

LIFE BAIE DE L'AIGUILLON

Preservation, restoration and valuation of coastal habitats of European interest of the Aiguillon Bay



MID-TERM REPORT

Covering the project activities from 01/01/2016 au 31/12/2018

Reporting date **31/03/2019**



Data project

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Total budget	2.317.727 €	
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(%) of eligible costs	100 %	

Data beneficiary

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2. LISTE OF KEY-WORDS AND ABBREVIATIONS

AAMP Agence des Aires Marines Protégées

APPB Arrêté Préfectoral de Protection de Biotope

CA85 Chambre d'Agriculture de Vendée

CCPNM Communauté de Communes du Pays Né de la Mer

CCSVL Communauté de Communes Sud Vendée Littoral

CDL Conservatoire du Littoral, Conservatoire de l'espace littoral et des rivages lacustres Centre

Atlantique

CRCPL Comité régional de la Conchyliculture Pays de la Loire

CRCPC Comité régional de la Conchyliculture Poitou-Charentes

DREAL NA Direction Régionale de l'Environnement, de l'Aménagement et du Logement de la région

Nouvelle-Aquitaine

DREAL PL Direction Régionale de l'Environnement, de l'Aménagement et du Logement de la région Pays

de la Loire

DDTM 85 Direction départementale des territoires et de la mer de la Vendée

DDTM 17 Direction départementale des territoires et de la mer de la Charente-Maritime

EPMP Etablissement public du Marais poitevin

GAE Groupe associatif Estuaire

IFREMER Institut Français de Recherche pour l'Exploitation de la Mer

LPO Ligue pour la Protection des Oiseaux

ONCFS Office Nationale de la Chasse et de la Faune Sauvage

Parc marin Parc naturel marin de l'estuaire de la Gironde et de la mer des Pertuis

PAPI Programme d'Actions de Prévention des Inondations

PNR Parc naturel régional du Marais poitevin

RNN Réserve naturelle nationale de la baie de l'Aiguillon

RTE Réseau de transport d'électricité

SMMPBL Syndicat Mixte du Marais Poitevin Bassin du Lay

SMVSA Syndicat Mixte Vendée Sèvre Autizes

3. EXECUTIVE SUMMARY

The LIFE BAIE DE L'AIGUILLON project purpose is the preservation, restoration and enhancement of habitats of European interest in the Aiguillon Bay.

The objectives of the project are:

- (1) The restoration of disturbed habitats of the Aiguillon Bay and Pointe and the limitation of negative effects of tourism on the shore;
- (2) The enhancement of shoreline habitats with a logic of passive resistance to submersions;
- (3) The understanding of interactions between the wet area of the Marais poitevin and the Aiguillon Bay to better management strategies;
- (4) The promotion of this wetland complex's richness and the apprehension of its function and role both biologically and physically.

Five strands of actions articulate this project:

(1) Restoration of mudflat habitats (Aiguillon Bay)

The actions of ecological enhancement of the Aiguillon Bay aim to restore 100 hectares of mudflat habitats, do a prospective analysis of the geomorphological evolution of the Aiguillon Bay and improve the habitat capacity for fauna and flora.

Midway, an analysis of the sedimentary dynamics of the Aiguillon Bay has been produced, indicating an increase in the sediment balance in the Aiguillon Bay. A second LIDAR analysis will be conducted in 2020, to compare both sets of data and bring conclusions on the scheduled experimental works. Prior studies for the launch of restoration works on



the mudflat habitats have also been conducted. After consulting the State services and the shellfish farming industry, the removal works of wild oyster beds will be conducted in 2019. They aim to restore nearly 100 hectares of mudflat habitats and reduce the silt traps created by those deposits.

(2) Restoration of estuarine habitats (farm of the Prée Mizottière, Sainte-Radégonde-des-Noyers)

The works on the site of the Prée Mizottière will allow the creation of 10 hectares of tidal marsh, which are necessary for the nesting of water birds species and the optimisation of water management in favour of avifauna on a 17-hectare area.

Midway, the realisation of hydraulic installations done in 2017 resulted in a better management of water levels on the meadows of the holding by the holder and the administrators of the National Natural Reserve, thus helping the welcome of water birds on nearly twenty hectares. A mission of project management necessary for the implementation of prior studies on the displacement of a dyke, responsible for the future creation of 10 hectares of tidal marshes, is under way. The displacement works on this dyke will be conducted in Autumn 2020. Moreover, a platform for the observation of water birds will be built close to the holding in 2019.

(3) Restoration of dune habitats (Aiguillon Pointe, L'Aiguillon-sur-Mer)

Works on the Aiguillon Pointe aim for the restoration of dune habitats (800 linear meters of protection), the planning of access for the public and protection of the dunes (2,500 linear meters of protection) and the creation of 1,500 m² of dune meadows (70 trees to be cut down).

Midway, the works on the access for the public and protection of the dunes have been conducted, as well as the works to re-nature a former campsite allowing the return of the grey dunes on that area. The works of dune habitat renaturation will be conducted by removing parts of the concrete blocks from the site of the Aiguillon Pointe. Moreover, a Public Awareness Panel has been installed on the site since February 2018.

(4) « Anatidae » and water studies

The characterisation of water quality effects on the primary production of the Bay and its links with species retribution, as well as the characterisation of the behaviour of Anatidae populations aim to improve the rules of habitat management implemented by the administrators of the National Natural Reserve (NNR). The results of those works will be broken down in the different management tools of the territory after the LIFE BAIE DE L'AIGUILLON project.

The different coring campaigns on the meadows have been conducted. The upcoming analysis of seeds coming from the core samples and the ongoing analysis of gizzards will bring hypothesis on the type of meadows occupied by the Anatidae. Moreover, the study of ducks' spatial movement continues with the application of tags for the follow-up of a few individuals.

The characterisation of water quality effects on the primary production of the Bay has been in progress since 2016 and is conducted by the ONCFS. The LIFE BAIE DE L'AIGUILLON project also played a role as a financial leverage with the emergence of a second action plan monitored by the EPMP and dedicated to the evaluation of water volumes released by the watershed in the Aiguillon Bay. The results of both studies will be produced in 2020 and will enable to help in the drafting of the NNR's future management plan of the Aiguillon Bay (2023-2032) which will contribute to the improvement in the conservation status of sites targeted by the project.

(5) Actions for public awareness and dissemination of the program's results

Since the start of the project, several tools for public awareness and the dissemination of the project's results have been produced: a website, a travelling exhibition, a book on the « Aiguillon Bay », a 9-minute film on the presentation of the project's natural habitats, a photographic report, newsletters, etc.

Videos, animated computed graphics, a discovery book, a conference on the restoration of mudflat habitats, a conference on the results of actions conducted as part of the project are already scheduled by the end of the project.

Moreover, the Parc naturel régional (PNR) organised with several partners the international symposium « Adapting the tidal marsh lands to climate change » in November 2018 in La Rochelle, with a very strong success (more than 1,200 persons). The project permitted innovation with a « scientific show » involving a scientific and two artists to popularize scientific elements on climate change. Political representatives from several French territorial communities have been so much impressed by this new format and have contacted the PNR to consider reproducing the « scientific show ».

Detailed progress on the actions is explained in the Gantt chart (cf. *Chapter 9*).

Detailed progress on the milestones and the transmission of deliverables are indicated in *annex 01*.

4. Introduction

4.1 GENERAL AND SPECIFIC OBJECTIVES

The Marais poitevin is a complex of original natural habitats that welcomes an exceptional biodiversity. This terrestrial and coastal wet area is the result of the filling of the Gulf of Picts by the sediment brought by the ocean. The agricultural practices and shoreline development have gradually exercised a negative pressure on the natural environment. Moreover, the prospects of global warming force the territory to adapt its protective system against sea phenomena. Coastal habitats thus find a new place in public policies by playing a role in the protective system.

The objectives of the LIFE BAIE DE L'AIGUILLON project are (1) the restoration of disturbed habitats of the Aiguillon Bay and Pointe and the limitation of negative effects of tourism on the shore; (2) the enhancement of shoreline habitats with a logic of passive resistance to submersions; (3) the understanding of interactions between the wet area of the Marais poitevin and the Aiguillon Bay to better management strategies; (4) the promotion of this wetland complex's richness and the apprehension of its function and role both biologically and physically.

4.2 HABITATS AND SPECIES TARGETED ON THE PROJECT'S SITES

The LIFE BAIE DE L'AIGUILLON project aims to improve the habitats and their habitat capacity for fauna and flora in the targeted sites located in the Natura 2000 site of the Marais poitevin, which represents an area of 68,023 hectares. The project intervenes on around 5,200 hectares:

- 4,900 hectares of mudflats in the National Natural Reserve of the Aiguillon Bay (public domain)
 In the Aiguillon Bay, the works will allow the restoration of mudflat habitats (Cor.14; Eur.15: 1140). Those mudflats host a large quantity of shellfish and worms, which form a feeding resource for waders and certain Anatidae. This action thus aims to improve the site's habitat capacity for migratory and wintering waders.
- 240 hectares on the site of the farm of the Prée Mizottière (property of the « Conservatoire du Littoral »)
 On the site of the Prée Mizottière, the works will allow the creation of tidal marshes, the optimisation of water management in favour of avifauna on nearly 20 ha of sub-brackish meadows (Cor. Eur 15,52: Eur. 15: 1410, 1330) and the development of the plant association which favours the habitat of Anatidae and migratory and wintering waders.
- 40 hectares on the site of the Aiguillon Pointe (public domain)
 - On the site of the Aiguillon Pointe, the action consists in the development of the visitors' track in the grey dunes (primary habitat, Cor. 16.22 Grey dunes) in order to restrain the access to those dunes and, thus, reduce their degradation by trampling. Those works will also allow the development of the plant association in the grey dunes and improve this area's habitat capacity to the passerines dependent on those habitats.

4.3 THREATS AND CONSERVATION ISSUES

The sites involved in this project (Aiguillon Bay, Aiguillon Pointe, Prée Mizottière) are threatened, creating true conservation issues on species and habitats that form the richness of those areas.

Alteration of mudflats habitats by anthropic pressure (Aiguillon Bay site)

Mudflats are an important place for biological production, which is why there are numerous oyster-farming complexes. With the closure or movement of oyster farms, the latter have been abandoned and are now used as support for wild oysters, thus competing in the food web with other seashells, and favour the acceleration of sediment accumulation and the siltation of the Bay. Those wild oysters have an impact on the functionality of the Aiguillon Bay: decrease in the trophic capacity, decrease in the population of benthic invertebrates, reduction of the habitat and food capacity for waders and Anatidae.

Alteration of dune habitats by anthropic pressure (Aiguillon Pointe site)

The development of tourist activity at the Aiguillon Pointe is generating an increase in the uncontrolled human frequentation, thus generating a degradation by trampling of dune habitats of community interest (Natura 2000 code: 2110, 2120, 2130, 2270), plant associations and bird nesting sites. Moreover, the current accretionary wedge of dunes cannot cover the constant and inevitable effects of wind and tides, thus generating a very high degradation of dune habitats.

Defective qualitative and quantitative management and lack of knowledge on the quality of Aiguillon Bay's water (Aiguillon Bay site)

Water quality (fresh and sea waters) in the Aiguillon Bay has an impact on primary producers, which are the main feeding resource for species living in the Bay and contribute to the attractiveness of streams used by migratory fishes (Anguilla anguilla, Salmo salar, etc.). In order to explain the species distribution (fishes, birds), it is necessary to characterise the evolution of salinity and physicochemical parameters over the course of several seasons.

Lack of knowledge on the movements of Anatidae between the Aiguillon Bay and the meadows of the Marais poitevin (Aiguillon Bay site, tributaries and meadows of the Marais poitevin)

The Aiguillon Bay is a migrating crossroad for Anatidae populations; they use mudflats as rest area and feed at night on the natural meadows of the Marais poitevin . However, it is difficult to propose measures to improve the management of meadows without knowing the movements of Anatidae and the nature of meadows on which the feed. To improve the habitat capacity of those areas for Anatidae, it is necessary to conduct a study on Anatidae feeding resources, diet and geographic distribution.

Lack of hydromorphy on the sub-brackish meadows of the Prée Mizottière (site of the Prée Mizottière)

The farm of the Prée Mizottière reconciles farming production and biological reclamation; it forms one of the Marais poitevin's main wintering areas for Anatidae and waders. However, depleted areas still exist, reducing its habitat capacity for those species. The increase in the site's hydromorphy will benefit the habitat of subbrackish meadows in an ongoing process of settlement and the nesting of Anatidae and waders.

Lack of knowledge from the general public on the biological issues of the Marais poitevin 's coastline and the risk of coastal flood (all sites of the project)

The Marais poitevin is a major site where habitat conservation issues are linked to the risk of coastal and river flood and also to anthropic activities. The lack of knowledge from the general public on the biological issues leads to a bad inclusion of their habitats and species. Public awareness campaigns are essential with the aim of improving natural habitats.

4.4 EXPECTED RESULTS

Actions of ecological enhancement of the Aiguillon Bay will allow the restoration of 100 hectares of mudflat habitats, a prospective analysis of the geomorphological evolution of the Aiguillon Bay, and thus an improvement in the habitat capacity for fauna and flora. The works of wild oyster removal to restore the natural habitats of colonised mudflats and reduce the silt trap represented by those deposits are experimental and will be reproducible.

The works in the site of the Prée Mizottière will allow the creation of 10 hectares of tidal marshes, necessary for the nesting of water bird species, the optimisation of water management in favour of avifauna on a 20-hectare area.

The works in the Aiguillon Pointe will allow the restoration of dune habitats (800 linear meters of protection), the development of public access and dune protection (2,500 linear meters of protection) and the creation of $1,500 \text{ m}^2$ of dune meadows (70 trees cut down).

The characterisation of the effects of water quality on the Bay's primary production and its links with species distribution, as well as the characterisation of the Anatidae populations' behaviour (capturing and badging 50 Anatidae; the analysis of 1,512 drill cores and 100 Anatidae crops) will help the administrators in improving the rules of habitat management. The results of those works will be broken down in the different management tools of the territory following the LIFE project.

The actions of public awareness and the dissemination of the program's results will benefit professionals, local users, tourists, institutional structures, school children and the general public. Those elements and exchanges (website, exhibition, technical poster, illustrated book, discovery book, collection of experiences, press articles, seminars, etc.) will allow the promotion of results on a European scale.

5. ADMINISTRATIVE PART

5.1 PROJECT MANAGEMENT

As main beneficiary of the LIFE BAIE DE L'AIGUILLON project, the Parc naturel régional du Marais poitevin oversees the project by cooperating with the associated beneficiaries and the financial partners, as well as the management and the coordination, to achieve the defined objectives and obtain relevant results.

As a reminder, the project's overall coordination relies on four bodies with complimentary tasks:

- (1) The steering committee (SteeCo) meets every year;
- (2) The technical committee (TechCo) meets several times a year. The drafting committee (DrafCo) is now part of the technical committee;
- (3) The different monitoring committees (MoniCo) are established according to the progress of the actions (committee of the Domaine Maritime, committee of the Prée Mizottière, committee of the Aiguillon Pointe, committee on water studies and ecosystemic study).

In addition to those coordination bodies, administrative and financial monitoring meetings are scheduled once a year (14/06/2016; 29/06/2017; 02/07/2018).

Moreover, a significant number of meetings (40) have been organised for all the professionals, the technical and scientific partners, the State services, the financiers and the regional stakeholders.

The PNR signed partnership agreements which precise the payment arrangements of funds received by the main beneficiary to two associated beneficiaries: the LPO (agreement signed on 11 July 2016) and the ONCFS (agreement signed on 3 May 2016) (annex 02).

Funding agreements have also been established with the French Ministry for Ecological and Supportive Transition, the Nouvelle Aquitaine prefecture, the Regional Council of Nouvelle Aquitaine, the biodiversity section of the « Caisse des dépôts et consignations », the « Etablissement public du Marais poitevin », the DREAL Nouvelle Aquitaine. All funding agreements are broken down in *annex 03*.

5.2 COMMUNICATION WITH NEEMO AND EASME

The NEEMO project management firm, charged with the monitoring of the LIFE BAIE DE L'AIGUILLON project, conducted three site visits: 18 – 20 July 2016, 24 – 25 July 2017 and 2 – 3 October 2018. Those visits were subject to correspondence from EASME. The project interlocutor, Mathilde REDON, is responsive and qualified.

All correspondences transmitted by EASME are in *annex 04*:

- 22/09/2016 Correspondence related to the NEEMO 01 visit report
- 09/11/2016 LIFE mid-term evaluation Survey
- 11/05/2017 Correspondence related to the progress report 01
- 01/06/2017 Survey on all LIFE projects where land purchases were made
- 09/11/2017 Correspondence related to the NEEMO 02 visit report
- 11/07/2018 Correspondence related to the progress report 02
- 30/10/2018 Correspondence related to the NEEMO 03 visit report
- 13/11/2018 KPI results

The *annex 05* brings the expected results on previous correspondences from EASME (11/07/2018, Progress report 02; 30/10/2018, NEEMO 03 visit report).

5.3 CHANGES DUE TO THE THREE AMENDMENTS OF THE GRANT AGREEMENT

The *annex 06* compiles the three amendments to the Grant Agreement.

5.3.1 Amendment to the Grant Agreement n°1 (06/12/2016)

Amendment of Article I.9 – Audits Amendment of Article I.10 – Submission of reports Amendment of Article II.23.2 (d) first paragraph

5.3.2 Amendment to the Grant Agreement n°2 (23/07/2018)

Amendment of Article II.19.2 (a) (i) - Eligible direct costs - Costs of personnel - Natural persons

« the natural person works under the instructions of the beneficiary and, unless otherwise agreed with the beneficiary, in the premises of the beneficiary; » is replaced by « 'the person works under conditions similar to those of an employee (in particular regarding the way the work is organised, the tasks that are performed and the premises where they are performed); »

Amendment of Article II.19.2 (h) - Eligible direct costs - VAT

« Non-deductible VAT is eligible as expenditure ... an explicit declaration in the certificate on the financial statement (Annex VII); » is replaced by « Non-deductible VAT is eligible as expenditure, save for those activities matching the concept of sovereign powers exercised by Member States; »

Amendment of Article II.23.2 (d) - Certificate on the financial statements:

« For beneficiaries for which the total contribution in the form of reimbursement of actual costs as referred to in Annex III is at least EUR 325,000, a certificate on the financial statements and underlying accounts (« certificate on the financial statements »); » is replaced by « For beneficiaries for which the total contribution in the form of reimbursement of actual costs as referred to in Annex III is at least EUR 750,000, a certificate on the financial statements and underlying accounts (« certificate on the financial statements »); ».

5.3.3 Amendment to the Grant Agreement n°3 (27/08/2018)

Change in the name of the coordinating beneficiary

« Syndicat mixte du Parc interrégional du Marais poitevin », as set out in the Grant Agreement, has been modified and is now known as « Syndicat mixte du Parc Naturel Régional du Marais poitevin ». A1 and A2 forms have been modified accordingly.

Change in the Project acronym

« LIFE 14 NAT/FR/000669 – LIFE BARGE », as set out in the Grant Agreement, has been modified and is now « LIFE 14 NAT/FR/000669 - LIFE BAIE DE l'AIGUILLON ».

6. TECHNICAL PART

6.1 TECHNICAL PROGRESS, PER ACTION

6.1.1 Action A1: Elaboration of an experimental protocol of wild oyster habitat removal from the Aiguillon Bay

	like ~-		2016				2017				2018				20	19		2020				Progress			
			1T 2T 3T 41					1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
8	Relia Aculton	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	n repo	ort	Prog	gress	repoi	rt III	F	inalı	repor	t	initial budget	of 31/12/2018		
	LPO	Elabo	oratio	n of a	n exp	erime	ntal p	rotoc	ol of	wild o	yster l	habita	at rem	ovalf	from	the Ai	guillor	n Bay							
A1	Initial																					84 397 €	60 468 €		
	Current																					04 397 €	00 400 €		

Action coordinator LPO

Status Action undertaken, in accordance with the initial schedule

Actions schedule Scheduled start date: April 2016 Effective start date: January 2016

Scheduled end date: June 2017 Effective end date: September 2019

Objective reminder

The objective is to carry out the preliminary studies required before initiating the experimental tasks of mudflat restoration in the Aiguillon Bay.

Expected results reminder

- Creation of a faunal and food web inventory of the Aiguillon Bay
- Creation of regulating provisions: Water Act, Natura 200 impact assessment, etc.
- Definition of areas of intervention and creation of a prior cartography of tasks.
- Awareness of the shellfish aquaculture industry.

Action progress

Initially scheduled for June 2017, the report related to the faunistic inventory and the identification of food web were received on 4 July 2018 (cf. **Deliverable 01**) and have been the subject of a newsletter (« chroniques estuariennes » #5). The delay was due to weather conditions. Indeed, Storm Volkmar from February 2017 made the use of a boat for the samplings from the Bay impossible. Those studies will be replicated after works and compared in order to evaluate the results and the original objectives (action D1).

Since the start of the action, the regulatory instructions are conducted by the DDTM services of Charente-Maritime for both DDTM teams (DDTM of Charente-Maritime and DDTM of Vendée). Initially expected for June 2017, the impact



assessment, the regulatory instructions and the required authorisations, done by the provider Créocéan, were received on 8 October 2018 (cf. **Deliverable 02**). The draft of the impact assessment has taken longer than expected. This was notably due to the definition of work methodologies to implement and the reflections on reprocessing seashells.

An evaluation on the possible presence of pollutants in the sediments likely to be re-suspended has been conducted, as recommended in the regulatory study and requested by the NNR Scientific Committee's meeting on 21 March 2017. This study of pollutants in the sediments, which was conducted by Oualyse in 2018, indicated the abnormal presence of dibenzo-anthracene (cf. *annex07*). A test on oyster larvae has also been requested to ensure the normal growth of seashells. This test was negative, the larvae that were in contact with the sediments normally developed (cf. *annex07*).

