (**action A3**) for the hydrodynamic recovery of the Santa Olaja tidal mill lagoon (Joyel) and the Soano lagoon (Joyel) suffered a delay and were completed in May 2017. In the second case, an alternative solution to the reconstruction of Soano dike flapgate was proposed. The improvement of the seabed conditions of an old channel (Joyel channel) that connected in the past the Soano Lagoon with the estuary, and the rehabilitation of the regulation of the water flow through the installation of a lock-gate was proposed in the construction project. The construction project of the green filter was delayed until autumn 2017. Previous to the installation of the green filter in the treatment plant discharge channel, Sonrionansa S.L. required a low maintenance cost and a high efficiency in high salinity fluctuating waters.

For this reason, a state-of-the-art floating green filter was designed in order to fulfil these requirements. The species finally selected was *Juncus maritimus* due to its high-salinity resistance. Several changes in the project design were performed before the start of the construction works. The construction project of Ría del Capitán dike was completed on schedule. All the construction project's details were included in 2017 Midterm Report in Annex II: Deliverable IIA3. The delay in the construction projects did not affect the objectives of the project nor the associated action plans (A4, C1, C2 and C3).

The concrete conservation actions (C) are on schedule, except for C1 and C2 which will suffer a delay.

Action C1 regarding *Baccharis* control works projected for 2018 in Ría del Capitán (Oyambre), Tina Menor and Victoria has been delayed until summer 2019, due to external and administrative reasons while in Joyel the control of *Baccharis* specimens was carried out by Arnuero's City Council. **Action C2** was partially delayed. The restoration of the hydrodynamic connection in Santa Olaja tidal mill dike took place in October 2017. The construction works included the installation of two flapgates in the old cutwaters of the dike. The tidal mill gates management plan is still in progress. Joyel channel restoration action took place in June 2018. The regulation of the water flow through the installation of a lock-gate and the cleaning of the seabed was performed once the authorization for the occupation of the Public Maritime-terrestrial domain was obtained. On the other hand, Ría del Capitán restoration suffered a delay due to the Coastal Demarcation Authority request to obtain the concession of the Ría del Capitán dike but the works started in November 2018 and ended at the beginning of 2019. The Municipality of Valdáliga undertook the responsibility to request the concession.

Action C3 is in progress according to schedule. Green filter installation in Tina Menor fish farm was carried out in February-March 2018, after changes in the constructive design. On the other hand, seven macroalgae removal campaigns have been carried out in Santa Olaja (Joyel) since October 2017. More than 110 tonnes of macroalgae have been removed from the lagoon.

Management plan final documents (**action C4**) were completed in September 2018. The Board of the Natural Park Marismas de Santoña, Joyel and Victoria were informed about the Joyel and Victoria Biodiversity Management Plans in June 2018 and the Dirección General del Medio Natural committed to undertake the content of the Victoria and Joyel management plans and to incorporate them in their internal planning. The workshop to present the Biodiversity Management Plan was celebrated in October 25th - 26th 2018 in Casa de Mareas de Soano (Joyel).

The monitoring actions (D) are on schedule, except for the monitoring in Ría del Capitán (Oyambre) (action D1) due to the delay in the start of the restoration works (action C2) and the monitoring of the habitats community interest distribution area (action D2) due to the delay in the Baccharis control works (action C1).

The environmental assessment to be carried out in Joyel, Victoria and Tina Menor as part of the **action D1** has already started in 2017 and 2018, respectively. The monitoring in Ría del Capitán started in November, 2018. On the other hand, the delay in the start of the 2018 *Baccharis* control works (action C1) has caused a delay in the establishment of the autochthonous pioneer species in the controlled areas, delaying the end of action **D2**. An extension of the end of these actions were requested to EASME by the partners so the objectives of the project can be successfully completed.

Actions D3 and D4 have started and are well underway. For action D3, the selection of the goods and services and the quality methods to assess them have been established and the selection of the indicators are still under development. Action D4 surveys carried out in order to know the social perception of the estuaries before the restoration have been completed. **Action D5** indicator selection was also completed in 2016 and assessed in 2017 and 2018. An extension of the end of these actions has been requested to EASME by the partners due to the need of the information gathered in actions D1 and D2 to complete D3, D4 and D5.

Public awareness and dissemination actions (E) are also implemented according to schedule.

COOPERA-NATURA technical session was done on May 29th, 2018 (**action E1**). The first CONVIVE-NATURA session (**action E2**) was delayed and carried out in October 26th 2017 in Soano (Joyel) to complete the restoration works in Joyel in order to relate the experience acquired in the process to the general public. **Action E3** is already completed, all the scholar workshops have been carried out and the 4-day training workshop was performed from November 23rd to 26th 2017. **Action E4** was completed and on September 15th 2017 the photo contest winners were announced. Finally, **action E5** is going on schedule, website is updated and bulletins (2016, 2017 and 2018) and summary of the actions can be downloaded from the website. CONVIVE partners attended International Conferences and regional dissemination sessions during this period. Finally, actions E6 and E7 have not started, according to schedule.

