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LIFE Project Number

LIFE15 NAT/DK/000948

Mid-term Report

Covering the project activities from 01/09/2016¹ to 31/12/2020

Reporting Date²

15/04/2021

LIFE PROJECT NAME or Acronym

Actions for improved conservation status of The thick shelled river mussel (*Unio crassus*) in Denmark

Data Project

Project location:	
Project start date:	01/09/2016
Project end date:	31/12/2021 Extension date: 31/12/2023
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(%) of eligible costs:	

Data Beneficiary

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¹ Project start date

² Include the reporting date as foreseen in part C2 of Annex II of the Grant Agreement

This table comprises an essential part of the report and should be filled in before submission

Please note that the evaluation of your report may only commence if the package complies with all the elements in this receivability check. The evaluation will be stopped if any obligatory elements are missing.

Package completeness and correctness check	
Obligatory elements	✓ or N/A
Technical report	
The correct latest template for the type of project (e.g. traditional) has been followed and all sections have been filled in, in English <i>In electronic version only</i>	✓
Index of deliverables with short description annexed, in English <i>In electronic version only</i>	✓
<u>Mid-term report</u> : Deliverables due in the reporting period (from project start) annexed <u>Final report</u> : Deliverables not already submitted with the MTR annexed including the Layman's report and after-LIFE plan Deliverables in language(s) other than English include a summary in English <i>In electronic version only</i>	✓
Financial report	
The reporting period in the financial report (consolidated financial statement and financial statement of each Individual Beneficiary) is the same as in the technical report with the exception of any terminated beneficiary for which the end period should be the date of the termination.	✓
Consolidated Financial Statement with all 5 forms duly filled in and signed and dated <i>On paper (signed and dated originals*) and in electronic version (pdfs of signed sheets + full Excel file)</i>	✓
Financial Statement(s) of the Coordinating Beneficiary, of each Associated Beneficiary and of each affiliate (if involved), with all forms duly filled in (signed and dated). The Financial Statement(s) of Beneficiaries with affiliate(s) include the total cost of each affiliate in 1 line per cost category. <i>In electronic version (pdfs of signed sheets + full Excel files) + in the case of the Final report the overall summary forms of each beneficiary on paper (signed and dated originals*)</i>	✓
Amounts, names and other data (e.g. bank account) are correct and consistent with the Grant Agreement / across the different forms (e.g. figures from the individual statements are the same as those reported in the consolidated statement)	✓
Mid-term report (for all projects except IPs): the threshold for the second pre-financing payment has been reached	✓
Beneficiary's certificate for Durable Goods included (if required, i.e. beneficiaries claiming 100% cost for durable goods) <i>On paper (signed and dated originals*) and in electronic version (pdfs of signed sheets)</i>	✓
Certificate on financial statements (if required, i.e. for beneficiaries with EU contribution ≥750,000 € in the budget) <i>On paper (signed original) and in electronic version (pdf)</i>	✓
Other checks	
Additional information / clarifications and supporting documents requested in previous EASME letters (unless already submitted or not yet due) <i>In electronic version only</i>	✓
This table, page 2 of the Mid-term / Final report, is completed - each tick box is filled in <i>In electronic version only</i>	✓

**original signature by a legal or statutory representative of the beneficiary / affiliate concerned*

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2. List of key-words and abbreviations

- NK = Næstved Municipality
- OK = Odense Municipality
- FMK = Faaborg-Midtfyn Municipality
- FK = Faxe Municipality
- RK = Ringsted Municipality
- SK = Sorø Municipality
- MST = National Environmental Agency (Denmark)
- CB = Coordinating beneficiary
- AB = Associated beneficiary
- GA = Grant Agreement
- PM = Project Manager
- IAS = Invasive Alien Species
- KPI = Key Project Indicators

3. Executive Summary

This is the MidTerm Report (MtR) for the LIFE project concerning the thick shelled river mussel (*Unio crassus*) in two sites in Denmark, the river Suså and the Odense river.