The termination of the last oyster farms operated in the Aiguillon Pointe area and Charron has been given by the DDTM services of Vendée and Charente-Maritime, in partnership with the Pays de la Loire and Poitou-Charentes' Regional Committees on Oyster Farming. Three oyster farms are still operating and will be maintained in the Aiguillon Pointe area.

In November 2018, a presentation of the action to representatives of the State, the Regional Committees on Oyster Farms, the representatives of the oyster farming trade unions, with the presence of the company undertaking the works, was done to precise the means of intervention and the strengthening of the network of bacteriological analyses REMI, in order to prevent the possible influence of works on the water's bacteriological quality (at the request of the DDTM services of Vendée). On 3 December 2018, the same presentation was done to oyster farming professionals from the Aiguillon Bay.



Pile of oysters on abandoned shellfish farm structures

Identified after the implementation of a consultation conducted by the LPO in 2018, the company Trézence TP contacted « Bâti recyclage » to define the modalities of oyster structures deposit and recycling, which will be exported from the mudflats following the works.

The common prefectorial order for Vendée and Charente-Maritime, which is a prerequisite for the start of works was signed on 28 December 2018 (cf. *annex 08*). The company Trézence TP notified the LPO by post on 17 January 2019 that works would not start on 7 January 2019 as originally scheduled. This delay was justified by an accumulated delay on another site of the company because of demonstrations in France during the 2018/2019 winter (« gilets jaunes » blockades), thus not allowing the mobilisation of the required equipment (cf. *annex 09*). Consequently, works will start in September 2019, in accordance with the Regional Committees on Oyster Farms. Indeed, the operating periods depend on shell-fishing activities and the NNR's avifauna issues, and the identified favourable times are in January and February or September and October.

A press conference for the launch of the works will be organised by the LPO.

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 01	Report of the faunistic inventory and food web identification	30/06/2017	04/07/2018	Completed
Deliverable 02	Impact assessment and other regulating provisions, achieved authorisations	30/06/2017	08/10/2018	Completed
Milestone 01	End of regulatory and technical provisions	01/06/2017	08/10/2018	Completed

6.1.2 Action A3: Prefiguration of ecological enhancement works of the Prée Mizottière

	like -		20	16			20	17			20	18			20	19			20	20		Pre	ogress
	5	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
Ba	ele Acultor	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	ı repo	ort	Prog	gress	repoi	t III	F	inalı	repor	t	initial budget	of 31/12/2018
	PNR	Prefig	gurati	on of	ecolo	gical	enhar	nceme	ent wo	orks of	f the P	rée M	izotti	ère									
A3	Initial																					83 460 €	7 640 €
	Current																					03 400 E	7 040 €

Action coordinator PNR Marais poitevin

Status Action undertaken, in accordance with the initial schedule

Actions schedule Scheduled start date: January 2016 Effective start date: January 2016

Scheduled end date: Dec. 2019 Effective (anticipated) end date: Dec. 2019

Objective reminder

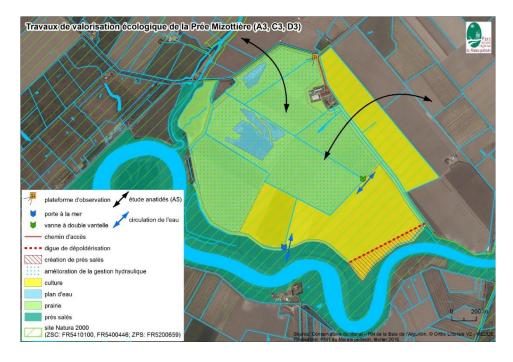
This action aims to create regulating and technical provisions for the implementation of ecological enhancement works on the Prée Mizottière site: restoration of hydraulic structures to retain water in meadow foreshores – a plus in nesting bird species –, creation of a vantage point for bird species and landscapes, creation of estuarine habitats through the displacement of a dike.

Expected results reminder

- Creation of regulatory and technical provisions on water development (specifications, etc.)
- Creation of regulatory and technical provisions on dike removal (Water Act, Natura 2000 influence, hydrological study, dike design specifications, etc.)
- Creation of regulatory and technical provisions on the development of a platform (specifications, etc.)

Action progress

This action comprises three axes: (1) Water engineering works; (2) Moving back the dike; (3) Installation of an observation platform.



Map of works originally identified in the project

(1) Water engineering works

The PNR contacted the DDTM Vendée in May 2016 for the creation of regulatory and technical provisions related to the hydraulic installations. In June 2017, the DDTM Vendée asked for and got details on the project. Following the technical meeting on 09 October 2017, the Water, Risks and Nature Service of the DDTM Vendée wrote on 13 October 2017 to the PNR to authorise the implementation of hydraulic restoration works without process (cf. *Deliverable 04*).

Moreover, the PNR established on 02 June 2017 an occupancy agreement of the site of the Prée Mizottière with the « Conservatoire du Littoral » (CDL) for the planning and implementation of works, allowing the PNR to lead the works (cf. *annex 10*).

Finally, the PNR has created specifications for the implementation of works that have been validated by the CDL, the farm operator and the administrators of the RNN. The competitive procedure was called in July 2017. The provider UNIMA has been selected.

The regulatory and technical provisions related to water development have been created according to the project's original schedule (Original delivery date: 30/09/2017).

(2) Moving back the dike

The works to move back the Prée Mizottière's main dike, a property of the « Conservatoire du Littoral », fall within an agri-environmental project. They aim to move back a dike at the expense of cultivated areas and in favour of the restoration of natural habitats targeted by the project.

The beginning of the preliminary studies to the project of moving back the dike depended on the consensus of the involved parties (cf. progress report 01):

- > the Conservatoire du Littoral (CDL), owner of the dikes located on the site of the Prée Mizottière;
- > the joint association Vendée Sèvre Autize (JAVSA), coordinating the restoration of the dikes, as part of the prevention action plan Vendée Sèvre Autize.

The LIFE team acted as a mediator and was able to find a solution. On 09 October 2017, a steering committee Prée Mizotttière met with the presence of LIFE beneficiaries, State services (DDTM Vendée), the CDL, the JAVSA and the farm operator. The situation has been resolved, the role of each parties explained, and a schedule created. Moreover, an agreement on the overlay of field affectation of the Prée Mizottière was signed on 29 December 2017 by the CDL and the JAVSA (cf. *annex 11*).

To pool technical and financial resources, the works will be jointly conducted by the PNR and the JAVSA. Indeed, the implementation schedule of those different works will allow a pooling of resources and a reduction in costs. Thus, the JAVSA and the PNR established a procurement consolidation contract, coordinated by the JAVSA. Works of the LIFE BAIE DE L'AIGUILLON project have been identified in a specific lot of this market. The meeting on 26 April 2018 between the Curators of the NNR, the JAVSA, the PNR and State services allowed the definition of administrative procedures required for the launch of works on the basis of the submitted specification.

Thereafter, State services have asked the PNR for a « case by case assessment as a prerequisite for the eventual implementation of an environmental assessment », which was done and transmitted in July 2018. By a decision on 07 August 2018, the project was thus exempted from an impact assessment. However, an environmental impact assessment will be conducted during summer 2019 (cf. *annex 12*).

The specification of the project management market has been created and the market published in spring 2018, after consulting the State services. The selected provider is *ISL Ingénierie Angers*. The meeting on the launch of project management took place on 23 October 2018. The launch of works is now scheduled for

summer 2020. The regulatory and technical provisions related to the removal of the dike will thus be transmitted in the final report (*Deliverable 03*).

Moreover, the PNR is continuing discussions with RTE, the company responsible for the maintenance of the electric pylon located at the back of the dike that must be relocated. The meeting on 06 April 2018 (RTE, CDL, PNR) led to conclusions shared by everyone: (1) the RTE pylon will not be put in jeopardy during and after the works to move back the dike; (2) the CDL will ensure RTE will have access to the pylon after the works; (3) an agreement in principle has been reached with the CDL if the issue of moving the pylon were to be arisen.

(3) Installation of an observation platform

On the site of the Prée Mizottière, the overall development project of the site – observation platform – and the farm – pathway between the farm and the platform – is conditioned on the location of the future borrow areas required for the repair of the secondary dikes as part of the prevention action plan from the JAVSA. Those borrow areas shall be defined by the CDL, the farm operator and the JAVSA based on the geotechnical study that will be conducted in January 2019.

Consequently, the reflexion on the project – type of platform, pathway, tool management, etc. – will start in spring 2019. The regulatory and technical provisions related to the development of this observation platform will thus be transmitted in the final progress report (*Deliverable 05*).

Changes in the schedule

The elements previously presented (conflicting relationships between the involved actors, the required mediation phase) are the reasons of the delay in starting action A3 and, consequently, actions C3 and D3. The evolution of the implementation schedule of those actions has been validated by EASME by email on 12/05/2017 and by correspondence on 09/11/2017 (cf. *annex 13*).

The regulatory and technical provisions related to the removal of the dike and the development of an observation platform (**Deliverable 05**) originally scheduled for 30/09/2017 is thus postponed to December 2020.

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 03	Creation of regulatory and technical provisions on the dike removal	31/12/2020	none	Not completed
Deliverable 04	Creation of regulatory and technical provisions on water development	30/09/2017	15/10/2017	Completed
Deliverable 05	Creation of regulatory and technical provisions on the development of a platform	31/12/2020	none	Not completed
Milestone 02	Creation of a steering committee: monitoring committee of Prée Mizottière	01/03/2016	28/04/2016	Completed

6.1.3 Action A4: Prefiguration of renaturation works on the Aiguillon Pointe

		like -		20	16			20	17			20	18			20	19			20	20		Pro	ogress
		6	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
_	Bar	e - Acultor	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	repo	ort	Prog	gress	repoi	t III	F	inalı	report	t	initial budget	of 31/12/2018
		PNR	Prefig	gurati	ion of	renat	uratio	n wo	rks or	the A	Aiguille	on Po	nte											
	A4	Initial																					18 689 €	9 509 €
		Current																					18 689 €	9 509 €

Action coordinator PNR Marais poitevin

Status Action undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: January 2016 Effective start date: January 2016

Scheduled end date: Dec. 2016 Effective (anticipated) end date: June 2017

Objective reminder

This action will establish a development project for the Aiguillon Pointe and present the analysis of a survey among visitors on the summer tourist attendance. Those elements are a prerequisite for the implementation of ecological engineering operations which will be initiated in the action C4, and the results of which are the preservation of habitats and species living in the Aiguillon Pointe site and the increase in dune habitat areas over urbanization.

Expected results reminder

- Production of a development project for the Aiguillon Pointe
- Performance of a survey among tourists (results and analysis)

Action progress

Three monitoring committees on the works to be implemented in the Aiguillon Pointe (24/03/2016; 17/11/2016; 11/12/2018) enabled the implementation of this action.

Survey on the summer 2016 tourist numbers (cf. *Deliverable 07*)

A field survey on the summer tourist numbers in the Aiguillon Pointe, carried out in 2016 by the PNR among 150 people, indicates that the Aiguillon Pointe site is mainly frequented for outdoor activities (hiking, fauna and flora observations) and gathering seafood by hand. The majority of respondents are in favour of moving the car park behind, thus facilitating the access to the site. Those conclusions show that users are strongly in favour of a renaturation of the site, partially engaged in the LIFE BAIE DE L'AIGUILLON project.

Aiguillon Pointe

Development mapping (cf. Deliverable 06)

Initially, the project provided for the intervention of a provider to elaborate a development project of the Aiguillon Pointe, as well as regulatory plans (obtaining agreements, circulation on publicly-owned coastal land, etc.). However, the development mapping has been produced by the PNR's task officers and presented during the second steering committee of the Aiguillon Bay. This project has been validated by all partners. Consequently, the cost for the budget entry « external assistance » (7,320 €) has been redirected, depending on the evolution of the project and its needs.

Prior authorisations

Located in publicly-owned coastal land and under the provisions of a prefectoral decree for protection of the biotope, works in the Aiguillon Pointe are subject to different procedures.

The administrative authorisations were not obtained in 2016 as initially scheduled. In July 2017, the PNR questioned the « Sea and Shore » direction of DDTM Vendée on the official procedure to follow for installing wooden fences, cutting trees and cleaning concrete blocks. Having received no answer from them, the PNR contacted the « Sea and Shore » direction of DDTM Vendée again in October 2017. The PNR was able to do the instruction only in December 2017:

- The Natura 2000 simplified environmental impact assessment, to measure the impact of the works;
- An authorisation request to temporarily occupy publicly-owned coastal land, in order to implement the works (laying wooden fences, cutting trees, removing concrete blocks, etc.) on the State properties.

The authorisation of temporary occupation, authorising the PNR to intervene, was received on 06/03/2018 for a term of 1 year (March 2019).

Information and orientation panel (cf. action E1)

The installation of an information and orientation panel, planned in the action E1, is subject of a partnership convention with the « Communauté de Communes du Pays Né de la Mer », now officially known since 2018 as « Communauté de Communes Sud Vendée Littoral » (CCSVL). Indeed, the CCSVL also had to restore an existing degraded panel. This panel was collectively designed in Autumn 2017 with all parties involved and laid on the Aiguillon Pointe site in February 2018.

Review of the prefectoral decree on protection of the biotope (outside the LIFE project)

The project's commitment has mobilised State services to start the review of the prefectoral decree on protection of the biotope of the Aiguillon Pointe. The finalisation of this review was initially scheduled in Autumn 2017. However, due to a staffing concern from the DREAL – DREAL task officer on long-term illness -, it was decided during a meeting on 24 November 2017 to reschedule this review for the end of the LIFE project. This reschedule will not cause any delay on the implementation of the actions.

Moreover, the idea from the PNR to integrate the LIF BAIE DE L'AIGUILLON program in a global strategy of renaturation of the Pointe required to increase concertation and caused delay in action A4. Indeed, two meetings with the main actors (Conservatoire du Littoral, « Syndicat mixte hydraulique de la Vallée du Lay », ONCFS, PNR and State services) and farmers/local users were to be scheduled to explain the project (01/06/2017 and 12/10/2017). In mid-term however, this project has not seen any change.

Because of the different elements described above, works for action C4 initially scheduled in autumn 2017 have been reported to spring 2018 (cf. action C3).

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 06	Development project of the Aiguillon Pointe	31/12/2016	15/12/2016	Completed
Deliverable 07	Survey on summer tourist attendance among visitors	01/10/2016	15/10/2016	Completed
Milestone 03	Receipt of the development project of the Aiguillon Pointe	01/12/2016	15/12/2016	Completed

6.1.4 Action A5: Survey on the use of the Aiguillon Bay and outlying marshes by wintering Anatidae

	ele -		20	16		2017				2018					20	19		2020				Pro	ogress
		1T 2T 3T 4T				1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
Ba	Re - Acullar	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	n repo	ort	Prog	gress	repoi	rt III	F	inalı	repor	t	illitiat buuget	of 31/12/2018
	ONCFS	Surve	ey on	the us	e of t	he Aig	guillon	Bay	and o	utlyin	g mai	shes I	by wir	nterin	g Ana	tidae							
A5	Initial																					157 519 €	180 043 €
	Current																					121,213€	100 043 €

Action coordinator ONCFS

Status Action undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: July 2016 Effective start date: January 2016

Scheduled end date: June 2020 Effective (anticipated) end date: June 2020

Objective reminder

This action will help us to better understand the links between feeding and resting grounds, and thus better understand the Anatidae's functional area in the Aiguillon Bay and the prairies of the Marais poitevin. Three axis of knowledge enhancement: (1) feeding resource, (2) diet and (3) geographic distribution.

Expected results reminder

- Feeding resource: analysis of 1512 cores
- Diet: analysis of 100 crops
- Geographical distribution: capture and tagging of 30 ducks

Action progress

(1) Feeding resource

The first two campaigns of soil core sampling in meadows and salty meadows resulted in the collection of 4,050 soil cores from the different sites (salty meadows in Charron and Champagné, meadows from the Prée Mizottière, « la Vacherie » marshlands and common land in Lairoux) during the 2016/2017 and 2017/2018 seasons. Those cores have then been sieved and passed through a drying kiln, waiting for the analysis phase. A third campaign (2018/2019) of soil core sampling in meadows started in autumn 2018. The seeds from the three campaigns will be available in summer 2019.

This action required the recruitment of Laurine Bouffandeau in fixed-term contracts in 2017 and 2018.







The steps of a soil core sampling campaign

The core samples of seeds coming from the salty meadows will be analysed in 2019 by the NNR staff (end-of-studies internships) and the ONCFS. The analysis of the core samples of seeds coming from the meadows (Lairoux, Champagné and Prée Mizottière) will be conducted by a provider (F. CAVALLO, appointed after a competitive call from the ONCFS).

(2) Diet

Since the start of the project, 100 gizzards have been collected by hunters and transmitted to the ONCFS. Those gizzards from ducks hunted in winter during the 2016/2017 and 2017/2018 seasons have been analysed. A first exploitation of data has been conducted and presented to local hunters (« Chasse Maritime Vendéenne » association on 08/04/2017; « La Sauvagine Vendéenne » association on 02/11/2017).

(3) Geographic distribution

Since the start of the project, 43 transceivers have been set on the Anatidae captures by the NNR's agents.



Analysis of ducks' gizzards

The acquisition of transceiver has been conducted in three phases:

- A first batch of 10 transceivers in December 2016, following a consultation done by the ONCFS (ECOTONE/GEOLINKS transceivers)
- A second batch of 20 transceivers in September 2017, following a consultation done by the PNR (GEOLINKS transceivers). Indeed, the ONCFS national consultation for the acquisition of transceivers, done in 2017, was not successful. To ensure the reception and the setting of transceivers, the PNR took over this acquisition, after the agreement of NEEMO from 05/06/2017 (cf. annex 14).
- A third batch of 17 transceivers in September 2018, following a consultation done by the ONCFS (ORNITHELIA/GEOLINKX).

	2016/2017 Season	2017/2018 Season	2018/2019 Season
Mallard duck	9	7	7
Northern pintail		3	
Eurasian teal		5	13

Number of Anatidae tagged during the different seasons (as of 31/12/2019)

A technical issue on the first ECOTONE transceivers happened on 31 December 2017. Data transmission linked to tagged ducks' movements has thus been affected. The transceivers have been replaced by the ECOTONE company and re-set during the 2018/2019 season.

Moreover, the absence of rain in autumn and summer has resulted in the absence of flooding of many wet areas, including the area where Anatidae captures were supposed to take place.

However, captures could start in end of November 2017 and a capture site on the salty meadows has also been added. However, 11 out of the 43 transceivers have not sent the data because of issues linked to the transmission distance (Eurasian teal) or because of technical or logistical issues (Mallard duck).



Setting a transceiver February 2017

A shift in the action's spending is explicated in *chapter 8.1*.

Debriefing meeting

This action is subject to debriefing meeting before wildfowler hunters, naturalist associations (LPO Charente-Maritime and OPN day) or during meetings with administrators of natural areas.

A presentation has also been conducted during the Coastal Ecology Workshop, a task force on the issue of coastal ecology (salty meadows, mudflats, estuaries), which took place in Scotland from 26 to 30/11/2018. A poster has been created for this purpose, at right.

Website

Instant communication on the website is technically delicate to set up. It has been suggested to insert a map of duck travelling – and especially teals – that is updated every 10-15 days during follow-up period on the LIFE project website and shared on the LIFE Baie de l'Aiguillon Facebook page.



Bimonthly monitoring of the Anatidae

The monitoring was conducted from November 2017 to March 2019. A synthesis will be submitted along the project's final report. These counts have been done during winter but the difficult weather conditions in January 2018 resulted in having partial headcounts.

The study report on the use of the Aiguillon Bay and the outlying marshes by wintering Anatidae (*Deliverable* 08) is scheduled for autumn 2019.

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 08	Study report on the use of the Aiguillon Bay and the outlying marshes by wintering Anatidae	01/09/2019	none	Not completed
Milestone 04	Implementation of studies on the knowledge enhancement of Anatidae	01/09/2016	15/01/2016	Engaged

6.1.5 Action A6: Implementation of water quality monitoring in the Aiguillon Bay

	ele -		20	16			20	17			20	18			20	19			20	20		Pro	ogress
	6	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
Ba	Re - Acullar	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	n repo	ort	Prog	gress	repo	rt III	F	inal	report	t	illitiat buuget	of 31/12/2018
	ONCFS	Imple	ement	ation	of wa	ter qu	uality	monit	toring	in the	e Aigu	illon E	Зау										
A6	Initial																					270 496 €	193 040 €
	Current																					270 490 €	193 040 €

Action coordinator ONCFS

Status Action undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: July 2016 Effective start date: January 2016

Scheduled end date: Dec. 2020 Effective (anticipated) end date: Dec. 2020

Objective reminder

The objective is to have a better understanding of hydraulic relationship between the Aiguillon Bay, the Marais poitevin and its watershed, according to an action plan with the following goals: (1) The perpetuation of the IFREMER multi-parameter measurement stations; (2) The evaluation of flows at the outlets of different waterways of the basin feeding the bay, through a study program associated with the LIFE project; (3) The evaluation of primary production.

Expected results reminder

- Implementation of complementary measurement stations (4),
- Drafting of a biannual newsletter on water (cf. E1),
- Scientific publications,
- Decision aids on upstream water management

Action progress

Building partnerships

Since the start of the project, the ONCFS has worked on a project of framework convention related to the implementation of qualitative and quantitative follow-up of fresh water entering the Aiguillon Bay with the different partners (IFREMER, LPO and EPMP):

- The action's qualitative component is conducted by the ONCFS as part of the LIFE BAIE DE L'AIGUILLON project, in partnership with IFREMER and LPO
- The quantitative component is conducted by the EPMP and is a complementary program of the LIFE BAIE DE L'AIGUILLON project

The ONCFS has also worked on a project of financing agreement with IFREMER for the implementation of this action A6's qualitative component. The draft was rather late because of an administrative issue: the ONCFS didn't wish to publish a contract notice for the analysis of cater quality with no guarantee of a strong partnership with IFREMER. A solution has been found between both parties.