Project management actions (F) are implemented according to schedule.

Action F1 manages the whole project producing the documents required by EASME on time and assisting periodically the partners with all their requirements. **Action F2** is going on schedule. Two Natura 2000 sites in Portugal (Ría de Aveiro/Modego estuary) and the Netherlands (Schelt estuary) were visited in January and March 2018, respectively. Additionally, in October 25th to 26th 2018 CONVIVE Partners organized a Workshop on “The management of coastal wetlands in the frame of LIFE projects” that was held in Casa de las Mareas in Arnuelo City Council (Soano, Joyel). This workshop served as a means to share experiences on the management of coastal wetlands among six different LIFE project partners. Visits to the Basque Country has been also carried out in November 2018, in collaboration with the Basque Country Government to share experiences on the control of *Baccharis halimifolia* acquired during the LIFE Project (LIFE+ “Restauración de hábitats de interés comunitario en estuarios del País Vasco”).

Finally, **actions F3 and F4** have not started yet, according to the proposal’s timetable. Moreover, according to the LIFE programme normative, action F3 (External Audit) has been deleted from the proposal.

3. ADMINISTRATIVE PART

3.1 General information

Coordination and difficulties encountered:

Regarding **internal management**, the coordination of the project has been effectively undertaken particularly through continuous emails between the coordinator and associated beneficiaries and the prompt Management meetings taking place to deal with administrative, financial and technical issues.

The Management Committee of the Project has organized, during this period, three Project Management meetings (January, June and December 2018) in order to coordinate the activities of the year. The meeting of June was useful to prepare the Neemo visit and the one of December was organized, among other things, to examine the results of the letter from EASME to the 2nd Progress report sent in October 2018. Moreover, several coordination meetings have been organized with stakeholders and interested partners to start the actions of the Project. Besides, several meetings have taken place with certain suppliers to start up the actions E3 y E5.

The following tables describe the management committee meetings and other relevant meetings which have taken place since 01/09/2017.

Project management meetings:

Date	Objective	Partners
18/01/2018	Administrative-financial management Meeting	All
05/06/2018	management committee meeting	All
14-15/06/2018	EASME/Neemo visit	All
20/12/2018	management committee meeting	All

Meetings with suppliers:

Date	Place	Participants	Objective
27/09/2017	IH Cantabria	FIHAC/C&C comunicación	Project dissemination
22/05/2018	IH Cantabria	FIHAC/C&C comunicación	Project dissemination
11/06/2018	IH Cantabria	FIHAC/C&C comunicación	Project dissemination

Coordination Meetings with stakeholders and interested partners:

Date	Participants	Objective
19/09/2017	Biodiversidad/COPSESA/FIHAC/Arnuro Council/Costas	Permits (C2 and C3)
11/10/2017	COPSESA/AC/Asoc. Ría/ Sonrionansa/ FIHAC	Green filter
15/11/2017	Neemo/FIHAC	Project management
22/02/2018	SEO/Biodiversidad/FIHAC	Biodiversity management plan

Regarding the **administrative and financial aspects** of the project, the coordinator beneficiary has established a narrow monitoring with the associated partners which has special difficulties to certify the cost of the project (AVES, ARNUERO Council) in order to monitor the preparation of their certification costs. This does not preclude to maintain also with the other associated partners a continued relation to monitor their state of costs and so on. In this sense, a meeting was celebrated with AC (05/02/2018) in order to explain the financial and administrative aspects and clarify all the questions and doubts emerged during the process of certification of costs.

Objective	Place	Date	Participants
Administrative-Financial Management Meeting	IHCantabria premises	5/02/2018	AC/FIHAC

Moreover, during the Management Committee held the coordinator beneficiary also had prepared a brief presentation in which it was analyzed the financial and administrative status of each associated beneficiary in order to comply with the requirements of the previous letters sent by the EASME team where it was required to correct some deviations detected. Besides this action, and with the aim of maintaining the correct costs accounted the associated beneficiaries have sent to the coordinator partial financial reports every three months to control the entire project's costs.

Additionally, and in relation to the administrative management, the coordinator maintained the deadlines for the associated beneficiaries to deliver the requested documents left and required by EASME. Once the Coordinator receives all the documentation required, this is organized and uploaded in its financial project ERP system.

Problems/Solutions:

The main problems encountered are related to: a) the delay in the reception of the documentation requested to ARNUERO City Council associated beneficiary with a shortage of administrative personnel associated to the project and, b) the delay in the reception of the certificate where it is described the process that assure the traceability of the management and accountability of the project separated from the general one of the entity (CGPYDR associated beneficiary).

In this sense, and with the aim of correcting the second problem, the Coordinator beneficiary has informed the person in charge of all the aspects. The Coordinator beneficiary has made a constant and great effort to obtain the required documentation through several contacts via meetings, official reminders and even a request letter sent on 18th August 2018 to the Treasure Department of the Government of Cantabria.