The main objective of the project is to contribute to obtaining a favourable conservation status for the thick-shelled river mussel (*Unio crassus*) and its host fish in Denmark and in the Continental biogeographic region.

At the start of the project, NK was the sole participant, and sub-project 2, the Lower Suså was the major site. In the original project, we planned to remove the barrier at Holløse Mill and create continuity between the river Suså and Torpe canal. In the first 2 years many resources were put in landowner and stakeholder involvement, initiating biological and technical feasibility studies, and creating the management plan for the *Unio crassus*.

Despite the hours and efforts spent in the project, it was not possible to find an acceptable compromise for the landowners, in which they would be satisfied in relation to creating a 4-5 km good habitat for the thick shelled river mussel. The landowner at the main barrier at Holløse Mill expressed, that he would not accept any of the physical changes we suggested. Therefore in November 2018 the subproject 2 at the Lower Suså was put on a permanent hold.

In the winter and spring of 2019, the project was reorganized, rebuilt and reconstructed as described in the amendment request submitted in June 2019. The changes were so significant that the project almost had a re-start in November 2019, where the amendment was approved.

Aiming for a larger and more robust population of *Unio crassus*, two additional project sites situated in the SAC DK0088X188 (river system of Odense Å and Sallinge Å) and two additional partners were included in the project. The Odense river system hosts the largest known population of *Unio crassus* in Denmark and probably the only Danish reproducing stock. This also means that all the riversystems with living *Unio Crassus* in Denmark are included in the project, thereby improving the management off the thick shelled river mussel (*Unio crassus*) and its host fish in Denmark.

In the revised project, subproject 1, Upper Suså, has been expanded. The project site has been expanded to almost 40 km, and the activities have been changed to include several habitat improvement for the mussel and its host fishes. The original restocking and release program for the key species has continued, and good results have been achieved in establishing an *Unio crassus* population and its host fishes. In 2018 300 individuals of minnows were collected from Hågerup Å on Fyn and released in May in subproject 1. In April 2019 and in May 2020 a total of 5100 minnows were infected by river mussel larvae and released in subproject 1. Infection was achieved in the lab by collecting gravid mussels in Hågerup Å, where the lab spawned glochidia were added to the fish tanks. Here infection took place.

European bullheads were collected in Sweden and re-introduced in subproject 1. This was done with 300 individuals in 2018, 450 in 2019 and 400 in 2020.

In the Odense river, the project has resulted in the removal of an obstacle, and thereby eliminating a stowing zone of 3.6 km, where new biotopes for the mussel has been restored. In the river Sallinge, 2000 infected minnows were released in 2020. This will be repeated for the next 3 years, as part of the restocking and release program.

The out-break off Covid-19 has made the dialog with the many new landowners in subproject 1 difficult and has led to delays in the project.

The project is frequently reported in the press and the knowledge of the thick shelled river mussel and its host fish has been widespread during the project.

4. Introduction

This project targets the highly threatened thick shelled river mussel (*Unio crassus*) in the Continental biogeographical region of Denmark. According to the recent article 17 report, the conservation status of the thick shelled river mussel is unfavourable and bad in Denmark.

The main project objective is to contribute to obtaining a favourable conservation status by increasing the number of biotopes for the river mussel and its host fish along with a comprehensive stocking program of the river mussels and its host fish.

The reproduction of the thick shelled river mussel is dependent on specific host fish; the minnow (*Phoxinus phoxinus*) and the European bullhead (*Cottus gobio*). At the start of the project the host fish were not present (or few in numbers) in some of the watercourses. If no action is taken, the population of the thick shelled river mussel will decline and disappear, since reproduction is not possible.

The project sites are two Natura 2000 watercourses the river Suså (SAC DK006Y275) and the Odense river system (SAC DK008X188). Both SAC's are designated for the thick shelled river mussel under the Habitat Directive.