Both agreements have thus been signed on 02/11/2016 (Milestone 05 respected, cf. annex 15).

Conduct of the action

The action A6 was presented to the members of the NNR's Scientific Council of the Aiguillon Bay on 21 March 2017 in Luçon to validate the implementation of this action (25 persons).

A requested steering committee for the implementation of this action was created in 2017 and gathered on 05 July 2017 at the headquarters of the RNN with the presence of the following members: PNR, LPO, ONCFS, IFREMER and EPMP. On this occasion, the report on the dynamics of nutrients and carbon in the outlets of the Marais poitevin and the associated overland flows in the Aiguillon Bay in winter has been presented (study from January to June 2017, cf. *annex 16*). This steering committee enabled the preparation of the 2017/208 season related to this action.

A first technical committee with the IFREMER, the ONCFS and the EPMP met on 28/09/2018. The qualitative and quantitative components have been presented by the IFREMER. Details in the calculations of the quantitative component have been asked in order to meet the study's expectations (better awareness of true inflows of the watershed).

A second technical committee met on 17/12/2018 with the presence of the IFREMER and administrators of the NNR to consider the monitoring mechanism to maintain and/or develop after the LIFE project.

The progress and ongoing reflections on the prospects with the IFREMER and other potential partners have been presented to the NNR's Scientific Council of the Aiguillon Bay on 17/12/2018.

Acquisition of equipment and installation

A first contract notice for the acquisition of salinity sensors, managed by the ONCFS in July 2017, was declared unsuccessful, the providers not offering adapted equipment. The ONCFS thus published a second contract notice, notified to NKE instrumentation in January 2017. The sensors were delivered in February 2017. The delay in the delivery has not impacted the project, because the IFREMER accepted to lend old sensors on a temporary basis. All targeted canals (cf. below) were equipped as of 03/01/2017 (*Milestone 06* respected). Two sensors have been obtained by both sites, enabling the alternate use, necessary for the maintenance of equipment.

The sensors are operational since February 2017 in the Aiguillon Bay and its immediate vicinity. They have been placed in the 5 initially planned sites (Chenal Vieux, canal de Luçon, canal de la Raque, Sèvre Niortaise estuary and canal du Curé).

Operational implementations: Measure of the physicochemical quality of waters

Physicochemical measurements are Completed, one per boat, by the provider (*Laboratoire de l'Environnement et de l'Alimentation de la Vendée*), every second week (in average) at each outlet. The first measurements were made on 16 January 2017 and will continue until January 2019. The measured elements will give a better understanding of the factors influencing the primary production.

Given the high turbidity of water, the initially scheduled analysis of the whole flora turned out to be complicated. The resources used lead to work primarily on the chlorophyll-a concentration levels.

Even if the flora component has not been budgeted for reasons of associated costs, studies on phytoplankton conducted by the LERPC are ongoing and will be presented in the final report scheduled for this year.

Moreover, the marine park agreed to participate in this action by doing the scheduled isotopic analyses to characterise the carbon flux between the watershed and the Bay.

Presentation of the first results

A presentation of the first results was made on 27/06/2017 to the main hydraulic stakeholders (SAGE, joint associations, Departmental Council of Vendée) to have a critical discussion (17 persons at the presentation). The action A6 was also presented to the members of the Local Water Committee of the Sèvre Niortaise Water Development and Management Scheme (LWC of the Sèvre Niortaise WDMS) on 18/09/2017 in Niort.

In 2018, the results were once again presented to the Scientific Council of the Aiguillon Bay NNR (17/12/2018). A synthetic presentation was also made to members of the NNR Consultative Committee and professional seafarers (oyster and mussel farmers) in the margins of a meeting on the presentation of action A1.

Newsletter « Chronique estuarienne »

This action A6 was subject to two « chroniques estuariennes » newsletters:

- Bulletin #1 (July 2017): The implementation of a follow-up on water quality in the Aiguillon Bay.
- Bulletin #3 (May 2018): Winter dynamics of nutrients and carbon in the rivers of the Marais poitevinwatershed and its associated inland flows in the Aiguillon Bay.



A few technical issues

Those technical issues do not restrict the study as a whole but cause one-time and local data losses:

- During the Zeus storm on 06/03/2017, one of the transceivers was lost, despite measures taken for the fixing. This does not challenge the project. A different rotation has been scheduled during the recalibration of transceivers (information transmitted to NEEMO on 17/03/2017).
- One-off issues of transceivers siltation linked to the sediment dynamics of the Bay, and especially the small canals called « russons » from the Luçon and Curés Canals have been observed. There have been improvements made in changing the devices used for the transceiver supports (transceivers rathers placed vertically in the russons to limit the siltation).
- An issue linked to the growth of barnacles in the canals in spring which, potentially, can damage the transceivers' sensors. In spring 2018, to remedy this situation, copper grilles have been installed on the transceivers, which considerably favours the siltation.

The monitoring report on this action (*Deliverable 09*) is expected by October 2020.

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 09	Monitoring report on the action	01/10/2020	none	Not completed
Milestone 05	Elaboration and signature of the IFREMER / National natural reserve managers (LPO, ONCFS) partnership	01/03/2017	30/11/2016	Completed
Milestone 06	Implementation of complementary probes	01/03/2017	11/2016 > 01/2017	Completed

6.1.6 Action A7: Formalisation of management direction

	the -		20	16			20	17			20	18			20	19			20	20		Pro	ogress
	6	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
Ba	religible Aculton	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	ı repo	ort	Prog	gress	repoi	t III	F	inal ı	epor	t	illitiat buuget	of 31/12/2018
	ONCFS	Form	alisat	tion of	f man	agem	ent di	rectio	n														
A7	Initial																					7 554 €	0€
	Current																					1 334 6	0.6

Action coordinator ONCFS

Status Action not undertaken in accordance with schedule

Action schedule Scheduled start date: July 2019 Effective start date: July 2019

Scheduled end date: Dec. 2020 Effective (anticipated) end date: Dec. 2020

Objectif reminder

The implementation of actions A1, C1, D1, A5 and A6 will characterise the function of the Aiguillon Bay. The conclusions of this study will be used as a basis for the drafting of the future management plan. Those elements are thus essential to reinforce the role of the natural reserve in the protection of the Marais poitevin 's natural heritage.

Expected results reminder

- Creation of a vade-mecum on hydraulic management
- Creation of proposals of hinterland priority intervention areas.

Action progress

This action will be undertaken by the ONCFS in summer 2019. Deliverables 10, 11 and 12 (*Deliverable 10*: Synthesis report, *Deliverable 11*: Vade-mecum on water management, *Deliverable 12*: Preparatory document to the evaluation of the 2013-2022 management plan of the Aiguillon Bay national natural reserve and the drafting of the 2023-2032 management plan of the reserve) are expected by November 2020.

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 10	Synthesis report	01/11/2020	none	Not completed
Deliverable 11	Vade-mecum on water management	01/11/2020	none	Not completed
Deliverable 12	Preparatory document to the evaluation of the 2013-2022 management plan of the Aiguillon Bay national natural reserve and the drafting of the 2023-2032 management plan of the reserve	01/11/2020	none	Not completed
Milestone 07	Implementation of preparatory documents and water management vade-mecum drafting	01/07/2020	none	Not completed

6.1.7 Action C1: Implementation of experimental works of wild oyster habitats removal from the Aiguillon Bay

		the -		20	16			20	17			20	18			20	19			20	20		Pro	ogress
		100	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
	Bar	e - Acultor	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	ı repo	ort	Prog	gress	repo	rt III	F	inalı	repor	t	illitiat buuget	of 31/12/2018
ſ		LPO	Imple	ement	ation	of exp	perim	ental	works	of wi	ld oys	ter ha	bitat	rem	oval fi	rom t	he Aig	uillon	Bay					
	C1	Initial																					401 956 €	5 458 €
		Current																					401 930 €	3 436 €

Action coordinator LPO

Status Action undertaken in accordance with schedule

Action schedule Scheduled start date: October 2017 Effective start date: October 2017

Scheduled end date: Dec. 2020 Effective (anticipated) end date: Dec. 2020

Objective reminder

Following the implementation of the preparatory action A1, the objective of this action is to experiment during a three-year period (2017-2019) a methodology for testing the removal of those oyster clusters and shellfish structures abandoned on several areas.

Expected results reminder

Restoration of 100 hectares of mudflats

Action progress

The duration of the regulatory instruction prior to the implementation of works has been longer than initially planned, which has caused delay in the launch of a consultation to find a provider to manage the removal works of oyster bed and abandoned structures. This consultation was conducted in 2017 and led to the identification of a provider in August 2017 (*Trézence TP*).





Abandoned oyster bed structures

The intervention methodology was defined following exchanges between the LPO and the provider, especially during the meeting on 27/11/2018 on the Aiguillon Pointe site, in the presence of the Regional Committees on Oyster Farms, the company Trézence TP and the LPO.

However, this provider was not able to implement the works by January 2019 as planned (cf. action A1). Consequently, the works period has been moved to the period between autumn 2019 and winter 2020.

As a result, the initial implementation schedule for this action will not be respected. A request for project extension has been submitted by the LOP (cf. *chapter 6.2*).

The report on the presentation of the works conducted on the site (*Deliverable 13*) is expected by the end of 2019, but it will only be issued once the works are completed. It will thus be issued in spring 2020.

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 13	Synthesis report: works and follow-up on oyster regrowth	01/12/2019	none	Not completed
Milestone 08	Implementation of experimental works on oyster habitat removal	01/07/2017	none	Not completed

6.1.8 Action C3: Implementation of ecological enhancement works for the Prée Mizottière site

		the -		20	16			20	17			20	18			20	19			20	20		Pro	ogress
		5	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
	Bar	e - Acultor	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	ı repo	ort	Prog	gress	repoi	t III	F	inal ı	report	t	illitiat buuget	of 31/12/2018
ſ		PNR	Imple	ement	tation	of eco	ologic	al enh	nance	ment	works	for tl	ne Pré	e Miz	ottière	e site								
	C3	Initial																					247 559 €	33 261 €
		Current																					241 339 €	33 201 €

Action coordinator PNR Marais poitevin

Status Action undertaken in accordance with schedule

Action schedule Scheduled start date: Oct. 2017 Effective start date: July 2017

Scheduled end date: Dec. 2020 Effective (anticipated) end date: Dec. 2020

Objective reminder

The objective of this action is the implementation of ecological enhancement works for the Prée Mizottière site. They consist of the restoration of hydraulic structures to maintain water in grassland slacks – favouring avifauna nesting –, the creation of a vantage point for observing birds and landscapes, and the creation of estuary habitats by moving back a dike.

Expected results reminder

- Creation of at least 10 hectares of sea marshes
- Adaptation of water management for species on 17 hectares
- Creation of wetland habitats for water bird nesting (black-winged stilt, pied avocet, northern shoveler)
- Creation of a resting area for Anatidae and Limicolae during migration

Action progress

(1) Water engineering works

Following the prior actions conducted by the PNR for the implementation of the works (cf. action A3), the competitive tendering procedure was done in July 2017 to choose a provider (UNIMA RIEM).

The water engineering works done are as follow:

- The creation of an exit to the sea through a dike, to allow the natural evacuation of gravity-fed rainwater and make the agricultural drainage pumps of the plots useless,
- The resumption of a non-functional pathway with nozzle to allow a better flooding of a more than 20hectare ecological zone,
- The restoration of a defective hydraulic structure, on one hand to allow a better management of water levels on the site, and on the other hand to favour the capture of ducks (action A5), including teals on that zone. In this case, it is a question of additional works, not initially planned, but approved by EASME on a correspondence from 09/11/2017 (cf. annex 04).

Works started on 20 November 2017 and were completed on 04 December 2017.

These improvements are currently running, managed by the NNR administrators. Those works allow the management of around 20 hectares of meadows. A muddy plug has been notified since summer 2018 at the structure leading to the sea, the flushing effects being ineffective because of a lack of water in summer 2018. A shovel will be mobilised in 2019 to evacuate this muddy plug.





Aménagement hydrauliques réalisés sur le site de la Prée Mizottière Novembre 2017

(2) Moving back the dike

The action A3 will last up to the summer 2020, the launch of the works is scheduled for the summer 2020 (cf. action A3).

Modification of the schedule

The initial conflictual relationships between the involved actors on the site of the Prée Mizottière and the induced mediation phase explain the reasons of the delay in the implementation of action A3 and, consequently, the delay in the implementation of actions C3 and E7. Those changes in the schedule were approved by EASME by email on 12 May 2017 and on a correspondence dated from 09/11/2017 (cf. *annex 13*). Those changes are broken down in chapter 6.2 again.

The report on the presentation of the whole works done on the site (**Deliverable 14**) is expected by the end of 2020

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 14	Report on the works (dikes, hydraulic structures)	01/12/2020	none	Not completed
Milestone 09	End of works (structure with valves; restoration of the structure at sea; depolderization)	31/12/2020	none	Engaged

6.1.9 Action C4: Implementation of renaturation works on the Aiguillon Pointe

		like		20	16			20	17			20	18			20	19			20	20		Pro	ogress
		5	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
	Bar	e - Acultur	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	n repo	ort	Pro	gress	repoi	rt III	F	inalı	repor	t	initial budget	of 31/12/2018
Ī		PNR	Imple	ement	tation	of rer	natura	ation v	vorks	on th	e Aigu	uillon	Pointe	9										
ı	C4	Initial																					94 652 €	18 790 €
		Current																					94 652 €	10 /90 €

Action coordinator PNR Marais poitevin

Status Action undertaken in accordance with schedule

Action schedule Scheduled start date: Dec. 2016 Effective start date: July 2017

Scheduled end date: Dec. 2019 Effective (anticipated) end date: Dec. 2019

Objective reminder

Following the implementation of action A4, the objective of this action is the implementation of ecological engineering operations to preserve habitats and species living on the Aiguillon Pointe site and increase dune habitat areas over urbanization.

Expected results reminder

- Restoration of dune habitats (800 linear meters of protection)
- Coordination between public access and dune protection (2 500 linear meters of protection),
- Creation of 5 000 m² of dune area (70 trees to be taken down)

Action progress

The competitive tendering instruction was done in December 2017 by the PNR to identify the providers who will carry out the layout of wooden fences, the felling operations and the removal of concrete blocks on the Aiguillon Bay site:

- A provider (AB Forêt) has been identified to carry out the layout of wooden fences and plain wires on the Aiguillon Bay site.
- However, no company has responded for the operations of concrete blocks removal and tree logging.
 A new instruction related to tree logging, done in summer 2018, resulted in the identification of a provider (ALIGATORE association).
- Regarding the removal of concrete blocks and tree stumps, a new instruction done in autumn 2018
 resulted in the identification of a provider (company « Vendée terrassement ») which will intervene
 in February 2019.

The map of works done on the Aiguillon Pointe site as part of the LIFE BAIE DE L'AIGUILLON project, updated in December 2018, is set out in *annex 17*. Those works have been carried out in three phases.

First phase of works

The first phase of works deals with the layout of wooden fences and plain wires. It was conducted in March 2018 by the company AB Forêt. Those works have contributed to better channel the public and avoid the trampling and the deterioration of dunes. 240 linear meters of wooden fences and 836 linear meters of plain wires have been installed.

This planning is experimental because those wooden fences can retain 1.4 time more sand than regular wooden fences.



Laying out wooden fences Aiguillon Pointe site March 2018

Second phase of works

The second phase of works was conducted in December 2018 by the association ALIGATORE. Those works include cutting trees from the old camp site, which are required for the restoration of grey dunes habitats. The wood has been reclaimed as fire wood by the association. Branches were chipped to be re-used as mulch for plantation sites by the association and the cities of la Faute-sur-Mer and L'Aiguillon-sur-Mer.



Cutting trees down Aiguillon Pointe Site December 2018

Third phase of works

The third phase of works deals with the extraction of concrete blocks and the final cleaning of the old camp site (removal of tree stumps and existing bitumen). The provider has been selected in November 2018 and the works will be conducted in February 2019. The waste will go to adapted recycling branches.

Additional works will take place in the perimeter of the Prefectoral decree on the protection of the biotope of the Aiguillon Pointe and the « Sablons » beach, at the end of 2019.

An inauguration of the last work acceptance should be organised before November 2019 (*Milestone 10*).

The report on works conducted on the site (**Deliverable 15**) will be issued by the second quarter of 2020.

Schedule compliance (deliverable and milestone) and next steps

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 15	Review on conducted works	01/06/2020	none	Not completed
Milestone 10	Inauguration of work acceptance done at the Aiguillon Bay	01/11/2019	none	Not engaged

6.1.10 Action D1: Monitoring in intervention sectors of wild oyster habitat removal in the Aiguillon Bay

	the -		20	16			20	17			20	18			20	19			20	20		Pro	ogress
	6	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
Ba	tell Acultur	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	n repo	ort	Pro	gress	repoi	rt III	F	inal ı	report	t	iiiiiai buuget	of 31/12/2018
	LPO	Moni	toring	; in int	erven	ition s	sector	s of w	ild oy:	ster h	abitat	remo	val ir	the A	iguill	on Ba	у						
D1	Initial																					119 612 €	30 376 €
	Current																					119 012 €	30 376 €

Action coordinator LPO

Status Action undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: April 2016 Effective start date: April 2016

Scheduled end date: Dec. 2020 Effective (anticipated) end date: Dec. 2020

Objective reminder

To evaluate those actions of oyster clusters and abandoned shellfish structures (action C1), several monitoring actions will be done between 2016 and 2020:

- An inventory of the benthic macrofauna and a sieve analysis of substrates;
- Two campaigns of topographical measurements (2016 and 2019) and the analysis of the sedimentary dynamics observed before and after works.

Expected results reminder

- Mapping of concerned areas and potential recolonization zones by wild oysters,
- Georeferenced list of benthic macrofauna species living on each intervention sector,
- Georeferenced grain size analysis on each intervention sector,
- Mapping and report on bathymetric recordings at the bay level,
- Forecasts on the morphological evolutions of the Aiguillon Bay and their causes,
- Cost/benefit analysis on wild oyster removal methods according to existing supports,
- Results approval by the oyster industry.

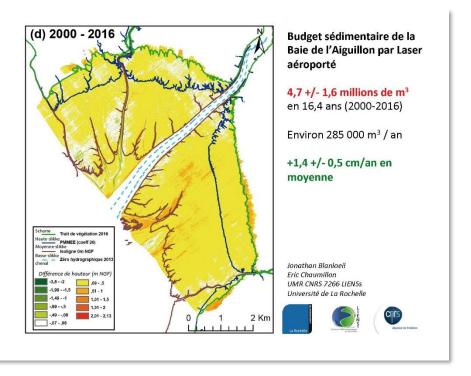
Action progress

Inventory of the benthic macrofauna and sieve analysis of substrates

This study, conducted in action A1, will be conducted again after the works, in order to evaluate the impact of mudflat habitat restoration on the benthic macrofauna and sediment grain-size distribution. This action will be conducted in 2020 after the works phase (action C1). The report on the benthic macrofauna and mudflat grain-size distribution in the concerned sectors (**Deliverable 17**) will be issued in 2020.

Topographical measurements and data analysis

In 2016, the initial sedimentary situation of the Aiguillon Bay mudflats was established thanks to a group of providers (OPSIA) and a digital elevation model (DEM) was created. This DEM allows a digital immersion (in 3D) in the mudflats. In February 2017, a competition procedure for the realisation of an analysis of the sedimentary dynamic observed in the Aiguillon Bay resulted in the choice of *Littoral Environnement et Sociétés* (LIENSs), a joint research unit between the CNRS (National Institute of Sciences and Research) and the University of La Rochelle, as provider. This analysis was conducted, and the results presented to the coordination team on 27 July 2017 and the report delivered in autumn 2017. This study shows that the Aiguillon Bay is an area with very high sedimentation rates – 1,44 \pm 0,5 cm/year from 2000 to 2016. It has also been characterised by a very rapid advance of the vegetation line – 6,3 \pm 0,3 m/year since 1972. (cf. *Deliverable 16*).



A second campaign of topographic surveys will be conducted in 2020 and not in March 2019 (because of a delay in the launch of works) and supplemented with an analysis of two sets of data obtained during the project (*Milestone 11*).

In light of the delay in action C1, the LPO proposes an extension of this action in 2021 in order to evaluate the efficiency of the operation (Cf. *chapter 6.2*).

The report on work completion and prospects for continued wild oyster habitat removal (**Deliverable 18**) will be issued at the end of the project.

Schedule compliance (deliverable and milestone) and next steps

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status	
Deliverable 16	Analytical report on bathymetric recordings and associated mapping	01/06/2020	Part 01 : 15/09/2017	Completed in part	
Deliverable 17	Report on the benthic macrofauna and grain size monitoring of mudflats on the concerned sectors.	01/03/2020	Part 01 : 16/08/2017	Completed in part	
Deliverable 18	Report on work completion and prospects for continued wild oyster habitat removal	none	Not completed		
Milestone 11	Analyse et interprétation des données bathymétriques	01/06/2020	none	Engaged	

6.1.11 Action D3: Biological Monitoring on ecological engineering work in the Prée Mizottière site

de			2016				2017				2018				2019				2020				Progress	
36		1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as	
	Bale - Acollor			Progress report I				Progress report II			Midterm report			Progress report III				Final report				iiiitiat buuget	of 31/12/2018	
Ī		PNR	Biolo	Biological Monitoring on ecological engineering work in the Prée Mizottière site																				
	D3	Initial																					19 290 €	3 604 €
		Current																					19 290 €	

Action coordinator PNR Marais poitevin

Status Action undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: April 2016 Effective start date: April 2016

Scheduled end date: June 2020 Effective (anticipated) end date: Dec. 2020

Objective reminder

Three ecological indicators will be under consideration to evaluate those conservation actions on the Prée Mizottière site (action C3):

- Follow-up on the avian fauna from 2018 to 2020.
- Follow-up on the vegetation and habitats from 2018 to 2020.
- Follow-up on amphibians from 2017 to 2020.