Provision of documentation:

Most of the beneficiaries provides the financial and administrative documents (timesheets, payment slips, invoices, etc.) on a termly basis (quarterly). However, ARNUERO City Council, due to their profile of Public Administration, could not always assure the provision of documents with that frequency.

Regarding the proof of payment of invoices, all the beneficiaries sent this documentation regularly.

According to the EASME letter of 20th December of 2017 after the Intermediate Report, the CGPYDR associated partner has sent the TVA certificate before receiving the Amendment nº3 from EASME in which it is clarified that for public bodies it is not necessary to send this certification.

Besides, this associated partner has elaborated a written memo where the process of how the traceability of the accountings of the project is separated from the one of the Government is described. However, it has been required this written memo under a formal document issued by the Government with the aim of assuring a formal value to the document.

Documentation required and get from EASME Letters:

During this period, it was already received the validation and signature of the Partnership Agreement from CGPYDR associated beneficiary. This document is attached in the annexes of the 2nd Progress Report. (Annex V.D. Consejería).

Financial issues:

In relation to the financial issues, it was requested to visit the website of LIFE with the aim of using the updated templates of the official excel file model as a financial statement record for the costs of the project and to read the instructions to correctly complete the reports. Moreover, the warnings requested previously by the Agency on previous letters to the associated partners were most of them achieved at this point.

On the other hand, as a result of the visit of the technical monitor of the project during June 2017 and the visit form EASME/Neemo on June 2018, the Coordinator and the associated beneficiaries have received tips in order to upgrade their controls and mechanisms to enhance the administrative procedures of the project.

Communication with the monitoring team:

The communication with the monitoring team is permanent in order to solve the doubts and problems, which emerged during the compliance of the work and the reporting. The feedback is excellent and fast due to their experience in managing this kind of projects.

3.2 SPECIFIC ADMINISTRATIVE ACTIONS

Action F1. General management of the project

Progress: The progress of this action is being developed by all the beneficiaries according to schedule.

This action is related to the **administrative, management and financial organisation** of the project. In this sense, during the relevant period, the meetings held with interested parties are explained above.

On the other hand, once a year, a visit from the Neemo team is undertaken in order to supervise the development of the project and set up the guidelines to perform the progress of the activities. In this sense, this team provides useful tips as regards the elaboration of the reports and certifications. During this period, an EASME/Neemo visit has been held in June 2018 to monitor and control the status of the activities of the project. During the visit, the Coordinator and the associated beneficiaries were alerted about the need to speed up those activities that were delayed due to administrative processes.

One of the compulsory tasks to be produced is the 2nd Progress Report of the project that was foreseen for October 2018. In this sense, this report was elaborated among all the beneficiaries where the progress achieved on each action was described.

Another administrative aspect is the upload of an Annual Bulletin on the website. During this period, the second Annual Bulletin corresponding to the activities held during the year 2017 was issued and uploaded to the website as part of the dissemination activities of the project.

As regards the technical and scientific management, the way to monitor the correct development has been done during the celebration of yearly CCP meetings. During these meetings, all the partners had the opportunity to show all the activities where they were involved in order to describe all the technical aspects related to their involvement and put in common the barriers and problems encountered during their management. Once the list of problems was analyzed, the Committee established all the correct solutions in order to avoid the deviations caused by the changes and improve the upgrade of the activities.

Action F2. Link build-ups with other projects.

Progress: This action is going according to schedule. During this period, two visits to SAC in Portugal and the Netherlands were planned and executed.

Thus, from January 29th to 31st, 2018, CONVIVE LIFE partners (Arnuero Council, AC, FIHAC and CGPYDR) travel to Portugal to link build-ups with colleagues from the University of Coimbra (MARE-UC), the University of Aveiro and from Natura 2000 site managers. On January 30th, 2018, a visit to Mondego estuary (Figueira da Foz) was carried out during the morning together with Joao Neto from MARE-UC. During the visit to the estuary, Dr. Neto summarized the different uses (port area, aquaculture, salt extraction, etc), and environmental problems (paper mill, land claim, sea level rise, eutrophication, turbidity increase, sediment erosion, etc.) in the area and the restoration actions that are taking place to minimize these problems. In the evening, a technical session was performed in the IEFF (Incubadora de Empresas da Figueira da Foz). During this session, 5 talks were given by IHCantabria, MAREFOZ/MARE, Camara Municipal da Águeda, CGPYDR, CFE-UC, Camara Municipal da Figueira da Foz and Arnuero Council (see technical session program). Following the discussion, a very fruitful round table was organized to debate about the opportunities to enhance the conservation status of the protected habitats and species.

On January 31st 2018, a visit to Ría the Aveiro was performed by CONVIVE partners together with Joao Neto from MARE-UC and Fernando Leao from the Instituto do Ambiente e Desenvolvimento (IDAD), a spin-off of the University of Aveiro, after a technical meeting in which a general description of the site to be visited was provided. During the visit, Fernando Leao summarized the environmental problems detected in the Baixo Vouga, where saltmarshes (habitats of community interest 1330 and 1420) and cultivable land are being protected from the sea level rise through the construction of a dike. Our colleague from IDAD also summarized the increase in invasive alien species, such as *Cortaderia selloana* and *Spartina patens*, among others, in the area and the increase in the mudflat cover due to the disappearance of the saltmarsh species.