Expected results reminder

- Extension of sea marshes areas
- Increase in the number of bluethroats, black-winged stilt and the associated avifauna

Action progress

1) Follow-up on the nesting avian fauna

A follow-up on nesting birds is conducted twice every year on the Prée Mizottière during the breeding season – April and June – at sunrise and consists in browsing the entire Prée Mizottière and conducting point counts to identify singing males. Several species linked to several habitats are present: the Eurasian skylark and the Corn bunting in areas opened to crops and meadows, the Eurasian reed warbler in reedbeds, the Bluethroat and the Common red bunting in salt meadows.

The follow-up of passerines was originally supposed to start in 2018. However, it was found appropriate to collect data starting 2016. The cost of action D3 has not been modified.

A monthly counting of birds has been done on the site of the Prée Mizottière. This follow-up is part of all the follow-ups from the Observatory of the Marais poitevin Natural Heritage (Observatoire du Patrimoine Naturel du Marais poitevin).

2) Follow-up on amphibians

A follow-up on amphibians has also been carried out on the Prée Mizottière three times during the season – from March to May – at sunset. Regular listening positions were used to identify the presence or not of amphibians in a 100-m² area. The two main species present on the Prée Mizottière are the Common parsley frog – a typical small toad from the wet meadows of the Marais poitevin – and the Mediterranean tree frog at the northern edge of its range.

3) Follow-up on vegetation and habitats

A first vegetation survey was established in 2017 by the LPO. A habitat mapping will be issued by the LPO in spring 2019.



Mapping of biological surveys conducted on the site of the Prée Mizottière (spring 2017)

The three inventory reports (*Deliverable 19, 20* and *21*) will be issued in September 2020.

Schedule compliance (deliverable and milestone) and next steps

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 19	Habitat inventory report	01/09/2020	none	Engaged
Deliverable 20	Avifauna inventory report	01/09/2020	none	Engaged
Deliverable 21	Amphibians inventory report	01/09/2020	none	Engaged
Milestone 12	Implementation of biological monitoring	01/09/2017	15/04/2016	Engaged

6.1.12 Action D4: Biological monitoring on the Aiguillon Pointe intervention sector

d			2016				2017				2018				2019				2020				Progress	
6		1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as	
Bale in Acollor			Progress report I				Progress report II			Midterm report			Progress report III				Final report			t	iiiitiat buuget	of 31/12/2018		
Ī		PNR	Biolo	gical	monit	toring on the Aiguillon Pointe intervention sectors																		
	D4	Initial																					11 545 €	515€
		Current																					11 545 €	

Action coordinator PNR Marais Poitevin

Status Action undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: April 2016 Effective start date: April 2016

Scheduled end date: June 2020 Effective (anticipated) end date: June 2020

Objective reminder

The work on action C4 will strengthen and preserve the Aiguillon Pointe dune ridge. Two biological indicators will be studied to evaluate those conservation actions:

- Annual follow-up of the avifauna: reproduction tracking of 3 species (Kentish plover, Tawny pipit, Bluethroat)
- A habitat mapping in 2019

Expected results reminder

Increase in targeted bird populations

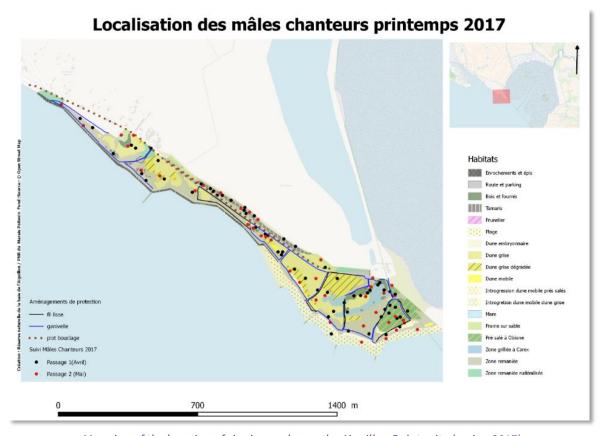
Action progress

This follow-up was carried out twice during the breeding season – in April and June – at sunrise and consisted in browsing the entire Pointe area and conducting point counts to identify singing males. The observations detail the presence of the following species:

- > The commonly observed species from the Aiguillon Bay Reserve in the salty meadow habitats (Bluethroat, Skylark, Zitting cisticola, Common reed bunting),
- > The species in contact with dunes (Tawny pipit, Greater short-toed lark)
- > Species present in the groves or bushy shrubs (Dunnock, Common Nightingale, Common linnet, European Stonechat...).

During those follow-ups, 23 breeding passerines were identified on the site of the Aiguillon Pointe. Moreover, the reproduction of the Greater short-toed lark (*Calandrella brachydactyla*) has been verified.

It was found relevant to do the inventory of bush passerines (blackbird, robin, accentor) and Alaudidae (skylark, crested lark). For this reason, it was necessary to do a first survey as soon as April 2016. This supplement will lead to a more exhaustive listing of species present on the Aiguillon Pointe site. Those additional follow-ups bring additional information but do not alter the cost of action D4.



Mapping of the location of singing males on the Aiguillon Pointe site (spring 2017)

The mapping of habitats (*Deliverable 22*), associated to the drafting of a synthesis report on avifauna follow-up (*Deliverable 23*), is expected by spring 2019. In view of the works scheduled for autumn 2019 on the site of the Prefectoral decree on the protection of the biotope in the Aiguillon Pointe and the « Sablons » beach area, it has been suggested to postpone the habitat mapping to spring 2020. It will thus be conducted after the end of works done on the site.

N°	Deliverable / Milestones name	Initial deadline	Completion date	Status
Deliverable 22	Habitat mapping	01/10/2019	none	Not completed
Deliverable 23	Final synthesis report on avifauna follow-up	01/10/2019	none	Not completed
Milestone 13	Implementation of avian follow-ups	01/03/2016	01/03/2016	Engaged

6.1.13 Action D5: Survey on the socio-economic and ecosystem impacts of the project

	et.		20	16			20	17			20	18			20	19			20	20		Pro	ogress
		1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
Bar	tis Acultor	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	repo	ort	Prog	gress	repo	rt III	F	inalı	repor	t	illitiat buuget	of 31/12/2018
	PNR	Surve	ey on	the so	cio-ed	conon	nic an	ıd eco	syster	n imp	acts	f the	proje	ct									
D5	Initial																					26 450 €	4 882 €
	Current																					26 450 €	4 002 €

Action coordinator PNR Marais poitevin

Status Action undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: July 2016 Effective start date: June 2017

Scheduled end date: Dec. 2020 Effective (anticipated) end date: Dec. 2020

Objective reminder

The objective here is to characterise the full benefits rendered by the project on the territory.

Expected results reminder

The analysis of the survey on the socio-economic and ecosystem impacts of the project is aimed to provide concrete information on the project's issues and impacts on the territory, and to answer stakeholders' questions on a life project's relevance and merit.

Action progress

The financial envelope of the action has been underestimated for external assistance. The LPO agent's skills lead us to redirect the financial envelope designed for the item « PNR external assistance » of the program – 10 000 € under the supervision of the PNR – to the item « LPO staff ». This budgetary stance has been accepted by EASME.

The LPO engaged its mission as early as October but got delayed because of employees' health issues. Indeed, an LPO employee was selected in October 2017 but couldn't continue the mission because of a sick leave and didn't come back afterwards. A second LPO employee (Alice Goosens) was thus selected in April 2018. Thereafter, Alice Goosens, because of health issues too and after leaving the office, was replaced by Florent BIGNON (selected in July 2018), who is now in charge of the evaluation of the project's socioeconomical and ecosystem impacts.

The survey on ecosystem services has been launched on the three study sites of the LIFE BAIE DE L'AIGUILLON project with a very special attention on the following ecosystem services: cultural services, nature-based leisure, grown commodities, the harvest of wild products and coastal protection. During the spring, meetings and workshops by stakeholders were conducted to identify everyone's expectations, list the habitats, threats and ecosystem services impacted by the project. This work was agreed during the monitoring committee of 29/05/2018, with the presence of the administrators of the Reserve, the PNR, the LPO, representatives of the association « Rivages de France », tourist offices and oyster farmers.

The preparation of the complete review has also been conducted, which helped to select the methods to obtain the required data to assess the ecosystem services.

Data has been collected through questionnaires on the sites of the Aiguillon Bay and the Aiguillon Pointe, to obtain data about cultural services and nature-based leisure. A new session will be organised in spring 2019 to ensure a sufficient data collection for the analysis of results.

The questionnaires related to the services of grown commodities and the harvest of wild products have been created and individual interviews will be conducted in the beginning of 2019.

Monthly meetings will take place throughout 2019 to maintain the regular collection of data, especially on the project's social and economic impact. A large part of the data collections will be conducted in 2019.

The survey on ecosystem services will be finalised by autumn 2020 (Deliverable 24).

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 24	Survey on the socio-economic and ecosystem impacts of the project	01/10/2020	none	Engaged
Milestone 14	Implementation of the evaluation survey on the socio- economic and ecosystem impacts of the project	01/07/2016	15/03/2017	Engaged

6.1.14 Action E1: Enhancement of the Life program actions

		the -		20	16			20	17			20	18			20	19			20	20		Pro	ogress
		6	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
	Barr	e - Aculor	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	ı repo	ort	Prog	gress	repoi	rt III	F	inalı	epor	t	initial budget	of 31/12/2018
ĺ		PNR	Enha	ncem	ent of	the L	ife pro	ogran	n acti	ons														
١	E1	Initial																					295 010 €	94 418 €
		Current																					295 010 €	94 410 €

Action coordinator PNR Marais poitevin

Status Action undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: Jan. 2016 Effective start date: Jan. 2016

Scheduled end date: Dec. 2020 Effective (anticipated) end date: Dec. 2020

Objective reminder

This action also aims to make the implementation done and the results obtained in this project known.

Expected results reminder

- Program communication to professionals (feedback meetings, expertise gathering, publication drafting, etc.), schools (discovery books, etc.) and the public (exhibitions, movies, etc.)
- Creation of a dynamic network that shall continue to exist after the end of the program

Action progress

Several tools to enhance the project have been implemented in accordance with the initial schedule:

Logo, graphic charter and presentation brochure of the project (Deliverable 25)

These three tools were created by the LPO during the first quarter of 2016, following the first technical committee of the project. 1,000 copied were issued and largely circulated. 1,000 copies were re-issued, with the inclusion of new co-financing partners for the project.

Exhibitions on the wonders of the bay (Deliverable 26)

Initially scheduled in 2018, the exhibition on the wonders of the Aiguillon Bay has been edited in February 2017 in partnership with the Centre Beautour. Indeed, thanks to a partnership initiated with the Centre Beautour, the project's coordinating team has decided to share financial and technical resources for the realisation of this travelling exhibition on the enhancement of the Bay site, in terms of the objectives of the different structures. The Centre Beautour is also planning the realisation of an artistic and travelling exhibition on the Aiguillon Bay. This partnership is subject to an agreement, cf. *annex* 18.



This exhibition was inaugurated on March 8, 2017 at the Centre Beautour. Thereafter, the exhibition has been presented and used several times:

- from 8 March to 2 July 2017, Temporary exhibition, Centre Beautour, La Roche-sur-Yon
- 10 November 2017, LIFE Party, L'Aiguillon-sur-Mer
- From 16 to 19 November 2017, Meeting with naturalists and natural area managers from the Pays de la Loire Region, Angers
- 26 January 2018, PNR general meeting, Saint-Michel-en-l'Herm
- 30 January 2018, 11th Observatory of the Marais poitevinNatural Heritage Day, Luçon
- From 10 February to 11 March 2018, House of the Aiguillon Bay, Esnandes
- 4-7 April 2018, at the « Réserves Naturelles de France » general meeting, Ronces-les-Bains
- 7 June 2018, during a visit of the « PNR de France » Agriculture Committee, the Prée Mizottière
- 29 June 2018, at the seminar on beach clean-up, La Faute-sur-Mer
- 26 June 1st September 2018, at the « Pôle des Espaces Naturels », Saint-Denis-du-Payré

- 22 October 6 November 2018, at the tourist office (Maison du maître des digues), Chaillé-les-Marais
- 27-29 November 2018, international symposium « Adaptation of tidal marshes to climate change »,
 La Rochelle

Illustrated book on the Aiguillon Bay (Deliverable 28)

Initially scheduled in 2018, the coordination team decided to start the illustrated book edition in the fall of 2016. This book has been promoted in the press and is subject to several public presentations and signing sessions by the author. 1 500 copies of the book were delivered in autumn 2017. It forms a relevant tool for communication and awareness for different interlocutors.



Two conferences on the Bay were held (at the « Festival de Ménigoute » in November 2017 and the « Ecole de la Mer » on 19/06/18), hosted by the Conservator of the Bay Frédéric Corre and the illustrator Benoit Perrotin. The two different yet complementary points of view generate interest on a diverse audience.

Photographic report

An aerial photographic report on the project's interventions sites (Aiguillon Pointe, Prée Mizottière and the Bay mudflats) the objective is to get an overview of the area before the implementation of work. The pictures were delivered in spring 2017. As the project goes forward, other pictures will be taken during and after work.



Video tracking of actions

A 12-minute film on the sites involved in the project and the wonders of the Aiguillon Bay, to be aired on the website and during meetings, was delivered to the PNR in June 2017 (*Deliverable 29*).

A provider for the production of the six video reports (translated in English) and a provider for the realisation of four animated infographics were selected in autumn 2018. The first productions will be delivered as soon as January 2019.





Discovery Guide (Deliverable 27)

The implementation of this awareness tool started in autumn 2017 by the LPO. A consultation (not initially scheduled) took place in summer 2018 to select a provider for the creation of the illustrations. This drafting of the specification and the creation of the illustrations have caused a delay in the printing of the discovery guides (originally scheduled for December 2018). The concept and design will be finalised by the beginning of 2019. However, those delays have no impact in the value of this tool, whose animations for schools will be done only by the end of school year 2019/2020. The value of the discovery guides will likely be subject to an agreement with the municipality community « Sud Vendée Littoral » for the use of the teaching aid during animations done in partnership with the LPO Vendée. Those animations take place every year in the Aiguillon Bay (Mainly the Aiguillon Pointe) with a dozen of schools boarding the Aiguillon Bay.

Press reports

There were numerous press articles in hard copy and electronic format but also interviews on the whole project. The entire press review is broken down in *annex* 19.

Experience collection (*Deliverable 30***)**

At the end of the project, the results of experiment in management will be collected in a publication for maritime professionals.

Avec une mer qui monte: des scénarios inattendus Après vymba et avec el degration du invesa de la mer, les manais in réclappemort pas aux débations de la constitución de la constitu

Thematic posters (Deliverable 31)

The design of 6 thematic posters for professionals working in the management of natural areas will be done in 2020, in accordance with the project's original schedule.

Other awareness and communication tools linked to the actions of the project:

Actions C1, A6 - LIFE BAIE DE L'AIGUILLON Newsletter « Chroniques estuariennes »

The ONCFS has designed a digital newsletter. At the midway point of the project, the National Natural Reserve managers published the first two newsletters in 2017 and three other newsletters in 2018 (cf. *annex 20*):

- Newsletter #1 July 2017: Implementation of water quality monitoring in the Aiguillon Bay (action A6)
- Newsletter #2 September 2017 : An experimentation of Japanese wild oyster habitat removal
- Newsletter #3 May 2018: Wintering dynamics of nutrients and carbon in the watercourses of the Marais poitevinwatershed and associated overland flows in the Aiguillon Bay
- Newsletter #4 July 2018: First assessment of the trophic availability of the salty meadows in the Aiguillon Bay for wintering granivore dabbling ducks
- Newsletter #5 September 2018: Bio-sedimentary survey of benthic communities of oyster reefs n the Aiguillon Bay – Situational analysis before works

The Newsletter #6 is about the morphological and sedimentary evolution of the Aiguillon Bay and will be issued in 2019.



Action C4 - Ground breaking ceremony in the Aiguillon Pointe

This ground breaking ceremony will be held in 2019 following the end of the works, in accordance with the project's initial schedule.

Action C4 - Information panel

The layout of the information and orientation panel was done in February 2018 (cf. action A4).





Action E3 - QR code, creation of a Facebook account

Delivered on 22/12/2016, the QR code sends you to the project website. $\label{eq:code} % \begin{center} \end{code} \begin{center} \begin{center} \end{center} \begin{center} \begin{cen$

A Facebook account was created on 08 July 2016.

Action A5 - Feedback meeting - anatidae action

The Curator of the NNR (ONCFS) presented the progress of action A5 several times: 08/04/2017, 29/11/2017, 07/04/2018, 26 au 30/11/18.

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 25	Project's presentation brochure	01/06/2016	15/03/2016	Completed
Deliverable 26	10 exhibition panels on the wonders of the bay	01/11/2018	15/02/2017	Completed
Deliverable 27	A discovery guide on the bay	01/06/2019	none	Engaged
Deliverable 28	Illustrated book on the bay	01/06/2019	15/09/2017	Completed
Deliverable 29	A 26-min film	01/10/2020	none	Engaged
Deliverable 30	Experience collection	01/11/2020	none	Not completed
Deliverable 31	Printout of 12 technical posters	01/11/2020	none	Not completed
Milestone 15	Creation of the drafting committee	01/05/2016	16/02/2016	Completed

6.1.15 Action E2: Days of exchanges and presentation

		et.		20	16			20	17			20	18			20	19			20	20		Pro	ogress
			1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
	Bar	tis Acultor	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	ı repo	ort	Prog	gress	repo	rt III	F	inalı	repor	t	illitiat buuget	of 31/12/2018
ſ		PNR	Jour	nDays	of ex	chang	ges an	d pre	senta	tion														
	E2	Initial																					91 086 €	56 119 €
		Current																					91 000 €	36 119 €

Action coordinator PNR Marais poitevin

Status Action undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: April 2016 Effective start date: April 2016

Scheduled end date: Dec. 2020 Effective (anticipated) end date: Dec. 2020

Objective reminder

The objective of this action is to promote exchanges on the program to positively integrate the stakeholders form the region in the project.

Expected results reminder

- A presentation day on the Life program
- An international seminar on the issue of climate change effects on the site and the procedures of coastal defence (2018)
- A European seminar for professionals on the experiment of wild oyster habitat removal in the Aiguillon Bay is underway (2019)
- A review colloquium

Action progress

At the midway point of the project, two actions took place:

LIFE Party (*Milestone 16* cancelled)

In the lack of a project launch day in 2016 (cf. *Chapter 6.2*), the beneficiaries organised an information session about the LIFE project on the theme on the preservation of natural resources of the Aiguillon Bay on 10 November 2017 in L'Aiguillon-sur-Mer, for the project partners, elected officials and inhabitants of coastal communities. The project's issues and program have been presented during this session as well as the book and the exhibition, and the movie has been projected. More than 100 persons gathered, and the session ended with a toast.

Un programme pour protéger la Baie de L'Aiguillon Sagnine auther de l'accident de l'a

International symposium on the issue of coastal floods

The PNR Marais Poitevin organised in autumn 2018 an international symposium on the issues of climate change effects and coastal defence. To share financial means to organise such an event, the symposium was created in partnership with:

- the Forum of Atlantic Marshes, which shares the same objectives in its program of characterisation of wetlands / climate change in coastal areas, funded by the Agency of Water Loire Bretagne;
- the University of La Rochelle as scientific referent.

This international symposium entitled « Adaptation of tidal marshes to climate change » was held in La Rochelle from 27 to 29 November 2018. This event was a success: nearly 450 people came during the two plenary days, a hundred



people for the visit of a project's site (Aiguillon Pointe) and a packed room of 800 people for the « scientific show » featuring Eric Chaumillon (university professor), the Professor Feuillage (video comedian who raises awareness on societal challenges) and Guillaume Bouzard (nationally-known illustrator and comic artist).

This « scientific show », associating a scientific and two artists and tackling scientific elements on climate change, is a true innovation. Political representatives from numerous French local authorities were sensitive to this new format and have contacted the PNR to consider new representations of this « show ».

At the behest of its elected representatives, the PNR has renewed the organisation of the scientific show for 2019 in Niort and on the PNR coast in Vendée (out of LIFE funding).



The « Communauté d'Agglomération » of Rochefort and the LPO have also decided to organise this show in May 2019.

All productions from the symposium (slideshows, speakers' videos, speakers' pictures, photo coverages, video on the value of the symposium, etc.) is valued on a specific website: https://maraislittoraux.myportfolio.com

Following the symposium, a satisfaction survey was conducted by the PNR among 150 people who have participated in the symposium. Feedbacks are very positive (cf. the specific website).

A specific press review on this symposium is also online. This press review is included in *annex 19*. Here are below a few key figures (last updated on 12/12/2018):

Press

- 17 written press articles (in Charente-Maritime, Deux-Sèvres and Vendée)
- 2 national press articles (Le Parisien, La Croix)
 5 radio news stories and interviews (RTL, NRJ, France Bleu, Demoiselle FM, RCF)
- 1 25-minute radio program (RCF)
- 4 TV reports (France 3 Nouvelle-Aquitaine, Atlantique, Pays de la Loire, TV Vendée)
- 2 web TV reports (Aunis TV, Webtvinfo.fr)

Media partners, collectivities

- A dozen of publications on newsletters and partners' letters (AFB, CNRS, Agglo La Rochelle, Rivages de France, ...)
- Dozens of advertisements on websites

Facebook

- 21 publications on the « Parc naturel régional » and « Forum des Marais Atlantiques »
 Facebook accounts: 222 shares, 22 800 views
- 20 publications on the « LIFE Baie de l'Aiguillon » Facebook account: 32 shares, 4 650 views



Twitter

26 Tweets from the Parc Twitter account: 75 retweets, 172 Likes.



Changes in expenditures

The size and nature of expenditures, initially identified, have evolved, cf. *chapter 8.1.* Indeed, the budget dedicated to the organisation of the symposium was 12,550€, cost of personnel excluded. However, the pooling of financial means resulted in a budget of 80,000€.