From March 6th to 7th 2018, CONVIVE LIFE partners (FIHAC and CGPYDR) travelled to the Netherlands to link build-ups with colleagues from the NIOZ (Royal Netherlands Institute for Sea Research) and from Natura 2000 site managers. During the first day (March 6th, 2018), a scientific session titled "Providing a scientific base for ecosystem restoration in the Schelt" was carried out at NIOZ headquarters in Yerseke. During this session NIOZ and IHCantabria introduced the Schelt and CONVIVE LIFE estuarine areas, the

environmental problems in the Schelt (sea level rise, sand nourishment, etc.) and in the Cantabria estuaries (invasive alien species, hydromorphological barriers, eutrophication events, etc.) and the restoration plans projected to cope with these problems. A series of 15 min talks were given by NIOZ and IH Cantabria to exchange knowledge regarding *i*) saltmarsh species germination, early survival and establishment and *ii*) physical and biological factors that affect *Baccharis halimifolia* germination (please refer to programmes for further detail).

Terça-feira, 30 Janeiro 2018 a partir das 14:00
IEFF - Incubadora de Empresas da Figueira da Foz

Jornadas "CONVIVencia entre usos e conservação de espaços aquáticos protegidos"

Programa

14:00 Recepção dos participantes

14:05 Apresentação do Projeto LIFE CONVIVE (Jose A. Juanes, IH Cantabria)

14:25 Quadro geral das zonas de estudo na Cantábria e em Portugal

- Características e problemáticas da Ria de Aveiro e do estuário do Mondego (João M. Neto, MAREFOZ/MARE-UC, Portugal)
- Características e problemáticas dos estuários da Cantábria (Maria Recio, IH Cantabria, Espanha)

15:05 Recuperação de características naturais dos sistemas aquáticos através da restauração hidrodinâmica

- Restauração e ferramentas de gestão aplicadas no estuário do Mondego (Helena Verissimo, MAREFOZ/MARE-UC, Portugal)
- Restauração da dinâmica de maré no estuário de Oyambre (Beatriz Echavarrí, IH Cantabria, Espanha)

15:45-16:00 Café

16:00 Problemáticas na gestão para a conservação dos espaços aquáticos protegidos

- Remoção mecânica do Jacinto-de-água: o caso da Pateira de Fermentelos (Dr.ª Célia Laranjeira, C.M. Águeda, Portugal)
- Evolução e atuações para o controlo de espécies invasoras na Cantábria (Raquel Sánchez, CGPYDR, Espanha)
- Plantas invasoras associadas a ambientes aquáticos: impactes, controlo e detecção-precoce de novas introduções em Portugal (Dr.ª Elizabeth Marchante, CFE-UC, Portugal)

16:40 Revitalização da conservação dos espaços através de uma gestão sustentável

- Valorização turística, económica e dos recursos naturais do Salgado do Estuário do Mondego (Eng.ª Ana Carvalho Oliveira, C.M. da Figueira da Foz, Portugal)
- Ecoparque de Trasmiera "Um museu a céu aberto" (José M. Igual, Alcalde de Arnauero, Espanha)

17:20 Mesa redonda "Oportunidades para a melhoria da conservação de habitats e de espécies protegidas"

"Visitas de trabalho ao estuário do Mondego (João M. Neto, MARE-UC) e Ria de Aveiro (Dr. Fernando Leão, IDAD-UA) nos dias 30 e 31 de Janeiro"

Organizado por:

Com o apoio de:

Portugal's technical session programme.



Networking in Portugal. Visits to Mondego estuary and technical session.

Yerseke, March 6th, 2018
NIOZ, Yerseke (NL)

Workshop "Providing a scientific base for ecosystem restoration in the Scheldt"

Programme

9:30-10:00 Coffee, Tea and Local Specialties

10:00 Welcome to NIOZ-EDS (Tjeerd Bouma, NIOZ)

10:10 Introductory overview concepts and Scheldt (Tjeerd Bouma, NIOZ)

10:30 Morphological development of the Oesterdam sand nourishment (Matthijs Boersema, HZ)

11:00 Ecological development of the Oesterdam restoration project (Tom Ysebaert, WMR)

11:30 CONVIVE-LIFE project: Integration of human activities in the conservation objectives of the Natura 2000 Network in the littoral of Cantabria (José A. Juanes, IHCantabria)

12:00-12:45 Lunch

12:45 Sediment and salt marsh establishment (Haobing Cao, SKLEC & NIOZ)

13:15 From seed to marsh expansion (Zhenchang Zhu, NIOZ)

13:45 Enabling restoration of coastal vegetation by creating windows of opportunity for establishment through mimicry (Greg Fivash, NIOZ)

14:15-14:45 Coffee/Tea break

14:45 Active Restoration of ecological drivers in the Oyambre estuary (Cristina Galván, IHCantabria)