Initially scheduled in December 2018, the conference proceedings will be released in the first half of 2019 (cf. *Deliverable 32*).

The two highlights to come next:

European symposium on the experimentation of mudflat restoration (Deliverable 33)

Initially scheduled for autumn 2019, this symposium will be held in spring or autumn 2020, because the mudflat restoration works have been delayed due to the inability for the selected company to do the works in January 2019 (cf. actions A1 and C1). Those works will start in autumn 2019 and be completed no later than February 2020. The symposium can be organised by the LPO only once the works are completed.

For this action, the LPO is requesting an extension of the project by 2021 to value at best the results of the program (cf. *Chapter 6.2*).

LIFE BAIE DE L'AIGUILLON review symposium (Deliverable 34)

The organisation of this colloquium by the three beneficiaries is scheduled for autumn 2020.

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 32	Proceedings of the international symposium on the issue of coastal floods	01/12/2018	15/06/2019	Engaged
Deliverable 33	Proceedings of the report symposium on « oyster 'crassat' removal » and European symposium on the impact of LIFE action on the marine environment	01/12/2019	none	Not completed
Deliverable 34	Acts of the review symposium	01/11/2020	none	Not completed
Milestone 16	Launch day	01/03/2016	Cancelled	Cancelled
Milestone 17	European symposium on the impact of LIFE action on the marine environment	01/11/2018	27 to 29/11/2018	Completed
Milestone 18	Report symposium on « oyster 'crassat' removal » and European seminar on the impact of LIFE action on the marine environment	01/11/2019	none	Not completed
Milestone 19	Review symposium	01/11/2020	none	Not completed

6.1.16 Action E3: Website

	like		20	16			20	17			20	18			20	19			20	20		Pre	ogress
	5	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
 Barr	tis Acultor	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	n repo	ort	Pro	gress	repo	t III	F	inal ı	repor	t	iiiiiai buuget	of 31/12/2018
	ONCFS	Webs	site																				
E3	Initial																					45 946 €	11 411 €
	Current																					43 340 €	11 411 €

Action coordinator ONCFS

Status Action undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: January 2016 Effective start date: January 2016

Scheduled end date: Dec. 2020 Effective (anticipated) end date: Dec. 2020

Objective reminder

The objective is to create a website.

Expected results reminder

Creation of a website

Action progress

Website https://life.reserve-baie-aiguillon.fr.

In accordance with the initial schedule, It is regularly updated by the team project. The website maintenance is provided by the company Pigment Web Multimedia.



The website is updated in its general content every year at the end of spring. Web pages on the biological follow-up (with the first results) and specific studies of the LIFE project (inventory of the benthic fauna, sedimentary survey) were created in 2018. The results of the Anatidae study are communicated via the website every 10 days and relayed on the LIFE BAIE DE L'AIGUILLON Facebook page.

Since the beginning of the program, there are 7,702 visits by 5,455 different users, which represent 22,351 viewed pages. Most of the visitors come from Europe (between 79.3 and 94.4%), and mostly from France (between 75 and 92.2%), and from America (between 5 and 18.2%), depending on the year.

As an example, in 2018, there were 4,066 visits by 3,058 different users, which represent 10,456 viewed pages (79.3% of visits from Europe, 96.1% of which are French visitors; 18.2% from America, the rest from Africa and Asia).

Facebook account htt

https://www.facebook.com/lifebaieaiguillon



A Facebook account has also been created on 8 July 2016. This account with nearly 500 followers enables the diffusion of events for our project, but also other Life projects' events. Articles and other contents are regularly published on the project's Facebook account. Newsletters are also systematically shared on the website and the project's Facebook account.

To avoid the multiplication of existing information tools for the LIFE BAIE DE L'AIGUILLON project, the coordinating team has decided not to have a Twitter account. However, the main information is shared on the « PNR Marais Poitevin » Twitter account.

All elected officials, local authorities, technical and financial partners, local stakeholders have been informed by email or letter of the different existing and available Life information tools (website, Facebook account, article drafted for external communication tools, etc.).

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Milestone 20	Creation of the website	01/10/2016	30/06/2016	Completed

6.1.17 Action E4: Layman's report

	life -		20	16			20	17			20	18			20	19			20	20		Pre	ogress
	20	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
	Barelli Acullur	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	n repo	ort	Pro	gress	repo	t III	F	inal ı	repor	t	iiiiiai buuget	of 31/12/2018
	PNR	Layn	nan's i	eport	t																		
E4	Initial																					5 981 €	0€
	Current																					2 201 €	0€

Action coordinator PNR Marais poitevin

Status Action not undertaken in accordance with schedule

Action schedule Scheduled start date: January 2020 Effective start date: January 2020

Scheduled end date: Dec. 2020 Effective (anticipated) end date: Dec. 2020

Objective reminder

A layman's report, which explains the project's results, is essential to enhance the value of the project and help to the development of new projects on habitat and coastal species conservation in the European Union.

Expected results reminder

- A national and international recognition of the project and its results
- The reproducibility of the program's actions on other similar sites
- Enhance the exchanges with new partners and develop experience exchanges after the end of the program

Action progress

As a reminder, 500 Layman's reports, including 100 in English and a downloadable version on the project's website, are expected by September 2020 (*Deliverable 35*).

N°	Deliverable / Milestones name	Initial deadline	Completion date	Status
Deliverable 35	500 layman's reports, including 100 in English and a downloadable version on the project's website	01/09/2020	none	Not completed
Milestone 21	Dissemination of the project's layman's report	01/10/2020	none	Not completed

6.1.18 Action E5: Animation of the network

	el.		20	16			20	17			20	18			20	19			20	20		Pro	ogress
		1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
Barr	e - Aculor	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	n repo	ort	Pro	gress	repo	rt III	F	inalı	repor	t	illitiat buuget	of 31/12/2018
	PNR	Anim	ation	of the	e netw	ork																	
E5	Initial																					19 956 €	14 384 €
	Current																					19 936 €	14 304 €

Action coordinator PNR Marais poitevin

Status Action undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: January 2016 Effective start date: January 2016

Scheduled end date: Dec. 2020 Effective (anticipated) end date: Dec. 2020

Objective reminder

The objective of this action is to create a partnership with other European programs in order to benefit from completed or ongoing programs and also from the knowledge gained throughout the program's implementation.

Expected results reminder

- Meetings with LIFE support structures
- Stakeholder participation during colloquiums and seminar organised as part of the project
- Invitation to participate in other LIFE projects' colloquiums.

Action progress

Since the start of the project, the PNR has continued its exchanges with under preparation or ongoing LIFE projects.

LIFE project, partner of the project

The « LIFE Pêche à pied » project (LIFE14 ENV/FR/000316) participated in several monitoring committees related to the management of actions done on the site of the Aiguillon Pointe.

LIFE projects welcomed on the territory

the PNR welcomed on 26 July 2017 the National Park of the Biedrza (Poland), initiator of the LIFE Preservation of wetland habitats in the upper Biedrza Valley (LIFE11/NAT/PL/422), during a visit of the Marais poitevin on the issue of European wet areas. This delegation was accompanied by the CAVEB (a farm cooperative for meat producers), the initiator of the LIFE+ Pâturage Tournant Dynamique project (LIFE13 ENV/FR/001315). This day of discussion has showed that European wet areas are subject to the same issues and cooperation is an essential tool to meet the challenges



Advices to LIFE project leaders

The PNR has met several LIFE project leaders to help them build or implement their projects:

- Conservatoire du littoral, « LIFE Ad'Apto » (LIFE16 CCA/FR/000131): Assistance for financial and administrative implementation / forum at the LIFE symposium
- ONCFS, « LIFE Oxyura » (LIFE17 NAT/FR/000542): Assistance for financial and administrative implementation
- ADASEA, « LIFE continuités écologiques », pending registration: Assistance for project preparation

- « Société herpétologique », « LIFE CROAA » (LIFE15 NAT/FR/000864): Telephone exchanges about the budget
- « Cap Atlantique » « LIFE SALLINA » (LIFE17 NAT/FR/000519): Assistance for financial and administrative implementation

Contacts with other LIFE projects

Exchanges (mainly by email) with other projects have also taken place: LIFE13 NAT/DK/001357, LIFE13 ENV/ES/001182, LIFE07 NAT/UK/000938, LIFE04 NAT/NL/000202, LIFE03 NAT/CP/NL/000006.

Symposiums

The LIFE BAIE DE L'AIGUILLON project was invited to participate in the review symposium of the LIFE SERESTO project (LIFE12 NAT/IT/000331) on 11 April 2018 in Roma. The LPO administrator of the NNR (Frédéric Corre) went and presented the LIFE BAE DE L'AIGUILLON project and its progress.



As part of the organisation of the international symposium entitled « Adaptation of tidal marshes to climate change », which was held in La Rochelle from 27 to 29 November 2018 and gathered 33 participants, three LIFE projects were invited to participate: LIFE FLANDRE (LIFE+12 NAT/BE/000631), LIFE CONVIVE (LIFE14 NAT/ES/001213), LIFE Ad'Apto (LIFE16 CCA/FR/000131). Unfortunately, because of other commitments, the LIFE FLANDRE and LIFE CONVIVE projects couldn't participate in the symposium.

InterLife meetings

The coordinating team has also participated in the different InterLife meetings since the start of the project.

The exchanges during the InterLife meetings organised by the National Park of the Reunion Island in 2017 led to a synthesis report transmitted to the European Commission and EASME. One of the priorities was to question the French Ministry for ecological and supportive transition on the importance of the LIFE tool and their implication.



An InterLife delegation that included the LIFE BAIE DE L'AIGUILLON project went to the Ministry on 10 July 2018. This meeting led to a discussion during the 2018 InterLife meeting (Jura).

6.1.19 Action E6: Creation of Life information panels

	like -		20	16			20	17			20	18			20	19			20	20		Pre	ogress
	6	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
Bar	tin Acultur	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	n repo	ort	Pro	gress	repor	rt III	F	inal ı	repor	t	iiiiiai buuget	of 31/12/2018
	PNR	Crea	tion o	f Life i	nform	nation	pane	els															
E6	Initial																					4 548 €	708 €
	Current																					4 340 €	100€

Action coordinator PNR Marais poitevin

Status Action undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: July 2017 Effective start date: Oct 2017

Scheduled end date: Dec. 2018 Effective (anticipated) end date: June 2018

Objective reminder

These information panels – placed on each site of Life Program actions, available to the Public and precising the financiers and the nature of the action – will give details on the project and enhance the LIFE Nature financial tool.

Expected results reminder

- The installation of those panels on strategic places will inform the public on the objective of the ongoing work in favour of biodiversity and the financing by the European Commission through the Life program.
- The presence of the QR Code as a link to the website will allow interested individuals to become more knowledgeable about this topic.

Action progress

The PNR started the panel design in December 2017. Those panels were printed and received in summer 2018 (cf. *Deliverable 36*).

Panel on the site of the Prée Mizottière farm

The panel on the site of the Prée Mizottière farm indicates the implementation of hydraulic engineering works, the removal of a dike in poor condition and a platform for bird observation for the public. It has been placed on the site in October 2018.



Panel on the site of the Aiguillon Bay (x2)

The panels on the site of the Aiguillon Bay show the implementation of experimental works (removal of old oyster farms from mudflats). They will be placed on the facilities of the site of mudflat habitat restoration, which will be localised on the crowded Pavé Harbour (city of Charron) from September 2019 to February 2020.



Panel on the site of the Aiguillon Pointe

The panel on the site of the Aiguillon Pointe indicates the implementation of improvement works on welcoming the public, the rehabilitation of natural areas and the protection of dunes.



N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 36	Collecting the Life information panels	01/09/2018		Completed
Milestone 22	Collecting the Life information panels	01/09/2018		Completed

6.1.20 Action E7: Pedagogic enhancement of the Prée Mizottière farm

	like -		20	16			20	17			20	18			20	19			20	20		Pro	ogress
	6	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
Ba	ele Acullar	Pro	gres	s repo	rt I	Pro	gress	repo	rt II	Mi	dtern	ı repo	ort	Prog	gress	repoi	rt III	F	inalı	repor	t	initial budget	of 31/12/2018
	PNR	Peda	gogic	enha	ncem	ent of	the P	rée M	izottič	ère fai	rm												
E7	Initial																					60 810 €	0€
	Current																					00 910 €	0€

Action coordinator PNR Marais poitevin

Status Action not undertaken in accordance with schedule

Action schedule Scheduled start date: Jan. 2018 Effective start date: Jan. 2019

Scheduled end date: Sept. 2019 Effective (anticipated) end date: Dec. 2019

Objective reminder

The objective of this action is to make the Prée Mizottière available to the public in order to allow landscape and avifauna observation and have a total control of this access, so that an anarchic development of this nature tourism can be avoided.

Expected results reminder

Creation of a vantage point on the edge of the Prée Mizottière site and its file path.

Action progress

The implementation of works for the vantage point and the file path was initially scheduled for March 2018. However, due to delays in the launch of actions A3 and C2, the implementation of this action has also been postponed.

Indeed, the design and the creation of this vantage point are affected by the positioning of land extraction areas for the rehabilitation of dikes of the Prée Mizottière by the JAVSA, as part of the Vendée Sèvre Autize Flood Prevention Action Plan (cf. actions A3 and C3).

Once the land has been extracted, those borrowing areas will be restored in meadows with depression areas in winter and spring, favouring the welcome of water birds. The vantage point will thus be placed so that birds can be observed without being disturbed.

In the course of the first quarter of 2019, the positioning of those borrowing areas will be identified by the contractor managing the dike removal works.

The design will thus be undertaken as soon as spring 2019, in cooperation with the « Conservatoire du Littoral », the farm operator and the NNR administrators.

The implementation of this development is scheduled by the end of 2019.

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Milestone 23		01/03/2018	none	Not completed

6.1.21 Action F1: Animation, coordination and administrative and financial monitoring of the LIFE program

	the -		20	16			20	17			20	18			20	19			20	20		Pro	ogress
4		1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
Bare	he Acultor	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	n repo	ort	Pro	gress	repo	rt III	F	inalı	report	t	iiiiiai buuget	of 31/12/2018
	PNR	Anim	ation	, coor	dinati	on an	ıd adr	ninist	rative	and f	inanc	ial mo	onitor	ing of	the L	IFE pr	ograi	n					
F1	Initial																					218 116 €	148 490 €
	Current													П								210 110 €	146 490 €

Action coordinator PNR Marais poitevin

Status Action undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: January 2016 Effective start date: January 2016

Scheduled end date: Dec. 2020 Effective (anticipated) end date: Dec. 2020

Objective reminder

The objective of this action is the implementation of a good technical, administrative and financial coordination of the project by the main beneficiary to ensure a successful conduct of the project and the achievement of define goals.

Expected results reminder

- Implementation of a steering committee
- 6 meetings of the steering committee
- Implementation of follow-up tools for the program
- Drafting of two partnerships between the beneficiary and the associated beneficiaries
- Drafting of two partnerships between the beneficiary and the financiers
- Drafting of five interim reports describing the program progress and presenting the achieved results, and a final technical and financial report
- Elaboration of a press report

Action progress

Coordination

As a reminder, the project's general coordination relies on three bodies with complementary missions:

- (1) The steering committee (SteeCo) meets each year: 16/02/2016; 07/08/2017; 08/03/2018.
- (2) The technical committee (TechCo) meets several times per year: 08/01/2016, 26/04/2016, 18-19-20/07/2016, 20/10/2016, 16/02/2017, 06/07/2017, 24/07/2017, 14/12/2017, 05/07/2018, 25/09/2018, 18/12/2018. The drafting committee (DrafCo) is now part of the technical committee.
- (3) The different monitoring committees (MoniCo) met according to the progress of the actions:
 - The monitoring committee of the Domaine Maritime: 18/04/2016
 - The monitoring committee of the Prée Mizottière: 28/04/2016, 09/10/2017, 11/12/2018
 - The monitoring committee of the Aiguillon Pointe: 24/03/2016, 17/11/2016, 11/12/2018
 - The monitoring committee water studies: 26/06/2017, 02/02/2018
 - The monitoring committee ecosystem studies: 29/05/2018

In addition to those coordination bodies, administrative and financial monitoring meetings are scheduled once a year: 14/06/2016; 29/06/2017; 02/07/2018.

Moreover, since the beginning of the project, a significant number of meetings (around 40) have been organised by the project's coordination team for all the professionals, the technical and scientific partners, the State services, the financiers and the regional stakeholders.

Amendment to the Grant Agreement

The three amendments to the Grant Agreement established between the PNR and the European Commission (23/11/2015) are presented in the *annex 06* (cf. chapter 5 – administrative part).

Partnership agreements between beneficiaries

The partnership agreements, which precise the payment arrangements of funds received by the main beneficiary (PNR Marais poitevin) to two associated beneficiaries (ONCFS, LPO) have been signed in 2016. These agreements are presented in the **annex 02**.

Convention de financement du Ministère de la transition écologique et solidaire

The grant agreement between the PNR and the French Ministry for ecological and supportive transition has been signed on 22 November 2016 for a 5-year term and a financial contribution of 250,000€. However, the PNR was notified on 17 January 2018 that the agreement wasn't undertaken in the Ministry level, because it had not been approved by the Ministry's Financial Controller, thus making the expenditures done in 2016 and 2017 ineligible. The PNR sent a letter to the Ministry on 08 March 2018 to denounce this situation, without getting any response from the Ministry. However, technical exchanges between the PNR and the Ministry led to the signature of a new agreement on 27 July 2018, ensuring a financial contribution from the Ministry of 245,000€ (cf. *annex 03*) on some of the project's actions from the date the application was filed.

Other grant agreements (cf. annex 03)

- Regional Prefecture of Nouvelle-Aquitaine: Four grant agreements have been established between the Regional Prefecture of Nouvelle-Aquitaine and the project's beneficiaries:
 - o Grant agreement of the DREAL Nouvelle Aquitaine for the benefit of the ONCFS in the amount of 8,405€ (15 December 2016)
 - o Grant agreement of the DREAL Nouvelle Aquitaine for the benefit of the LPO in the amount of 25,595€ (15 December 2016)
 - o Grant agreement of the DREAL Nouvelle Aquitaine for the benefit of the PNR in the amount of 11,229€ (20 July 2018)
 - o Grant agreement of the DREAL Nouvelle Aquitaine for the benefit of the LPO in the amount of 21,981€ (20 July 2018)
- Regional Council of Nouvelle-Aquitaine: agreement #2016/RALPC-P-BE-46 (LPO), signed on 09 August 2016 for a 5-year term: 53,475€
- Biodiversity section of the « Caisse des Dépôts et consignation »: agreement signed on 15 December 2016 (LPO) for a 5-year term: 134,579€
- « Etablissement public du Marais poitevin »: agreement #2017-324/EPMP/JEP, signed on 12 December 2017: 4,000€

Press report

This action also includes the production of a press report by December 2020 (*Deliverable 37*).

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 37	Press report	01/12/2020	none	Engaged
Milestone 24	Launch meeting	01/01/2016	08/01/2016	Completed
Milestone 25	Steering committee meeting n°1	01/03/2016	16/02/2016	Completed
Milestone 26	Steering committee meeting n°2	01/03/2017	07/03/2017	Completed
Milestone 27	Steering committee meeting n°3	01/03/2018	08/03/2018	Completed

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Milestone 28	Steering committee meeting n°4	01/03/2019	none	Not completed
Milestone 29	Steering committee meeting n°5	01/03/2020	none	Not completed
Milestone 30	Steering committee meeting n°6	01/09/2020	none	Not completed

6.1.22 Action F2: Realisation of a final external audit

	like -		20	16			20	17			20	18			20	19			20	20		Pro	ogress
	6	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
Bar	e ≈ 'Acullor	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	n repo	ort	Pro	gress	repoi	t III	F	inalı	repor	t	initial budget	of 31/12/2018
	PNR	Reali	zatior	of a	final e	extern	al aud	dit															
F2	Initial																					13 899 €	0€
	Current																					13 099 €	0€

Action coordinator PNR Marais poitevin

Status Action not undertaken, in accordance with the schedule

Action schedule Scheduled start date: April 2020 Effective start date: April 2020

Scheduled end date: March 2021 Effective (anticipated) end date: March 2021

Objective reminder

The objective is the realization of an audit by an independent provider, which will validate the final expenditure and revenues statement to be transmitted to the European Commission. This audit will certify the respect of the national legislation and accounting rules, but also the compliance of all costs in accordance with the « General Conditions » established by the European Commission.

Expected results reminder

An external audit validating the entire project (general report).

Action progress

This audit will be conducted at the end of the project and submitted in March 2021 (**Deliverable 38**). It is however anticipated to start the audit as soon as 2019.

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 38	Audit report	01/03/2021	none	Not Completed
Milestone 31	Production of the audit	01/03/2021	none	Not Completed

6.1.23 Action F3: « Post-Life » conservation plan

	liber -		20	16			20	17			20	18			20	19			20	20		Pro	ogress
	6	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
Bu	t = Acultar	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	n repo	ort	Prog	gress	repoi	rt III	F	inal ı	repor	t	illitiat buuget	of 31/12/2018
	PNR	"Post	t-Life"	conse	ervati	on pla	an																
F3	Initial																					12 551 €	0€
	Current																					12 331 €	0€

Action coordinator PNR Marais poitevin

Status Action not undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: Jan. 2020 Effective start date: Jan. 2020

Scheduled end date: March 2021 Effective (anticipated) end date: March 2021

Objective reminder

This action will detail the way the initiated actions from the project will continue in the years following the end of the project.