14:55 Germination and early survival of saltmarshes (Felipe Calleja, IHCantabria)

15:15 Modelling salt marsh establishment (Jim van Belzen, NIOZ)

15:30 Musselbed restoration (Jildou Schotanus, HZ)

16:00 Concluding remarks and discussion

16:30-17:00 Drinks

Organized by:

Supported by:

Groede, March 7th, 2018
Restaurant De Drie Koningen

Stakeholder meeting "Coexistence between uses and nature conservation in estuaries"

Programme

09:00- 09:15 Reception of participants (location: Hotel VanderValk Goes) and transport to Perkpolder

10:15 Field visit to Perkpolder site

10:45 Transport to Waterdunen site

11:45 Field visit to Waterdunen site

12:15 Transport to Groede

12:30-13:30 Lunch at De Drie Koningen, Groede

13:30 CONVIVE-LIFE project: Integration of human activities in the conservation objectives of the Natura 2000 Network in the littoral of Cantabria (José A. Juanes, IHCantabria)

14:00 Perkpolder and Zwin projects

- Lessons learned of nature restoration Perkpolder (Anton van Berchum, Ministry Rijkswaterstaat)
- Movie on special method to prevent salt intrusion in Perkpolder
- Zwin in transformation: bigger, safer and more valuable (Monique Ekkebus, Zeeland Province)

15:00-15:20 Coffee/Tea break

15:20 Waterdunen project

- A global view of the waterdunen project (Chris Vreugdenhil, Het Zeeuwse Landschap)
- Waterdunen: from plan to realization (Karien van Veggel, project team Waterdunen)

16:00 General discussion: Integration of nature, economy and society for the sustainable management of estuaries

16.30-17.00 Drinks at restaurant De Drie Koningen

Organized by:

Supported by:

The Netherlands Scientific (March, 6th, 2018) and technical session (March, 7th, 2018) programmes.



Networking in the Netherlands. Scientific and technical sessions and visits to Perkpolder and Waterdunen environmental restoration areas.

The second day (March 7th 2018), CONVIVE partners visited Perkpolder's and Waterdunnen's executed environmental restoration plans. These plans combine the development of real estate, recreational facilities and nature restoration that follow climate adaptation concepts. Afterwards, a technical session was carried out in Groede in which 5 talks were given: the first talk was about the CONVIVE project restoration actions and was given by IHCantabria, 2 talks were about the Perkpolder and Zwin restoration projects and were given by colleagues from the Rijkswaterstaat (Dutch Ministry of Infrastructure and Water Management) and Zeeland Province, respectively. Finally, 2 talks were about the Waterdunnen restoration projects and were given by the Het Zeeuwse Landschap and the Waterdunnen Project Team (see Technical Programme). After the talks, a round table was organized to debate about the integration of nature, economy and society for the sustainable management of the estuaries.

Additionally, in October 25th -26th 2018, CONVIVE Partners organized a Workshop on "The management of coastal wetlands in the frame of LIFE projects" that was held in Casa de las Mareas in Arnuero City Council (Soano, Joyel). This workshop served to share experiences on the management of coastal wetlands among LIFE partners and the knowledge acquired through the implementation of the actions.

A visit to the Basque Country was organized in collaboration with the Basque Country Government in November 15th 2018 to share methodologies in the control of the invasive species *Baccharis halimifolia* experienced in the LIFE Project LIFE+ "Restauración de hábitats de interés comunitario en estuarios del País Vasco" (LIFE08NAT/E/0055).

Action F3. Preparation of an external independent audit

Progress: As detailed in Letter Amendment nº 3 to grant agreement for the CONVIVE project, the certificate on the financial statements does not need to be submitted because the total contribution in the form of reimbursement of actual costs as referred to in Annex III is less than €750.000. The money from this action will be moved to other actions (action F2 and E6) to cover travel costs.

Action F4. Preservation Plan after the LIFE Project

Progress: Not started according to schedule.

The Preservation plan is not defined yet, but it will have two main objectives: i) to define the future conservation strategy and ii) to disseminate the results derived from the project.

1) Definition of the Preservation Plan after the LIFE Project

This document will include a summary of the most relevant results of the project, specifically of those actions that are replicable in other Spanish or European estuaries. It will also provide a list of the priority conservation actions for the habitats of community interest to be performed after the LIFE Project, a monitoring plan for these actions and the networking with the relevant authorities. It will also include a proposal for a conservation strategy which guarantees the maintenance of the results achieved and the dissemination and impact of the project results.

2) Dissemination actions after the LIFE Project

An independent document including the dissemination strategy after the LIFE Project will be developed. This document will summarize the different dissemination actions needed to publish the implemented methodologies and the achieved results. Among these dissemination actions, special relevance will be given to:

- The maintenance and update of the project webpage
- The dissemination of the project results through specialized media (scientific journals, environmental dissemination magazines (e.g. *Locustella*, etc).
- The dissemination of the project results through the assistance to National and international Congresses and Conferences, and to experts' meetings.