Expected results reminder

Drafting of a « Post-Life conservation plan » report in French, in paper copy and electronic version, appended to the final report

Action progress

The « Post-Life » conservation plan will be included in the final report, in French and English, in hard and electronic copy. The necessary reflections on the drafting of the report will start as soon as 2019.

The report will be issued in March 2021 (**Deliverable 39**).

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 39	Post-Life conservation plan appended to the final report	01/03/2021	none	Not Completed
Milestone 32	Post-Life conservation plan appended to the final report	01/03/2021	none	Not Completed

6.1.24 Action F4: Indicators

		the -		20	16			20	17			20	18			20	19			20	20		Pr	ogress
	4	5	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	Initial budget	Expenditures as
	Bare	tis Acultor	Pro	gress	repo	rt I	Pro	gress	repo	rt II	Mi	dtern	ı repo	ort	Prog	gress	repo	t III	F	inal ı	repor	t	illitiat buuget	of 31/12/2018
ſ		PNR	Indic	ators																				
	F4	Initial																					6 645 €	1 134 €
		Current																					0 043 €	1134€

Action coordinator PNR Marais poitevin

Status Action undertaken, in accordance with the initial schedule

Action schedule Scheduled start date: January 2016 Effective start date: January 2016

Scheduled end date: March 2021 Effective (anticipated) end date: March 2021

Objective reminder

The objective is to evaluate the implementation of the project through a regular monitoring of several indicators as defined by the European Commission.

Expected results reminder

• Improvement of indicators as defined by the European Commission between the project's initial and final situation.

Action progress

The implementation of this action started in March 2016, the scoreboards of the initiation situation have been addressed to the European Commission, in electronic copy, during the first half of 2016 (cf. *Deliverable 40*).

Moreover, the PNR has answered Neemo's requests for further information from 11 January 2018.

The completed indicator tables of the final situation (cf. **Deliverable 41**) will be addressed to the European Commission, in electronic copy, in March 2021, appended to the final report, the audit and the « Post-LIFE » conservation plan.

N°	Deliverable / Milestone name	Initial deadline	Completion date	Status
Deliverable 40	Scoreboards on the initial situation addressed to the European Commission in electronic copy	01/06/2016	25/07/2016	Completed
Deliverable 41	Scoreboards on the final situation addressed to the European Commission in electronic copy	01/03/2021	none	Not Completed
Milestone 33	Filling the scoreboards on the project's initial situation	01/06/2016	25/07/2016	Completed
Milestone 34	Filling the scoreboards on the project's final situation	01/03/2021	none	Not Completed

6.2 MAIN DIFFERENCES, ISSUES AND REMEDIAL ACTIONS IMPLEMENTED

The LIFE BAIE DE L'AIGUILLON project is implemented according to the initial schedule, except for a few actions which have been delayed, thus postponing the implementation of other actions.

Aiguillon Bay site - Actions A1, C1, D1 and E2

The implementation of mudflat habitat restoration works in the Aiguillon Bay, initially scheduled for July 2017 (action C1), has been postponed to September 2019 on the following grounds:

- Delay in the implementation of the faunistic inventory and the identification of trophic food webs (A1). The implementation of the faunistic inventory and the identification of trophic food webs have been approved on 4 July 2018, however it was scheduled for June 2017. Weather conditions are part of the delay. Indeed, the February 2017 Volkmar storm made it impossible to use of a boat for the Bay samplings. This delay led to a delay in the production of the regulatory instruction and the acquisition of the necessary authorisations (action A1).
- Delay in the regulatory instruction and the acquisition of the necessary authorisations (action A1). The faunistic inventory and the identification of trophic food webs was a prerequisite in the realisation of the regulatory instruction and the acquisition of the necessary acquisitions. Moreover, the complementary request suggested by the regulatory study, solicited by the NNR Scientific Council and issued in 2017 to evaluate the potential presences of pollutants in the sediments that can be resuspended, contributed in the delay of the procedure (evaluation done in 2018).
- Reduced intervention periods (action C1). Indeed, the period of implementation of works is conditional
 on the oyster farming activities and avifaunal challenges in the NNR. Both factors reduce the intervention
 periods to two distinct periods: January-February and September-October.
- Delay in the launch of the ordered service (Action C1). Indeed, the provider informed the LPO at the beginning of January 2019 that the works would not start on 7 January 2019 as initially scheduled. It is the result of a delay in another site due to demonstrations in France during the 2018/2019 winter (« gilets jaunes » blockades), thus making it impossible to use the necessary equipment.

This delay in the implementation of mudflat habitat restoration works in the Aiguillon Bay also leads to an extension of the schedule for action D1. The second campaign of topographical surveys will be conducted in 2020 and no longer in March 2019 and will be completed with an analysis of the two sets of data obtained during the project.

This delay in the implementation of mudflat habitat restoration works in the Aiguillon Bay also leads to a delay In the organisation of the symposium on the experimentation of mudflat restoration, initially scheduled for autumn 2019 (action E2). Indeed, this symposium will be organised in spring or autumn 2020, after the end of works and the realisation of the second topographical survey.

For those reasons, a request to change the schedule of the implementation of action C1 has been suggested:

- Initial schedule: 09/2017 to 12/2019
- Suggested modification: 09/2017 to 12/2020

Moreover, the LPO requests <u>a one-year extension of the LIFE BAIE DE L'AIGUILLON project</u> to organise the symposiums of action E2 and the follow-ups of action D1.

■ The target of 100 hectares may be difficult to reach. The experimental nature of the operation implies uncertainties as to the extent (in particular the depth of the « crassats ») and the progress of the works. Given the available financial envelope, and the risks associated with the re-colonization of sites by oysters, it's better to work more vigilantly on a smaller experimental area.

Site of the Prée Mizottière - Actions A3, C3 and E7

The conflicting relationships between the involved stakeholders (JAVSA, CDL, farm operator) and the necessary mediation phase led by the PNR led to a delay in the implementation of action A3, as indicated in the progress report 02. Consequently, a modification in the schedules of implementation of actions A3, C3 and E7 has been approved by EASME by an email from 12 May 2017 and by letter from 09/11/2017 (*annex 13*). However, those changes have no financial consequence at this stage of the project.

As a reminder, the approved changes in the project:

Action A3

- o Initial schedule VS modified and approved schedule: 01/2016 to 09/2017 > 01/2016 to 12/2019
- Changes in the dates of the deliverables: Deliverable 03 (Creation of regulatory and technical provisions on the dike removal) 09/2017 > 12/2020

Action C3

- Initial schedule VS modified and approved schedule: 09/2017 to 12/2019 > 09/2017 to 12/2020
- O Changes in the dates of the deliverables: Deliverable 14 (Creation of regulatory and technical provisions on the dike removal): 12/2019 > 12/2020
- o Changes in the dates of the milestones ("End of works"): 12/2019 > 12/2020

Action E7

- o Initial schedule VS modified and approved schedule: 01/2018 to 09/2019 > 01/2018 to 12/2020
- Changes in the dates of the milestones ("Implementation of works"): 03/2018 > 03/2019

At this project's stage, the actions A3, C3 and E7 should be carried out within the modified timetable. On the other hand, the action D3 will have to continue in 2021, ie an additional year corresponding to the request for project's extension, to evaluate the impact of the dike retreat works on the natural environments.

Site of the Aiguillon Pointe - Actions A4 and C4

Originally, the action A4 provided for the a service provider intervention to elaborate a layout project for Pointe de l'Aiguillon and regulatory framework (obtaining authorizations, circulation in Maritime Public Domain, etc.). However, these actions were conducted by the PNR without significant additional staff. The corresponding budget line will be reallocated to another project action.

Moreover, the authorisation process for the works on the Pointe site engaged with the DDTM 85 services was longer than initially scheduled, which led to a 6-month extension of the implementation schedule of action A4.

However, this delay did not have a major impact on the commitment of the action C4 work. The initial schedule provided for the implementation of this work between September 2017 and December 2019. Indeed, the work operational phase took place in several stages: the first works in March 2018, a second phase in December 2018 and a third phase in February 2019 (cf. action C3). A work final phase will be conducted in the fall of 2019. The provisional schedule will thus be maintained.

Postponements and cancellation of the LIFE BAIE DE L'AIGUILLON project launch day - Action E2

In 2016, action E2 provided for the organisation of a launch day of the project before 31 March 2016. Scheduled three times, this day could not be organised because of difficulties in the timetables of the PNR elected officials, a potential reason being evoked in the initial project (Constraints and assumptions).

Indeed, due to the renewal of the PNR Board on 23 March 2016, it was not possible to organise that day, because powers were not established. This is why this day had to be postponed to 07 June 2016 because the PNR representatives were at that time fully committed in their role. However, it had to be postponed again, because the Chairman of the PNR was not available at that time.

It has thus been decided to organise a press conference at the beginning of 2017 after one year of operations, during which all the professionals, partners, financiers and stakeholders of the territory targeted by this project met during the different committees of the LIFE project and other specific meetings (1 steering committee, 4 monitoring committees, 4 technical committees and 2 drafting committees, 25 meetings with the territory's stakeholders involved in the project or not). It was thus not necessary to organise this presentation day anymore.

A press conference was supposed to take place on Friday 13 January 2017, with discussions between the project's technical partners and a signature of the partnership agreement on an action dedicated to the waters in the Bay between the IFREMER, the EPMP, the ONCFS and the LPO. 38 people representing the project's partners had expressed an interest. However, due to another change in the PNR Chairman's timetable, who wanted to be present, this day of press report and exchanges couldn't be set up.

Despite the failure to organise a launch day of the project in 2016, the beneficiaries organised on 17 November 2017 in L'Aiguillon-sur-Mer an information night on the LIFE project on the issue of the preservation of natural resources in the Aiguillon Bay, for the project's partners, the officials and the inhabitants of the coastal communities. The issues and programs of the project have been presented during the night; the book and the exhibition have also been put forward and the film has been shown. This night gathered more than 100 people and ended with a toast.

Funding agreement with the French Ministry for ecological and supportive transition – Action F1

The finding agreement between the PNR and the French Ministry for ecological and supportive transition was established on 22 November 2016 for a 5-year term and a financial contribution of 250,000€. However, the PNR was notified on 17 January 2018 that the agreement wasn't undertaken at the Ministry level, because it had not been approved by the Ministry's Financial Controller, thus making the expenditures done in 2016 and 2017 ineligible. The PNR sent a letter to the Ministry on 08 March 2018 to denounce this situation, without getting any response from the Ministry. However, technical exchanges between the PNR and the Ministry led to the signature of a new agreement on 27 July 2018, ensuring a financial contribution from the Ministry of 245,000€ (cf. *annex 03*) on less flexible conditions (6 targeted actions on a shorter eligibility period). The differential of € 5,000 is borne by the coordinating beneficiary.

6.3 EVALUATION OF THE IMPLEMENTATION OF THE PROJECT

At the midway point of the project, it is too soon to provide conclusions on the efficiency of the project's conservation actions; however, this chapter sets an evaluation of the implementation progress of the LIFE BAIE DE L'AIGUILLON project.

The implementation of preparatory actions is in line with the initial schedule and has faced no major difficulties, except for actions A1 and A3. Indeed, the period for preparatory action A3 has been extended because of issues between the partners of the actions. An important mediation phase, led by the PNR, resolved those longstanding conflicts and launched the prior studies. Likewise, the action A1 was delayed because of technical issues.

Consequently, the operating phases (actions C1 and C3) are delayed but will be conducted before the end of the project. Only the implementation of actions C4 is in line with the initial schedule.

The methodology on the follow-up of the project's actions and their implementation are all well engaged. A « state zero » of all actions has been issued. At the midway point of the project, it is not possible to evaluate the conservation actions, few of them having been engaged. Moreover, actions C1 and C3 having been delayed, the duration of actions D1 and D3 will probably be too short in the context of the initial schedule. For this reason, a request for project extension for one year is made by our associated beneficiary LPO, in particular for the implementation of action D1 and E2. This request will be validated in March 2019 by all the beneficiaries.

The public awareness supports the main objective of the project. The implementation of actions is in line with the initial schedule. Those actions have raised the level of awareness for a large number of people in the different topics of the project thanks to the different tools and events organised since the launch of the project.

There is good relationship with the project's associated beneficiaries, which facilitate its coordination.

The following table compares the results obtained at midway in the LIFE BAIE DE L'AIGUILLON project with the objectives and expected results from the initial proposal through quantitative and qualitative information:

Action	Envisaged in the proposition	Mid-term status	Evaluation
Action A1	Objectives > Carry out the preliminary studies required before initiating the experimental tasks of mudflat restoration Expected results > Faunal and food web inventory > Regulating provisions > Cartography of intervention areas > Awareness of the shellfish aquaculture industry	> Achieved > Achieved > Achieved > Achieved > Achieved > Achieved	The prior studies have been undertaken though behind schedule, leading to a delay in the implementation of the restoration works of this area.
Action A3	Objectives > Undertake preliminary studies for the restoration of estuarine habitats in the Prée Mizottière Expected results > Creation of regulatory and technical provisions on water development	> Achieved > Achieved	An essential mediation phase was necessary to undertake this action, causing some delay: > Regulatory and technical provisions on water development created

	> Regulatory and technical provisions on dike removal > Regulatory and technical provisions on the development of a platform	> Ongoing > Not undertaken	 Selection of a provider to manage the preliminary studies for the removal of a dike Regulatory and technical provisions on the development of a platform created.
Action A4	Objectives > Undertake preliminary studies for the restoration of dune habitats Expected results > A development project for the Aiguillon Pointe	> Achieved > Achieved	The expected elements have been realised in accordance with the initial schedule.
	> Performance of a survey among tourists	> Achieved	
	Objectives > better understand the Anatidae's ecology Expected results	> Achieved	The detailed objectives of those studies are already achieved, and even exceeded (4,050 meadow core samplings
Action A5	Diet: analysis of 100 cropsGeographical distribution: capture and tagging of 30 ducks	> Achieved > Achieved	instead of the 1,512 cores announced).
	> Feeding resource: analysis of 1512 cores	> Exceeded	The data analysis is ongoing.
	Objectives > Have a better understanding of hydraulic relationship between the Aiguillon Bay, the Marais Poitevin and its watershed	> Ongoing	At the midway point of the project, the action's objectives have been achieved.
Action A6	Expected results > Implementation of 4 complementary measurement stations, > Drafting of a biannual newsletter on water,	> Exceeded > Achieved: 2	The number of measurement stations exceeds the initial objective: 5 measurement stations.
	> Scientific publications, > Decision aids on upstream water management	newsletters > Not Achieved > Not undertaken	
	Objectives > Drafting the future NNR management plan	> Ongoing	Nothing at this stage.
Action A7	Expected results > Creation of a vade-mecum on hydraulic management > Creation of proposals of hinterland priority	> Not undertaken > Not undertaken	
	intervention areas		
Action	Objectives > Experimental restoration of mudflat habitats on a three-year period (2017-2019)	> Ongoing	The preliminary studies have been delayed, causing a delay in the implementation of the works.
C1	Expected results > Restoration of 100 hectares of mudflats	> Ongoing	As a result, the construction period, initially planned for the winter of 2017-2018, is shifted

Action C3	Objectives > Restoration of estuarine habitats in the Prée Mizottière Expected results > Creation of at least 10 hectares of sea marshes > Adaptation of water management for species on 17 hectares > Creation of wetland habitats for water bird nesting (black-winged stilt, pied avocet, northern shoveler) > Creation of a resting area for Anatidae and Limicolae during migration	> Ongoing > Not undertaken > Achieved > Not undertaken > Ongoing	to the period between autumn 2019 and the beginning of 2020. The water engineering works have been conducted, improving the management of water levels on nearly 20 ha of meadows that favour the nesting of water birds. A provider is identified. He's in charge of the realization of studies prior to the dike retreat works, that will be carried out in the summer of 2020.
			The development works for the observation platform will be conducted in 2019.
	Objectives > Implementation of ecological engineering operations	> Partially achieved	The first phase of works (March 2018) led to a better protection of the dunes.
Action C4	Expected results > Restoration of dune habitats (800 linear meters of protection) > Coordination between public access and dune protection (2,500 linear meters of protection), > Creation of 1,500 m² of dune area (70 trees to be taken down)	> Achieved > Achieved > Achieved	The second phase of works (December 2018) led to e restoration of the area. The third phase of works will finalise the restoration of dunes identified in the project.
	Objectives	Ongoing	The different high rical and
	> Evaluation of mudflat restoration actions Expected results > Mapping of concerned areas > Mapping of, potential recolonization zones by wild oysters,	> Ongoing > Achieved > Not undertaken	The different biological and topographical surveys are under way and form a « zero state » before the works which are not implemented yet. It is thus too soon, at the midway point of the
Action	> Georeferenced list of benthic macrofauna species living on each intervention sector,	> Achieved	project, to evaluate the impact of works on the habitats'
D1	Georeferenced grain size analysis on each intervention sector,Mapping and report on bathymetric recordings at	> Ongoing > Ongoing	population.
	the bay level, > Forecasts on the morphological evolutions of the	> Ongoing	
	Aiguillon Bay and their causes, > Cost/benefit analysis on wild oyster removal methods according to existing supports, > Results approval by the oyster industry	> Not undertaken > Not undertaken	
Action D3	Objectives > Evaluation of restoration actions done on the site of the Prée Mizottière	> Ongoing	The different biological surveys are under way and form a « zero state » before the works which are not implemented yet. It is
	Expected results		thus too soon, at the midway

	> Extension of sea marshes areas > Increase in the number of bluethroats, black-winged stilt and the associated avifauna	> Not undertaken > Ongoing evaluation	point of the project, to evaluate the impact of works on the population and the habitats.
Action D4	Objectives > Evaluation of conservation actions done in the Aiguillon Pointe	> Ongoing	The different biological surveys are under way, but it is too soon, at the midway point of the project, to evaluate the impact of works on the population and
	Expected results > Increase in targeted bird populations	> Ongoing	the habitats.
Action D5	Objectives > Characterise the full benefits rendered by the project on the territory	> Ongoing	The ecosystem services are identified, data are collected, new data will be collected in
	Expected results > Analysis of the survey on the socio-economic and ecosystem impacts of the project	> Ongoing	2019, an analysis will be issued in 2020.
	Objectives > Make the implementation done and the results obtained in this project known	> Partially achieved	In accordance with the action's initial schedule, several awareness-raising tools have been produced: a project
Action E1	Expected results > Program communication to professionals, schools and the public > Creation of a dynamic network that shall continue to exist after the end of the program	> Partially achieved > Ongoing	leaflet, a travelling exhibition, an illustrated book, a photo report, videos, a press monitoring, 5 newsletters.
			Other tools will be produced: a discovery guide, thematic posters and a publication on experiences.
	Objectives > Promote exchanges on the program to positively integrate the stakeholders form the region in the project.	> Partially achieved	A party dedicated to the project gathered more than 100 people in 2017, replacing the presentation day which
Action E2	 Expected results A presentation day on the Life program An international seminar on the issue of climate change effects on the site and the procedures of 	> Replaced with a LIFE Party > Achieved	The first symposium on the project gathered more than 1,200 people in 2018 and 800
	coastal defence (2018) > A European seminar for professionals on the experiment of wild oyster habitat removal in the Aiguillon Bay is underway (2019) > A review colloquium	> Not undertaken > Not undertaken	people for a scientific show (brand-new experience).
Action E3	Objectives > Creation of a website Expected results	> Achieved > Achieved and	The website and Facebook page are regularly updated.
	> Creation of a website	exceeded (Facebook)	

			1
	Objectives > Production of a Layman's report presenting the project's results	> Not undertaken	Nothing at this stage.
Action	Expected results > A national and international recognition of the project and its results	> Not undertaken	
E4	> The reproducibility of the program's actions on other similar sites	> Not undertaken	
	> Enhance the exchanges with new partners and develop experience exchanges after the end of the program	> Ongoing	
	Objectives		The PNR has helped 4
	> Create a partnership with other European programs	> Ongoing	structures for their LIFE project. More than 33 participants have
	Expected results		contributed to the success of
A -4.5	> Meetings with LIFE support structures	> Achieved and	the 1 st project's colloquium.
Action E5	> Stakeholder participation during colleguiums and	Ongoing > Achieved and to	The PNR has contacted 13
E5	> Stakeholder participation during colloquiums and seminar organised as part of the project	be completed	other LIFE projects (welcome in the Marais poitevin, participation on colloquiums,
	> Invitation to participate in other LIFE projects	> Achieved and to be completed	etc.).
	Objectives		
	> Create information panels on the project	> Achieved	
			The results of this action are in
	Expected results		accordance with the objectives
E6	> Installation of the panels on strategic places	> Achieved	and the implementation
	> Presence on the panels of the QR code as a link to the website	> Achieved	schedule.
	Objectives		
	> Make the Prée Mizottière available to the public in order to allow landscape and avifauna observation	> Not undertaken	Nothing at this stage
Action E7	Even extend years lite		
E/	Expected results > Creation of a vantage point on the edge of the Prée	> Not undertaken	
	Mizottière site and its file path	Not undertaken	
	Objectives		
	> Implementation of a good technical, administrative and financial coordination of the project	> Ongoing	The project's coordination is in accordance with the objectives
			set out in the initial project.
	Expected results		TI 1:00
	> Implementation of a steering committee	> Achieved	The different committees allow
Action	6 meetings of the steering committeeImplementation of follow-up tools for the program	> Ongoing > Achieved	a good implementation of the project.
F1	> Drafting of two partnerships between the	> Achieved	project.
	beneficiary and the associated beneficiaries	> Achieved	All the agreements
	> Drafting of two partnerships between the	> Achieved	(partnerships, funding) have
	beneficiary and the financiers		been established.
	> Drafting of five interim reports describing the	> Ongoing	
	program progress and presenting the achieved		
	results, and a final technical and financial report		

	> Elaboration of a press report	> Not undertaken	
	Objectives > Realization of a financial audit	> Not undertaken	Nothing at this stage
Action F2	Expected results > An external audit validating the entire project (general report).	> Not undertaken	
Action F3	Objectives > Drafting of a « Post-Life conservation plan » report Expected results > Drafting of a « Post-Life conservation plan » report, included in the final report.	> Not undertaken > Not undertaken	Nothing at this stage
Action	Objectives > Evaluate the implementation of the project through a regular monitoring of several indicators as defined by the European Commission	> Ongoing	Nothing at this stage
F4	Expected results > Improvement of indicators as defined by the European Commission between the project's initial and final situation	> Partially achieved	

At this progress stage, it's difficult to establish the project's impacts on the public policies implemented in the project areas. As indicated in the following chapter, the project must make it possible to prepare the preparatory documents for the evaluation of the Aiguillon Bay RNN management plan for 2013-2022 and especially to update the drafting of this plan for the years 2023 to 2032 (Action A7). These management plans correspond to an operational version of the DOCOB NATURA 2000, which the implementation is entrusted to the PNR by the EPMP, responsible for the Marais poitevin NATURA 2000 sites management.