3.3 MAIN DEVIATIONS, PROBLEMS AND CORRECTIVE ACTIONS IMPLEMENTED

Action C1:

Tina Menor, Victoria and Ría del Capitán *Baccharis* control works: control tasks planned for 2018 have suffered a delay due to administrative and external reasons (physiology of the plant) and will start in 2019. The new Spanish public procurement law (Ley 9/2017 de Contratos del Sector Público) published on March 9th 2018, has changed many aspects of the procedures, which has led to an extension of the control task subcontracting processing time. In addition, the novelty of the law has caused multiple difficulties and corrections to be made in the work contracts. This fact and the limitation of the time in which the control works can be done (the treatments can only be carry out in spring and summer) led to a delay in the 2018 *Baccharis* control action. This delay will affect the final objective of the proposal regarding the recovery of a good conservation status of the habitat 1330 by the removal of *Baccharis halimifolia* and, finally, actions D1 and D2. A new annual contract is being processed to be able to start the works as soon as possible.

Action C2:

Construction works: Demarcación de Costas Authority required the obtainment of the concession for the occupation of Ría del Capitán dike and for the authorization or concession for the occupation of the Joyel channel to be able to carry out the construction works. These requirements caused a delay in the start of Ría del Capitán dike and Joyel channel works. Joyel channel works have been already completed in June 2018 while works in Ría del Capitán dike were planned to end in August 2017 but will be completed during the first quarter of 2019.

To address these requirements, a series of technical documents were developed by FIHAC outside LIFE project for the Ría del Capitán dike and Joyel channel concessions/authorizations. The drafting of these documents was not included in the CONVIVE LIFE and took more than 1,5 months. The application for the concession of Ria del Capitán dike was carried out by the Municipality of Valdáliga in June 2017 after approval by the local government board. This process took around 12 months and was resolved in June 2018.

In the case of Joyel channel, Demarcación de Costas Authority required an authorization or concession for the occupation of the Public Maritime-terrestrial domain to reinstall the control structure (weir) in Joyel Channel. The authorization process lasted about 2 months while the concession process took 8 months. To speed up the start of the construction works in Joyel channel, ARNUERO applied for the authorization for the occupation of the Public Maritime-terrestrial domain in Joyel Channel and for the concession of the channel at the same time in November, 2017 after approval by the local government

board. This process took around 3 months and was resolved in February, 2018. On the other hand, the Joyel channel gate has been subject to acts of vandalism. Several wooden boards had been stolen and the stirrups were destroyed and removed. Project partners decided to fix and reinforce the gate. So, in August, 2018 COPSESA proceeded to repair the stirrups, and install on the gate new wooden boards with handles to facilitate handling. To prevent vandalism, an anti-theft system consisting of a metal lock with a padlock to prevent the removal of the boards was installed. To prevent water leaks from the channel bottom, the stones were relocated, and the holes were refilled with concrete.

The delay of this action consequently delayed the start of action D1 in Ría del Capitán (Oyambre). Despite this delay, actions D1 and D2 are expected to be completed as programmed. If necessary, the delivery of the deliverables for these actions will be slightly delayed. This small delay will not affect significantly other actions.

Tidal mill gate management plan: The plan has been postponed in order to analyze the data of the new 1-month sampling campaigns performed to evaluate the water level oscillation inside the lagoon at different times after the end of the construction works performed in the old cutwaters of the dike. The second phase of the plan is projected to be completed in spring 2019. The third phase (the checking operation of the management protocol) will be done during summer of 2019. The final protocol will be ready by the end of 2019. This delay will not affect other actions.

Action C3:

Green filter: The main problem was related to the past administrative situation of the fish farm. This situation delayed almost 1 year the construction project definition. Despite this fact, the construction works were only slightly delayed and were finished in April 2018 (End date scheduled: October, 2017). This small delay will not affect significantly the other actions. Macroalgae removal is 9 months delayed and will be completed in June 2019 to be able to carry an extra removal in spring, 2019.

Action C4:

Joyel and Victoria Plans: The drafting of the plans took more time than expected and the slow pace in the draft reviews by the Board of the Natural Park (Parque Natural de las Marismas de Santoña, Joyel y Victoria) caused the delay of this action. The Biodiversity management Plans were presented to the Board of the Natural Park in June 2018. In October 2018, the Dirección General del Medio Natural (Government of Cantabria), as the competent authority in the management of the Natural Protected areas in Cantabria, commit to take on the content of the Victoria and Joyel management plans and to incorporate them in their internal planning and to procure, according to their legal, physical and monetary possibilities, their development and implementation.

Action D1:

Preliminary design of the monitoring programs was completed. The environmental monitoring of Tina Menor, Joyel and Victoria restoration actions is being done according to the design and schedule. Only the monitoring design of the Ría del Capitán restoration actions suffered some changes due to the delay in the start of the works. Thus, the monitoring of the changes in the physico-chemical characteristics of the water in the estuary will be executed in one year. So, a total of 8 campaigns will be performed as suggested in the preliminary design. This change does not affect the efficiency of the monitoring changes because, as soon as the dike is removed, changes in the water characteristics are almost immediately, as suggested in the hydrodynamic study performed in action A2. On the other hand, monitoring of the

changes in the benthic assemblages has been redefined. Two sampling campaigns, one just before the start of the works in the dike and the other the following summer 2019, has been planned. This change in the design is attributable to the natural changes suffered in the benthic assemblages since 2016. As we plan to analyse the changes attributable to the dike removal it was very important to know the composition and structure of the benthic assemblages right before the dike opening.

Action D2:

The delay in the 2018 *Baccharis* control works (action C1) have caused an imbalance in the monitoring of the habitat conservation status (action D2). Despite the two-year monitoring planned for the D2 action started on time (a cartography of the distribution of the habitats of community interest was carried out in May 2018 and another cartography is planned to be carried out in 2020), the delay in the control of *Baccharis* will cause a delay in the recolonization of the treated area by autochthonous pioneer species, so a perceptible change in the habitats of community interest area of distribution is not predicted to happen in a short-term future. For this reason, an extension of the end of the action is being considered by the partners so the objectives of the action can be fulfilled successfully.

Action F2:

Delay in the SAC visits: The visits to the SAC were expected to finish in October 2017, however, the visits are still being carried out. During this period, two visits have been already completed, one to Portugal and another to the Netherlands. A more specific visit to the Basque Country (Spain) to share experiences in the control of *Baccharis* was carried out in November 12th 2018. The delay in the SAC visits is partially due to the difficulties to find the partners needed to help in the organization of the technical visits and events and to the SAC selection process itself. Besides, this action has been deliberately delayed so a more specific approach of the actions that are taking place to restore the conservation status of the habitat and species in the CONVIVE LIFE actionable areas can be explained to the visited SAC managers and stakeholders. This delay does not affect the action itself or other actions.

4. FINANCIAL PART

4.1 COSTS AND DAYS INCURRED BY COST CATEGORY AND RELEVANT COMMENTS

Comments on the financial status of the project:

A general review of the figures of the total costs per associated partner, at first glance the category of “*personnel costs*” is adequate to the work executed in the project.

Regarding the category of “*travel costs*”, the amount spent is the third part of the budgeted due to some reasons. Currently, three international visits have been performed regarding F2 action (Italy, Portugal and the Netherlands) and in the next year the amount for the monitoring actions will be increased and consequently the costs of trips will be raised.

As of “*External Assistance*” category cost, the amount spent does not reach the third part of the budgeted cost mainly due to the fact that the subcontracting of around 80.000 by the CGPYDR associated partner is still pending. There has been a delay due to administrative issues and so it is foreseen that this action is undertaken next year. Besides, next year it will be necessary to subcontract diverse tasks such as

communication and dissemination actions, the organisation of the closure conference and the Layman report.

According to the “Consumables” category cost, the situation is similar to the previous one with an amount executed around the third part of the budgeted cost. It is foreseen that the cost of sampling material for the monitoring actions that will start in the next months.

Finally, the “other costs” category cost has a a poor percentage of execution due to the delay in the start of the conservation actions and consequently of the monitoring actions.

Budgeted Person-days by action:

In terms of “budgeted person-days” spent by actions these are the conclusions regarding the development of the project activities:

Actions A have been explained in the previous Mid-term Report.

Regarding the Conservation actions (**actions C**) there has been a delay in the opening of the Capitan Dike (action C2) due to the administrative issues related to the Coastal Public Administration and a delay in the “Canal de Joyel” related with the concession request and in Santa Olaja lagoon related with the different consultations to the Public Heritage Administration (short delay in this case) and the delay in the execution of the green filter regarding the bankrupt of the administration in the enterprise and the change of the administration.

According to **actions D**, the start is expected after the execution of the conservation actions (C actions) and in this last year of the project these actions will start immediately.

Regarding **actions E** (communication and dissemination actions) they are being timely implemented as foreseen in the initial proposal and in the next year it is foreseen the organization of the closure conference, the Layman Report and one CONVIVE Seminar. Apart from this, the Report for the COOPERA Workshops will be drafted

Finally, regarding **actions F**, they are being implemented according to the proposal and to schedule.

Status of the 2nd pre-financing executed:

On 2017, an intermediate report was sent and consequently a second pre-financing payment foreseen in the GA was released by the European Commission.

Analyzing the figures of the absorption percentage relating the two-pre-financing allocated during the project, all the associated partners except CGPYDR have covered the total pre-financing.

The reasons for the weak absorption for that associated partner is due to the delay in the execution of action C1, related to the eradication of the *Baccharis halimifolia*. Currently, the subcontracting task for this action is running slow because of diverse administrative issues related to the public administration.

4.2 OTHER FINANCIAL ISSUES CAME ABOUT

Budget Modification and Budget Transfer for AVES CANTABRICAS Associated beneficiary:

On April 2018, the Coordinator requested to EASME a budget modification and a budget transfer originated by AC which does not affect the substance of the actions planned as a correction required by EASME in the Mid-term Report sent on October, 2017.