Almost the entire Aiguillon Pointe site is subject to a prefectural biotope protection order (APPB), which constitutes a strong level of regulatory protection at the national level. The project will allow, before its term, to revise this decree in consultation with the state services and on the base of engaged actions on the site.

Finally, the project has already made it possible to tackle a delicate theme on the Marais poitevin site, which is the adaptation of the resistance modalities of to the warming effects. Indeed, to consider the retreat of the Man, even modest in terms of area on the polder of the Prée Mizottière site, constitutes a major step near the territory's actors, little inclined to revise the conquest on the sea strategies. From this point of view, the conference "Adaptation of coastal marshes to climate change" organized in November 2018 made it possible to provide scientific arguments on the relevance of de-polderization in the fight against sea-level rise, with local septic actors.

6.4 ANALYSIS OF BENEFITS

6.4.1 Environmental benefits

6.4.1.1 Direct and quantitative environmental benefits

Although the majority of concrete actions have not been implemented at this stage of the project, we can estimate that the project will contribute to a better preservation of the habitats targeted by the project. Those habitats, located in the Natura 2000 site of the Marais poitevin, are as follow:

- Aiguillon Pointe site: grey dunes (primary habitat, Cor. 16.22 Grey dunes);
- Prée Mizottière site: sub-brackish meadows (Cor. Eur 15,52 : Eur. 15 : 1410, 1330);
- Aiguillon Bay site, mudflats (Cor.14; Eur. 15: 1140).

The objective of this project is to improve the conservation status of those habitats, to restore those habitats by freeing up spaces and let the habitats recuperate naturally. The environmental benefit will not be the result of the environment transformation but rather the absence of major intervention.

It has to be noted that the LIFE BAIE DE L'AIGUILLON project has been a financial leverage as part of the action A6, whose objective is to take better account of the hydraulic relations between the Aiguillon Bay and its watershed by allowing a second program of actions managed by the EPMP and dedicated to the evaluation of water volumes released by the watershed in the Aiguillon Bay.

6.4.1.2 Oualitative environmental benefits

At this stage of the project, it is not possible to establish trends on the qualitative evolutions of habitats targeted by the project.

However, the implementation of actions A1, C1, D1, A5 and A6 will enable the characterisation of the Aiguillon Bay functionality by the end of the project. The conclusions from the survey will enable the elaboration of prior documents for the evaluation of the 2013-2022 Management plan of the Aiguillon Bay NNR and, above all, the update of the management plan's drafting for the years 2023 to 2032 (action A7). The objective of those management plans of the Aiguillon Bay RNN is the preservation of natural heritage and the respect of EU directives that are associated to this environment. Indeed, the NNR is part of the Natura 2000 site of the Marais poitevinand includes a part of the Poitevin March coastal fringe. But the NNR management plan is considered as an operational application of the NATURA 2000 Objective Document, whose implementation is delegated to the PNR by the EPMP, which is in charge of the management of the Natura 2000 sites of the Marais poitevin.

Moreover, the actions of biological monitoring (actions D1, D3 and D4) will continue as part of the « Observatoire du Patrimoine Naturel du Marais poitevin », created within the LIFE04 NAT/FR/00087 Life project, to evaluate the long-term impacts of those different actions undertaken in the LIFE BAIE DE L'AIGUILLON project.

Finally, the « Post-Life » conservation plan will be drafted at the end of the project. Several actions will probably be pursued by the administrators of the NNR and the PNR after the end of the project to ensure the environmental benefits obtained during the implementation of the project.

6.4.2 Economic benefits

At this stage of the project, it is difficult to evaluate the project's economic benefits because the major conservation actions have not been implemented yet.

However, regarding the mudflat restoration works (action C1), it seems that the allocated financial volume cannot allow the restoration of 100 hectares as initially scheduled. Indeed, the consultation carried out by the LPO seems to point it out. However, we should wait for the start of the works before taking any decision.

6.4.3 Social benefits

At this stage of the project, it is not possible to qualify the socio-economic impacts of the project. The evaluation of socio-economic and ecosystem impacts of the LIFE BAIE DE L'AIGUILLON project (action D5) is under way, managed by the LPO as an associated beneficiary. The first analyses are expected for 2020.

6.4.4 Reproducibility, probability, cooperation

The experimental works of wild oyster habitats removal in the Aiguillon Bay (action C1) are not undertaken yet, it is thus not possible at this stage of the project to evaluate the probability of replication of this action elsewhere in Europe.

The works for action C3 will be conducted in a broader framework of creation and strengthening of maritime dikes in the Vendée basin. Indeed, the PNR and the JAVSA (coordinator) have established a procurement consolidation contract to pool the financial means to conduct the primary surveys and the operational implementation.

The project has established a strong partnership between ONCFS, IFREMER and EPMP around the qualitative and quantitative studies of the Aiguillon Bay waters. Without the LIFE project, this partnership would not have been possible.

Similarly, the PNR pooled its financial resources to organize a symposium with two other partners (action E2). He was able to build an event of considerable magnitude that affected more than 1,200 people.

Indeed, the PNR organized in the 2018 autumn an international seminar on the cross-cutting issue of the effects of global warming and the coastal defense methods, in accordance with the initial project schedule. In order to pool the financial means to organize a significant event, the conference was built in partnership with the Forum des Marais Atlantiques and the University of La Rochelle, as a scientific referent.

This international conference was a real success: nearly 450 people present during the two plenary days, a hundred people for the visit of a project site (Aiguillon Pointe site) and a packed room of 800 people for the "scientific show "starring Eric Chaumillon (University professor), Professeur Feuillage (videomaker who raises awareness about societal issues) and Guillaume Bouzard (cartoonist and author of national comics).

The PNR, the La Rochelle Agglomeration Community, the University of La Rochelle and other partnerships wish to renew this event in 2019, then every year.

6.4.5 Experiences on better practices

At this stage of the project, it is not possible to qualify the best practices used during the project, because there are not enough actions of conservation of natural environment that are currently implemented.

6.4.6 Innovation and demonstration values

When it comes to the experimental works of wild oyster habitats removal in the Aiguillon Bay, it is not possible, at this stage of the project, to evaluate the efficiency of those works because they are not implemented yet. It will be possible to characterise the method used for it at the end of the project.

As part of the works of protection of the dunes on the Aiguillon Pointe site, the PNR has decided to install innovative materials. Indeed, the LIFE BAIE DE L'AIGUILLON project is a pilot site to evaluate the efficiency of innovative wooden fenced that capture 1.4 time more sand than classical wooden fences.

The LIFE BAIE DE L'AIGUILLON project has innovated in the creation of an awareness tool. Indeed, one of the objectives of the symposium organised in November 2018 by the PNR and its partners was to raise awareness among the general public. To do that, the PNR has innovated and created a « scientific show » involving a scientist and two artists to popularise scientific elements confirming climate change. This innovation has been a true success, the room was packed, more than 800 people have seen the « show » and notably young audiences (high-schoolers, students, young adults). Political representatives from numerous French local collectivities have been very sensitive to this new format and have contacted the PNR to consider other representations of this « show ». This evening will be organized twice again in 2019 by the PNR and these partners.

6.4.7 Impact on local policies

The action A7 is on that objective but will be implemented during the last year of the project. It is thus not possible at this stage of the project to evaluate the project's impact on local policies.

7. KEY PROJECT-LEVEL INDICATORS

At the midway point of this project, the main operations of restoring natural habitats have not been conducted, it is thus impossible at this stage to evaluate the trends in the indicators identified for each of the project's operational sites/

However, some of the communication and awareness raising actions already done can be used to evaluate the initial objectives.

The objectives of consulting the website dedicated to the LIFE BAIE DE L'AIGUILLON project have been exceeded. Indeed, since the start of the project, more than 5,000 people consulted several times the website (22,351 pages seen between 1st January 2016 and 31 December 2018). The initial objective was 1,000 people at the end of the project. The objectives are thus largely exceeded.

The first symposium organised in November 2018 aimed to sensitive 150 people. This objective has been largely exceeded, because this symposium brought more than 800 people for the « scientific show » and more than 450 people for the plenary days.

The travelling exhibition helped to reach more than 2,000 people. The objectives are also largely exceeded.

We must have to wait for the operational implementation of works on the three sites of the project to bring trends on the evolution of the indicators.

8. COMMENTS ON THE FINANCIAL REPORT

The project's financial report (Excel file) includes the expenditure statements for each beneficiary of the LIFE BAIE DE L'AIGUILLON project and their certificates, appended to this midterm report:

- Annex 21 The Financial statement of the PNR
- Annex 22 The Financial statement of the LPO
- Annex 23 The Financial statement of the ONCFS
- Annex 24 The payment request
- Annex 25 The cost summary
- Annex 26 The income summary
- Annex 27 The consolidated financial statement
- Annex 28 The funds contribution
- Annex 29 Life financial reporting PNR (excel)
- Annex 30 Life financial reporting LPO (excel)
- Annex 31 Life financial reporting ONCFS (excel)
- Annex 32 Life financial reporting consolidated (excel)

In addition, the certificates of the three project beneficiaries are presented in the following annexes:

- Annex 33 The Certificate of expenditure of the PNR
- Annex 34 The Certificate of expenditure of the LPO
- Annex 35 The Certificate of expenditure of the ONCFS

8.1 SUMMARY OF ENGAGED COSTS

Budget breakdown categories	Budgeted costs in €	Costs incurred from the start date to 01/01/2016 in 31/12/2018 €	% of Budget			
1. Personnel	671 391,00	382 115,99	56,91%			
2. Travel and subsistence	32 284,00	11 787,57	36,51%			
3. External assistance	951 316,00	262 044,54	27,55%			
4. Durable goods						
Infrastruture	320 000,00	40 811,16	-			
Budget breakdown categories Budgeted costs in € from the start date to 01/01/2016 in 31/12/2018 € % of Budget 1. Personnel 671 391,00 382 115,99 56,91% 2. Travel and subsistence 32 284,00 11 787,57 36,51% 3. External assistance 951 316,00 262 044,54 27,55% 4. Durable goods 40 811,16 - Equipment 110 340,00 103 129,71 93,47% Prototype - - -			93,47%			
			Budget breakdown categories in € date to 01/01/2016 in 31/12/2018 € 1. Personnel 671 391,00 382 115,99 56,91% 2. Travel and subsistence 32 284,00 11 787,57 36,51% 3. External assistance 951 316,00 262 044,54 27,55% 4. Durable goods 320 000,00 40 811,16 - Equipment 110 340,00 103 129,71 93,47% Prototype - - 5. Land purchase / long-term lease - - - 6. Consumables 16 310,00 3 935,58 24,13% 7. Other Costs 64 460,00 13 232,69 20,53% 8. Overheads 151 626,00 57 194,01 37,72%			
01/01/2016 in 31/12/2018 € 1. Personnel 671 391,00 382 115,99 56,91% 2. Travel and subsistence 32 284,00 11 787,57 36,51% 3. External assistance 951 316,00 262 044,54 27,55% 4. Durable goods 320 000,00 40 811,16 - Equipment 110 340,00 103 129,71 93,47% Prototype - - - 5. Land purchase / long-term lease - - - 6. Consumables 16 310,00 3 935,58 24,13% 7. Other Costs 64 460,00 13 232,69 20,53% 8. Overheads 151 626,00 57 194,01 37,72%						
TOTAL	2 317 727,00	874 251,25				

8.1.1 Comments on the budget item: Personnel

8.1.1.1 Precisions on the calculations of personnel cost

The personnel participating in the implementation of the LIFE Aiguillon Bay project is declared in this category of expenditures. Internship gratuities are also declared in this budget item.

Only the costs linked to the actual hours worked by people managing the actions of the project are declared.

The total cost of personnel is determined on the two following methods:

1. Method 1: Hourly rate multiplied by the actual number of hours worked

The calculation of the hourly rate is defined based on the three following values:

1.1. The annual productive hours

The total number of effective annual productive hours for each employee is registered in timesheets, signed by the agent and a line manager.

A default value of 1,720 hours of total annual production is used for agents working less than two complete days per month in average during one civil year. The PNR agents concerned by this second option are: Dominique Giret, technical director (PNR), Séverine Le Ridant, communication officer (PNR), Nicolas Beaubeau, environmental technician (PNR).

1.2. Real wage

For the employees, the annual salary considered corresponds to the total actual gross remuneration and the part of social contributions supported by the employer (on wage slips).

For the PNR, the personnel charges that are not considered in the calculation of the real wage correspond to:

- the amount related to hours not worked in 2014 and paid in 2016 as part of the « time credit scheme contract ». For the following years the amount related to the « time credit scheme contract » is included in the count.
- The Employer pension participation: The PNR bears the partial cost of the contribution paid by the agents for their supplementary social protection scheme. In accordance with the deliberation from January 2014, the gross monthly amount is 8€ for Category A agents. The employer costs on that protection scheme are also deducted from the calculation. So far, the NRP has wrongly considered these costs as ineligible. However, as of 2019, these costs will be taken into account in the calculation of real wages on the NEEMO recommendation. The inclusion of this information in the calculation of eligible real wages for the years 2016, 2017 and 2018 will result in a substantial workload, so the PNR has decided not to make these changes.

For the ONCFS, the personnel charges that are not considered in the calculation of the real wage correspond to:

- The « public holiday » Sundays compensation, related to the Sundays worked in December 2015 and deducted from the total gross cost of January 2016.
- The costs linked to the « benefit in kind » of an agent benefiting from an accommodation as an absolute service requirement. The employer who provides an employee with accommodation for free must evaluate a housing in-kind benefit and submit it to the payment of Social security contributions. This agent pays its contributions once a year in February.

For interns, the real wage corresponds to the internship gratification. This indemnity is exempt from social contributions.

1.3. The productive hours worked on the project

Only the costs of real hours worked on the project are considered. The effectives hours are registered:

• For the PNR in the timesheets; the agents also write down their time table in a time registration software (Gedeon) or a paper agenda and report them on the timesheets. The personnel working on the LIFE project with less than two full work days per month in average during a civil year is exempt

from registering the work time. However, the work time affected to the LIFE program by the PNR agents is attested by the structure leader.

- For the LPO in the timesheets.
- For the ONCFS, the registration of hours worked in the timesheets.

1.4. Calculation of the hourly rate

The hourly rate, calculated on an annual basis, is obtained by dividing the actual gross annual salary, increased by the employer's compulsory social contributions and other statutory cost included in the agents' remuneration, by the total number of annual production hours.

Broadly speaking, for interns, the hourly rate of gratuity equals 15% of the Social Security threshold, or 3.60€ in 2016 and 3.75€ in 2018.

The hourly rates are calculated on an annual basis.

2. Method 2: Calculation on a full-time-equivalent basis or percentage affected to the project

For the personnel (employees or interns) working full-time for the project or on a percentage basis explained in the contract, the eligible salary costs will be proportionally calculated on the basis of the real annual salary (as defined in the method 1).

The concerned agents are: Laurine Bouffandeau, « Anatidae » task officer, full-time contract (ONCFS), Mathieu Dumery, artist, full-time contract à 100% (PNR), Rémi Bruneau, intern, part-time agreement at 80% (PNR), Fanny Journaux, intern, full-time agreement (PNR). A letter is appended to their internship agreement.

8.1.1.2 Comments

PNR: 55 % of expenditure

The global implementation of the program relies on three permanent agents: Loïc Chaigneau, Elise Chourré and Alain Texier. The agents' daily costs do not exceed the ones initially estimated (230€). In 2017, three additional agents do not exceed two work days per month and have been declared on the program: Séverine Le Ridant (communication officer, action E2), Nicolas Beaubeau (environment technician, site supervisor, action C3) and Dominique Giret (technical director).

For the purpose of the symposium's evening event « Hé…la mer monte! », the PNR has recruited an artist, Mathieu Dumery. This task is registered in the « non-employee personnel » part.

Some of the actions required more time than initially scheduled provided by the PNR, especially for the action E2. Indeed, the PNR managed the organisation of the whole symposium in 2018 as well as its implementation. These additional staff costs were borne by the PNR, either as part of the project or as part of the PNR action program (excluding the LIFE BAIE DE L'AIGUILLON project).

LPO: 34% of expenditure

Olivia Mercier joined the Aiguillon Bay NNR team in January 2017 as task officer? She left her post at the end of 2018 and was replaced by Louise Froud from 2019.

A large part of the animation is managed by the Curator of the NNR (LPO): Frédéric Corre from 2016 to September 2018, then Jean-Pierre Guéret from 2018 to today. Sylvain Haie also participates in the implementation of certain actions (actions A5, A4 and C4 notably). These times, however, are not included in the project, but justify certain expenses in the category "travel and subsistence costs" or "consumables".

Sylvain Haie also participates in the implementation of certain actions (notably the Anatidae survey, works on the Aiguillon Pointe). However, this period is not part of the project, but some of the expenditures are justified in the « travel and accommodation costs » or « consumables ».

Emmanuelle Champion, Natura 2000 coordinator, is a research fellow at the NNR. In 2016, her daily cost was 322€, which is 60% higher than the estimated amount (200€). This is due to the fact that Emmanuelle Champion, employee by the LPO since 1992, was on sick leave for several weeks and on part-time work for 4 months in 2016. In 2017, her daily cost was 255.78€. Emmanuelle Champion's daily cost is in 2018 20% higher. This is because of her one-month sick leave (from 15/01 to 09/02). It is worth noting that the LPO employees have no loss of wages during a sick leave. The LPO has a propagation action and pays the complete wage to the employee, covering the days of default and the payment difference with Social security and the benefits difference (for sick leaves longer than 3 months). Her mission was to manage the procurement of the studies and oyster « crassat » removal works.

In some of the actions, little or no reference was initially made to the LPO work time. However, the field needs have mobilised the study manager Olivia Mercier on the following actions:

- Action A5: Study report on the use of the Aiguillon Bay and the outlying marshes by wintering Anatidae
- Action A6: Implementation of water quality monitoring in the Aiguillon Bay
- Action D5: Survey on the socio-economic and ecosystem impacts of the project

ONCFS: 86% of expenditure

The time spent by the ONCFS has been superior to those initially estimated on the permanent personnel. This is notably due to the action A5:

- A modification of the core sampling protocol of action A5 (addition of a puncture site);
- An initial undervaluation of time spent on the field;
- It was expected deep freeze storage of carrots before sifting and analysis. Facing the lack of stockage capacity, it has been decided to start the sifting and the use of vacuum drying oven as early as 2017.
 This required more time in 2017 and 2018 and led to the recruitment of an individual contractor, Laurine Bouffandeau;
- A longer catching period. Indeed, the weather conditions and smaller numbers of birds have not led to an optimal management (meaning several captures at once) and a rapid tagging of ducks. This capture will thus be done at a slower pace every morning from November to February. The ideal scenario would be to capture a lot of birds in the shortest possible time to ease this work time. That event did not happen.

Moreover, Jacques Marquis's daily cost in 2018 was 419.59€, which is 48% higher than the initial amount presented in this project (283€). This difference is due to the retirement of this agent in October 2019, who benefits from his days of his « time credit scheme contract ». The number of days worked in 2018 is thus smaller than other years.

8.1.2 Comments on the budget item: Travel and accommodation costs

PNR: 39% of expenditure

Broadly speaking, the LIFE agents use the hybrid Yaris vehicle obtained during the project. The charges relating to this vehicle are declared in the « consumables » item for fuel and « other costs » for maintenance costs, insurance, etc.

For the rest, the PNR agents file expense reports on which are specified:

(1) The reimbursement of mileage expenses related to the use of personal vehicles when the conditions to use the LIFE hybrid Yaris vehicle are not fulfilled (especially when the vehicle is already booked), according to the following terms:

Tax horsepower of the	Under 2,000 kms per	From 2,001 to 10,000	Over 10,000 kms per
vehicle	year	kms per year	year
5CV and less	0.18 €	0.25 €	0.31 €
6 to 7 CV	0.23 €	0.32 €	0.39 €
8 CV and more	0.25 €	0.35 €	0.43 €

(2) Mission allowances

Allowances on expense	Mission Paris/dept.77/92/93/94 and	Mission Province
reports	cities over 200,000 inhabitants*	
Car park /toll	On documentary evidence	On documentary evidence
Meal	15.25 €	15.25 €
Overnight stay	60 €	45 €
Daily allowance (one overnight stay + 2 meals)	90 €	75.50 €

Toll charges can also be justified from Société Total invoices.

The mission expenses can also be invoiced directly to the PNR by travel agencies, food outlets or hotel structures.