The transfer is a non-substantial change so that it is shifted less than 20 % of the maximum amount as specified in Article II.22 in the GA about Budget Transfers, between two or more categories of actual costs (according to the XIV section of “Financial and Administrative Guidelines” for LIFE Projects).

The modification requested does not affect the development of their activities in the project and the reason for that modification was due to inconsistencies with the costs foreseen in the proposal as a result of the change of the beneficiary Tinamenor by Aves Cantábricas.

This notification on modification and budget transfer was properly done and sent on 9th April 2018 to EASME/Neemo and on the letter ref ARES (2018)5415840. 22/10/2018 it is notified the acceptance of these changes to the budget (budget transfer) from AVES associated beneficiary.

Budget modification for the Coordinator beneficiary:

FIHAC as coordinator beneficiary had foreseen several visits in different ZECs related with the problems and needs of the project in different countries as a part of the action F2. Besides, on the same action (“Building networks with other Projects”) it is foreseen to organize a discussion meeting with all those managers and stakeholders in Santander (FIHAC premises) before the closing meeting of the project (action E7). Nevertheless, on the proposal was not foreseen budget allocation for this purpose.

For that reasons the coordinator beneficiary would like to modify these funds from one action to another (F3 to the action F2) under the “*other costs*” category to meet the criteria for that activity.

Other reasons for that transfer is based on the fact that it would be beneficial for the project to comply with that activity in an optimal way and the opportunity to cover the costs of displacement for the managers and stakeholders ensures their participation in the discussion meeting, which will guarantee to achieve the objective of implementation of a networking. Consequently, the amount transferred for the action F2 would be used for budgeting the travel and subsistence costs of the people (managers and stakeholders) who will attend this meeting. In this sense, we have foreseen to gather 8 people from Coimbra, Hull, Zeeland and Andalucía (two persons for each site) and to assume their travel and subsistence cost for two nights.

This notification on modification was properly done and sent on 12th February 2018 to EASME/Neemo and an answer was received advising that this modification will be duly notified during the final report of the project.

Role Modification or adjustment on C3 action for ARNUERO City Council associated beneficiary:

Action C3 “*Restauración del estado de conservación de los hábitats de interés comunitario mediante la implementación de un sistema de filtros verdes y la eliminación de proliferaciones de algas verdes*”, corresponds to Arnüero Council associated beneficiary which is involved exclusively in the environmental restoration of “Joyel estuary” through the eradication of algae blooms and other invasive species, mainly *Baccharis halimifolia*. Taking this into consideration the personnel initially foreseen for that activity is an Assistant Engineer budgeted with the amount of 47.000€.

As this beneficiary has already done several clean-ups with its own personnel for a week for the periods 2016 and 2017 and has detected that the level of eradication during those periods has been limited and insufficient with respect to the objective foreseen for the algae bloom eradication and that was noticed that this type of algae has emerged again and has done a quick propagation, as a consequence, it seems to be necessary to plan a periodic and continue removal of the algae bloom which with the higher hydrodynamic renovation as a result of the action C2, would reach a complete removal of these algae communities.

As the category of Senior Engineer proposed is not adequate for the implementation of these activities, it has been decided as more appropriate to propose a partial role modification to the next categories: Technical Coordinator, (Specialized worker) and Team Responsible.

This role modification will not modify the mandatory management and coordination tasks required initially, which will be developed by specialized personnel of this associated partner (Technical Coordinator) with the support of the partner coordinator (FIHAC).

For these reasons and other technical details that will be explained in more detail in the final report, the recruitment of this personnel full-time but with a partial assignment to the project would improve the problems identified, with the consequent optimization of the employed human resources, who under no circumstances, would remain without their mission and support other foreseen actions like the control of the water levels inside the lagoon and the gate's management, the eradication of *Baccharis halimifolia* and occasionally other invasive species with the result of reaching a high level of conservation of the natural space of the estuary.

As a consequence, this modification would be also useful to maximize the success of the initially proposed objectives of the Action C3, in addition to the improvement of the social and economic impact of the project (action D4) through the recruitment of unemployed people, increasing as much as possible the number of people recruitable and the contractual period (8 months).

This notification on modification was properly done and sent on 12th February 2018 to EASME/Neemo and was received answer advising that this modification will be due notified during the final report of the project.

New personnel participant in the project:

FIHAC as coordinator beneficiary, has incorporated to the project Pablo Ruiz as a Field Expert with the aim of carrying out several journeys to the different estuaries studied in order to do the environmental monitoring of hydrodynamic and ecological restoration activities (D1).

This person is permanent personnel of the coordinator beneficiary and his involvement is due to his experience as a specialized researcher in the sample gathering, measures in situ, physical-chemical analysis on water, sediments and biota (taxonomic identification, macroinvertebrates sampling) on coastal and freshwater ecosystems.

ARNUERO City Council associated beneficiary has incorporated new personnel for the optimal provision of action C3, as it was mentioned above.