<u>Details on the beneficiaries of the meals from the following invoices:</u>

- Invoice 990/308 (Marais Social Club, 2017 Neemo annual visit, 7 meals): the members of the LIFE technical committee (Elise Chourré, Loïc Chaigneau, Emmanuel Joyeux, Frédéric Corre), the technical director Dominique Giret, the Chairwoman of the PNR, Caroline Rouennier, as well as one elected representative from the PNR, Catherine Tromas.
- Invoice 989/308 (Marais Social Club, presentation of the topographical analysis of the Bay to the LIFE technical committee, 7 meals): the members of the LIFE technical committee (Loïc Chaigneau, Elise Chourré, Ségolène Travichon, Emmanuel Joyeux), the technical director Dominique Giret, Eric Chaumillon and Jonathan Blanloeil (LIENSs).
- Invoices 1291/415 and 1419/458 (Marais Social Club, 5 meals): the members of the LIFE technical committee (Loïc Chaigneau, Elise Chourré, Gregory Garandeau, Alain Texier) and the technical director Dominique Giret.
- Invoice 1292/415 (Marais social club, 9 meals): the members of the LIFE technical committee (Loïc Chaigneau, Elise Chourré, Alain Texier, Emmanuel Joyeux, Régis Gallais, Olivia Mercier, Jean-Pierre Guéret, Florent Bignon) and Lena Romao, newly-established Finance director of the PNR.
- Invoices 1547/497 and 1556/500. The meals and the accommodation of Marion Lechelon, recruited by the PNR through the management centre of Vienne (interim service of public service) are declared in that category.

LPO: 46% of expenditure

The refunds are made to the agents on presentation of expense forms.

Meal	Hotel	Personal vehicle
On documentary evidence	On documentary evidence	0.38€/Km up to 31/03/17 0.40€/Km from 01/04/17

The costs of using vehicles belonging to the structure depend on the cost per kilometre which is annually calculated.

ONCFS: 13% of expenditure

Emmanuel Joyeux's visit was not initially scheduled. However, the forecasts in this category can cover the costs incurred, as the ONCFS doesn't justify any type of travel. The initial envelope of 4,319 is available.

8.1.3 Comments on the budget item: External assistance

At this project progress stage, this expense item may seem small in relation to the time elapsed. However, the majority of the expenditure is financially committed in the context of contracts by the three beneficiaries (mudflats restoration works, IFREMER study and qualitative analysis of the waters, mission of project management of dyke retreat, etc.). Indeed, 201 170 € are financially committed, bringing this rate to almost 50%.

PNR: 27% of expenditure

Provisions other than those referred in the Grant Agreement

The partnership with the « Forum des Marais Atlantiques (FMA) » has brought additional funds and allowed the organisation of a wide-ranging international symposium. The organisation of this event required bigger human and logistical means than initially scheduled. The pooling of those means required changes in the initial budget as well as a distribution of expenditure between the FMA and the PNR.

The expenses that haven't been initially covered on that event concern:

- The recruitment of an agent, Marion Léchelon, from 7 September to 16 December 2018 in the amount of 8,672.15€. The PNR has requested the management centre of Vienne (interim service of public service) to provide an agent to help in the organisation, monitoring and review of the symposium « Adaptation of tidal marshes to climate change ». This staff member has been billed.
- The design of communication tools (posters, flyers, badges, advertisement, flame, flap folder, lectern dressing, flags, outdoor tarps) in the amount of 2,530€. The creation or printing of those elements, except for the badges, has been taken in charge by the FMA.
- The poster campaign, which has been taken in charge in the amount of 1,512€.

Meanwhile, contributions scheduled have not been implemented on that symposium or have been funded by the FMA: reception costs (500€), on-site translator costs (1,500€), printing of the proceedings (2,250€).

For general information

- The provision « Elaboration of a project renaturation Aiguillon Pointe » in the amount of 7,320€ has not been conducted.
- The provision « cutting down trees Aiguillon Pointe » has been done in 2018 (awaiting the invoice). The final amount for the provision is 3,050€ (16,000€) initially scheduled.
- The provision « Socio-economic and ecosystem surveys » has been cancelled. The 10,000€ have been redirected to the LPO personnel for the same objective.
- The publishing of the « illustrated book on the Bay 1,500 copies », initially provided in the amount of 29,000€, costed 26,058.50€.

LPO: 12% of expenditure

Provisions other than those referred in the Grant Agreement

- Assistance contract on the procurement of the wild Japanese oyster removal works, in the amount of 600€. In view of the estimated total amount of the procurement, The LPO has wished to get assistance from a law firm for the drafting of the tender documents related to the « crassats » works.
- Qualitative analysis of the mudflat sediments, recommended as part of the regulatory study and by the National Natural Reserve Scientific Council, to study the environmental impact of re-suspension of sediments during those works. This provision has been conducted but not settled.

ONCFS: 66% of expenditure

Provisions other than those referred in the Grant Agreement

The training on the use of the 10 transceivers for the water study was technically planned in action A6, but the amount had not been stated in the F1 form. This provision is included in the procurement contract. Conducted for the Natural Reserve personnel, it is required for the maintenance, the common use, the programming and transfer of data. The amount of the provision (720€) is taken from the envelope « Ongoing assessment of salinity in the Aiguillon Bay ».

8.1.4 Comments on the budget item: Infrastructures

PNR: 13% of expenditure

The low completion rate is justified by the difficulty encountered by the PNR with the partners associated with the actions related to the Prée Mizottiere site, which delayed the operational implementation of the works (dike, platform).

On the other hand, some works carried out in 2018 on Aiguillon Pointe site were not subject to payment in 2018 (invoices not received).

For general information

The cost for the « works hydraulic structures Prée Mizottière », initialled planned at 20,000€, is 25,552.80€.

8.1.5 Comments on the budget item: capital goods

PNR: 146% of expenditure

The surcharge is related to the transceivers acquisition on behalf of ONCFS, cf. action A5.

Acquisitions other than those referred in the Grant Agreement

The PNR acquired:

- Another computer for the purposes of the coordinating team in the amount of 1,921.91€, as the financial coordinator's computer was old.
- Anatidae transceivers in the amount of 15,786€: the ONCFS wanted to launch a national procurement contract for the acquisition of monitoring equipment. The delay caused by this type of contract would have been too important for the good implementation of action A5 in 2017. This administrative burden forced the PNR to acquire this monitoring equipment. The information has been transmitted to NEEMO by email on 14/06/2017.

For general information

- The acquisition of the GPS device has been cancelled (acquisition done in 2015 outside of the LIFE project by the PNR).
- The cost of the vehicle, initially planned as 20,000€, is 17,172.28€.

LPO: 0% of expenditure

The laptop acquisition will be done in 2019.

ONCFS: 76% of expenditure

Acquisitions other than those referred in the Grant Agreement

It was scheduled, as part of action A6, beside the acquisition of new probes, to sustain the multi-parameter measuring points belonging to the IFREMER and made available to get data for the program. It is in this context that the ONCFS acquired:

- specific batteries (1,944 €) for the recharging of probes (marketed only by NKE Instrumentation)
- a protection cage for probe (1,116 € including VAT) to change a defective cage. The ordered equipment is adjusted to the probe marketed only by NKE.



Defective cage



New cage without the probe

A submersible GPRS/GPS antenna for float (1,776€). The station on the Sèvre niortaise river has been destroyed due to an impact with a boat in July 2017. The data transmission antenna had to be replaced. This equipment is adjusted to the probes and marketed only by NKE.

Antenna and cage float(without the cage)



For general information

The cost of probes, initially planned at 35,000€, is in fact 28,440€.

The LIFE Nature are not concerned by the depreciation of durable goods.

8.1.6 Comments on the budget item: Consumables

PNR: 14% of expenditure

It is mainly fuel costs for the hybrid Yaris vehicle. Fuel costs are quantified. Each travel is annotated in a tracking sheet and liked to a specific action. At the end of the year, fuel cost is calculated per kilometre. The distribution is then done per action and approved by the manager of the structure.

The acquisition of field equipment and its renewal have been cancelled.

Expenses other than those referred in the Grant Agreement

- The acquisition of stamps showing the reference of the LIFE project turned out to be necessary to remedy the omissions on invoices. This stamp has been occasionally used at the start of the program and is now used at the last resort.
- Consumer good purchases can be included in this item.

LPO: 120% of expenditure

Expenses other than those referred in the Grant Agreement

- The acquisition of carrying devices for the exhibition (action E1), not initially planned, was necessary in view of the fragility and the important roaming of panels in the amount of 1,121.41€.
- Technical equipment was necessary for the monitoring of ducks (weighing equipment and monitoring antenna) in the amount of 55.45€.

ONCFS: 21% of expenditure

Expenses other than those referred in the Grant Agreement

- Equipment required for the fixation of probes as part of the project was acquired in the amount of 505.32€ (Action A6).
- Petri dishes required to the storage of seeds coming from the core samples, necessary for the Anatidae survey (Action A5) in the amount of 354.12€.

8.1.7 Comments on the budget item: Consumables

PNR: 14% of expenditure

It is mainly fuel costs for the hybrid Yaris vehicle. Fuel costs are quantified. Each travel is annotated in a tracking sheet and liked to a specific action. At the end of the year, fuel cost is calculated per kilometre. The distribution is then done per action and approved by the manager of the structure.

The acquisition of field equipment and its renewal have been cancelled.

Expenses other than those referred in the Grant Agreement

- The acquisition of stamps showing the reference of the LIFE project turned out to be necessary to remedy the omissions on invoices. This stamp has been occasionally used at the start of the program and is now used at the last resort.
- Consumer good purchases can be included in this item.

LPO: 120% of expenditure

Expenses other than those referred in the Grant Agreement

- The acquisition of carrying devices for the exhibition (action E1), not initially planned, was necessary in view of the fragility and the important roaming of panels in the amount of 1,121.41€.
- Technical equipment was necessary for the monitoring of ducks (weighing equipment and monitoring antenna) in the amount of 55.45€.

ONCFS: 21% of expenditure

Expenses other than those referred in the Grant Agreement

- Equipment required for the fixation of probes as part of the project was acquired in the amount of 505.32€ (Action A6).
- Petri dishes required to the storage of seeds coming from the core samples, necessary for the Anatidae survey (Action A5) in the amount of 354.12€.

8.1.8 Comments on the budget item: Other costs

PNR: 36% of expenditure

Expenses other than those referred in the Grant Agreement

As indicated in the « External assistance » section, the scale of the symposium « Adaptation of tidal marshes to climate change » generated costs not initially planned, divided with the FMA and the PNR.

The expenses not originally planned in this expenditure item concern:

- The publishing of an advertisement for the evening for the public « Hé…la mer monte !... » in the amount of 720€.
- The housing and cost of meals for a part of the PNR agents, originally planned as « travel expenses », who participated in the organisation of the symposium and others (photographer, filmmaker) in the amount of 387.75€.
- The acquisition of collars for the organisers, speakers and participants' badges in the amount of 373.51€.
- The renting of sound equipment for the site visit on the third day of the symposium in the amount of 151.20€.
- The renting of a bus originally planned on the « External assistance » item, in the amount of 798€.

For general information

- Certain expenses indicated for the « submersion symposium » have not been made or have been taken in charge by the FMA: proceedings translation for 600€, renting the conference room (1,000€), renting the lectern (500€).
- Insurance costs are below the initial estimates. Maintenance costs for a vehicle exclusively for the purpose of this project, will thus be used from the 4,500€ line.
- For external volunteers, travel expenses with a personal car are refunded on the basis of the scale applicable to agents of the territorial public service.
- For external volunteers and PNR agents, travel expenses, meals and overnight stays are refunded on the basis of documentary evidence.

LPO: 3% of expenditure

These expenses are related to the upcoming organization of the symposium, resulting in a low achievement rate.

Expenses other than those referred in the Grant Agreement

- Photo credits were required for the design of the brochure; those rights have been obtained through Fotolia, Erick Faucher and Studio Lézard Graphique, in the amount of 154.60€.
- NEEMO's annual visit took place on 19 July 2017 at the headquarters of the National Natural Reserve, on the site of the Prée Mizottière. Far from any catering service, this day required the purchase of restoration products.

ONCFS: 6% of expenditure

For general information

- The book on the seeds, originally scheduled in bound copy, is now also available in free digital version. It will thus not be obtained as part of the LIFE Bay program.
- A pay reception via Argos was originally planned. It has been decided to tag ducks with a GSM transmission mode. The cost is below the one originally planned on the line « subscription reception data tracking Anatidae monitoring ».

8.1.9 Comments on the budget item: overhead expenses

The costs are submitted to a 7% flat rate on the whole direct costs that are eligible for the project.

8.2 ACCOUNTING SYSTEM

8.2.1 Accounting system

The PNR uses a cost accounting system. The code related to the LIFE operational action is 26-154. An analytical study of the project will then orientate the costs on the considered action when it's possible. The LPO uses the code 2929 in its cost accounting system.

The ONCFS uses the code RF31. However, at the beginning of the program, it was RA16/921.

8.2.2 Staff time monitoring

Timesheets are filled for the PNR and the ONCFS through n Excel file and manually signed by a line manager. Since 2017, the LPO has set up a project management software (LOGEPROJ) which includes an interface for the input of the staff's worked time. 2017 was a test phase, few people entered their hours on the software, the majority of entries was done of Excel. In 2018, the vast majority of the « protection of the nature » pole switched to the time entry on LOGEPROJ, only a few services including support functions (management control, communication, Publishing). In 2019, all employees working on funded files will have to enter the worked hours on the LOGEPROJ software.

Approval of timesheets

- For the PNR: from 01/01/16 to 31/12/16, signed by the manager of the structure or the chairman. From 01/01/2017, exclusively signed by Dominique Giret, technical director of the Environment and agriculture service.
- For the LPO: signed by Olivier Denoue, executive general secretary.
- For the ONCFS: in 2016, signed by Christophe Bayou, delegate for the Bretagne and Pays de Loire regions, en 2017, signed by Christophe Bayou, Aurélien Viau deputy delegate for the regions, then Nathalie Franquet, delegate for the regions from October 2017. Since Emmanuel Joyeux moved to another service, those timesheets are signed from April 2018 by Bertrand Trolliet, manager of the Limicolae project.

8.2.3 Referencing the invoices

For the PNR, all invoices mention the reference of the LIFE project. In some cases, a stamp with the reference of the LIFE project is occasionally used. On the other hand, inside the PNR structure, the entrustments of invoices are mostly done by the project coordinator.

For the LPO, the invoices bear the reference of the LIFE project and/or the reference 2929.

For the ONCFS, the reference of the LIFE project is indicated, as well as the analytic code.

8.3 PARTNERSHIP AGREEMENTS

As main beneficiary of the project, the PNR has signed with its associated beneficiaries LPO and ONCFS a partnership agreement which, in addition to the parties' rights and obligations, stipulates the financial terms on the payment of the European grant and the public funds.

The payment will be done in three steps, in accordance with the terms of the European Commission: 30% when the agreement is signed, 40% after EASME approved and payment of the intermediate advance, the remaining balance after EASME approved and payment of the intermediate advance of the fund's remaining balance.

Public finds (agreement for 245,000€) pass through the PNR. Originally, the funding covered 10.79% of the total programme.

Now, the fund between the Ministry and the main beneficiary covers the expenses of only 6 actions, on an eligibility period going from 2018 to December 2020. However, the repayment to associated beneficiaries is done as originally planned: 10.79% on the total amount of their expenses.

8.4 CERTIFICATE ON THE FINANCIAL STATEMENTS

The competition procedure has not been initiated yet. This will be done in 2019.

8.5 ESTIMATION OF THE PERCENTAGE OF THE NUMBER OF WORKED DAYS PER ACTION GROUPS

Action type	Budgeted person-days	Estimated % of person- days spent
Action A - Preparatory actions	567	77%
Action C - Concrete conservation actions	214	28%
Action D - Monitoring and impact assessment	289	8%
Action E - Communication and Dissemination of results	1 090	19%
Action F - Project management (and progress)	693	48%
TOTAL	2 853	37%

The percentage of the number of days spent on part A is higher and linked to actions A4 and A5.

9. PLANNED PROGRESS UP TO THE NEXT REPORT

The LIFE BAIE DE L'AIGUILLON project started on 1st January 2016. It includes 24 actions during the whole project. At the midway point of the project, all actions (19) to be engaged by 31 December 2018 in accordance with the proposed schedule, have been initiated.

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	Current																			
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E2	Initial																			
	Current																			
	ONCFS	Webs	site																	
E3	Initial																			
	Current																			
	PNR	Layn	Layman's report																	
E4	Initial																			
	Current																			
	PNR	Anim	ation	of the	e netv	vork														
E5	Initial																			
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	PNR	Creation of Life information panels																		
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Actual schedule of implementation of the action Provisional schedule of the action up to the progress report 03

The planned progress up to the next progress report (progress report 03) per action are as follow:

Action A1: The action is completed.

Action A3: The PNR will regularly meet the contractor responsible for the prior studies to implement the dike removal works. The PNR will participate in the identification of land borrow areas on the site of the Prée Mizottière, as required for the restoration of the FPAP dikes.

Action A4: The action is completed.

Action A5: The third campaign of core sampling in the meadows will be completed. The analysis of seeds from the core samples will start. Other Anatidae will be tagged with transceivers and the study of their movements will continue.

Action A6: The action will continue in accordance with the provisional schedule. A new technical committee and a new steering committee will bring the first analyses of collected data as part of this action.

Action A7: The action will be implemented during the second half of 2019; the first work meetings will be organised by the ONCFS to prepare the drafting of expected elements.

Action C1: The experimental works of mudflat restoration in the Aiguillon Bay will be carried out(September 2019). A conference during the works will be organised by the LPO.

Action C3: On the site of the Prée Mizottière, meetings will bring the contractor in the implementation of prior study to move back the dike. The land borrow areas for the implementation of FPAP dike restoration works (outside of LIFE) will be identified and will launch the prior technical instruction to the implementation of an observation platform.

Action C4: On the site of the Aiguillon Pointe, works to remove concrete block and renature an old camp site with dunes will be conducted. The inauguration of the works on the Aiguillon Pointe will be done after the end of the works.

Action D1: In the Aiguillon Bay, the works of mudflat habitat restoration will be conducted during the second half of 2019. The monitoring elements will thus be launched in 2020 after the phase of works.

Action D3: On the site of the Prée Mizottière, the monitoring of three ecological indicators will continue: monitoring of the nesting avifauna, monitoring of the amphibians and monitoring of the vegetation and habitats. A mapping of the habitats will be in particular created.

Action D4: On the site of the Aiguillon Pointe, the monitoring of both biological indicators will continue: annual monitoring of the avifauna and monitoring of the reproduction of the 3 species (Kentish plover, tawny pipit, bluethroat). A mapping of the habitats will be created.

Action D5: The survey on food grown and the harvest of wild products will be conducted. A large part of the data collection will be done. Monthly meetings will take place.

Action E1: The discovery book will be published, Activities will be conducted by partners. An animated computer graphics on the role of dunes will be created, a video on the restoration of dune habitats will also be created. The press report will be updated. Other newsletters on the project (*Chroniques estuariennes*) will be published.

Action E2: No event in 2019.

Action E3: The website update will be done, New posts presenting the project's news will be published.

Action E4: No event in 2019 (Layman's report), in accordance with the initial schedule.

Action E5: The PNR will participate in the InterLife 2019, the contacts with other LIFE projects will continue.

Action E6: The action is completed.

Action E7: Action not undertaken, in accordance with the initial schedule.

Action F1: The project coordination will be ensured, a steering committee will take place in March 2019, different monitoring committees will ensure the good implementation of the project.

Action F2: Action not undertaken, in accordance with the initial schedule.

Action F3: Action not undertaken, in accordance with the initial schedule.

Action F4: A possible update on the data will be done at the request of the European Commission.

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Annex 02 - Partnership agreements

Annex 03 - Funding agreements

Annex 04 - EASME correspondences

Annex 05 - Answers to the previous EASME correspondences

Annex 06 - The three amendments to the Grant Agreement

10.2 ANNEXES LINKED TO THE ACTIONS

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Annex 09 – Action A1 – Prefectorial decree from 28/12/2018 (LPO)

Annex 08 - Action A1 - Correspondence from the company Trézence TP from 17/01/2019 (LPO)

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Annex 13 - Action A3 - EASME email from 12/05/2017 et EASME letter from 09/11/2017 (PNR)

Annex 14 – Action A5 – NEEMO letter from 15/06/17 (ONCFS)

Annex 15 – Action A6 – IFREMER ONCFS EPMP Agreement (ONCFS)

Annex 16 – Action A6 –IFREMER Study Report on the wintering dynamics of nutrients and carbon (ONCFS)

Annex 17 – Action C4 – Map of works done in the Aiguillon Pointe (PNR)

Annex 18 - Action E1 - Centre Beautour partnership agreement (PNR)

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10.3 FINANCIAL ANNEXES

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10.4 DELIVERABLES

The LIFE BAIE DE L'AIGUILLON includes 41 deliverables listed in the *annex 01*, in which the transmission status of those deliverables is explained. The deliverables that have been created and transmitted since the start of the project are as follow:

Deliverable 01 – Action A1 – Report of the faunistic inventory and food web identification (LPO, J. Jourde) **Transmission Midterm report**

Deliverable 02 – Action A1 – Impact assessment and other regulating provisions, achieved authorisations (LPO, Créocéan)

Transmission Midterm report

Deliverable 04 – Action A3 – Creation of regulatory and technical provisions on water developments (DDTM 85 correspondence from 13/10/2017)

Transmission Progress report 02

Deliverable 06 – Action A4 – Development project of the Aiguillon Pointe **Transmission Progress report 01**

Deliverable 07 – Action A4 – Survey on summer tourist attendance among visitors **Transmission Progress report 01**

Deliverable 16 – Action D1 – Analytical report on bathymetric recordings – Part 01 **Transmission Midterm report: transmitted again with the logos, at the request of EASME (11/07/2018)**

Deliverable 25 – Action E1 – Project's presentation brochure **Transmission Progress report 01**

Deliverable 26 – Action E1 – 10 exhibition panels on the wonders of the bay **Transmission Progress report 02**

Deliverable 28 – Action E1 – Illustrated book on the bay **Transmission Progress report 02**

Deliverable 36 – Action E6 – Collecting the Life information panels **Transmission Midterm report**

Deliverable 40 – Action F4 – Scoreboards on the initial situation **Transmission Progress report 01**