Historically, the thick shelled river mussel inhabited 10 watercourses in Denmark, but now it is only found in the river Suså and the Odense river system. The population is estimated to 40.000 individuals, and > 95 % are found in the Odense river system. Though the historic distribution is estimated to have been 6 times larger. The project operates in four subprojects:

- Subproject 1 located in river Suså – upper part
- Subproject 2 located in river Suså – lower part
- Subproject 3 located in Odense river
- Subproject 4 located in river Sallinge (part of SAC Odense river)

In the project site in subproject 1, a few old living individuals of the river mussel were found along with many empty shells. In the project site in subproject 2 and 4 only empty shells were found. In subproject 1 and 2 no host fish were found.

The specific objectives are:

- Physical improvements in the watercourse at app. 18 km, by making the appropriate bottom substrate and continuity conditions for both the river mussel and its host fishes.
- A comprehensive stocking program for the river mussels host fishes. European bullhead and minnows infected by mussel larvae and released in the watercourse will create the starting point for rebuilding a viable and self-reproductive population of the river mussel at app. 16 km watercourse.
- The population of the river mussel is expected to increase from zero individuals to about 0,1-0,2 individuals / m² of watercourse during the project and the reintroduction program (in Subproject 1,2 and 4). This is equivalent to about 10.000 new individuals.
- By reintroducing the host fishes in the watercourses at river Suså and river Sallinge, the reproductive cycle of the river mussel is secured.
- In a socio-economic context the project will increase public awareness of watercourse biodiversity in Denmark and EU by establishing information boards, public meetings, a website and numerous reports in the press.

5. Administrative part

The project management is taken care of in action F1 as follows:

- NK is the coordinating beneficiary and has established a secretariat to support the project. The secretariat is composed of a PM (Mrs. Sofia Mulla Kølmeel) and three permanent staff members (Mrs. Malene Callesen Dahl, Mr. Palle Myssen and Mr. Søren Madsen).

The PM is supported by an assistant project manager. This position is taken care of by the consultant Claus Paludan from Bangsgaard og Paludan ApS. The task has been placed at Bangsgaard og Paludan ApS based on a tendering procedure.

- The steering group is chaired by NK and in addition composed of one representative from each of the three partners in the project. The steering group members are all high-levelled staff from the various beneficiaries and the steering group members are:

Mr. Jens Bach - Chairman, NK
 Mr. Heidi Kastrup Christensen - OK
 Mr. Ole Tyrsted Jørgensen - FMK
 Mrs. Sofia Mulla Kølmeel - NK, PM

- The project group takes care of the day-to-day activities in the project. When needed, the accounting staff supports the project group. The project group is composed as follows:

Mrs. Sofia Mulla Kølmeel, PM, NK
 Mrs. Malene Callesen Dahl, NK
 Mr. Palle Myssen, NK

Mr. Søren Madsen, NK
 Mr. Gert Magnus Hansen, accountant, NK
 Mr. Jan Hald Kjeldsen, OK
 Mrs. Henriette Rantzau Almtorp, FMK
 Mr. Claus Paludan, assistant PM, Bangsgaard og Paludan ApS

The various activities in the steering group and the project group during this reporting period are reported below (action F1).

5.1 Previous reports, amendments, communication with EASME

This project has sent three progress reports to EASME (05.10.2017, 28.02.2019, 30.06.2020) and one Project note (09.2018).

The monitor has visited the project six times (30.11.2020 (virtual), 20.04.2020 (virtual), 01.10.2019, 07.09.2018, 06.03.2018 and 07.03.2017).

EASME has issued one letter amendment on 27.09.2018 and approved the second amendment the 26.11.2019.

Communication with EASME (now CINEA)

Date of letter from EASME	Questions asked if not answered	Questions answered date
16.05.2017	-	05.10.2017 – All questions answered in the first progress report
02.02.2018	-	28.02.2019 – All questions answered in the second progress report
07.05.2018	a) Daily rate of your staff in some cases will exceed the planned rate by more than 20%. Please include an explanation and justification of this in your Midterm Report.	28.02.2019 – All but one question answered in the second progress report a) Se section 6.2
11.12.2018	-	28.02.2019 – All questions answered in the second progress report
19.06.2019	a) Progress report # 2 has been accepted b) Suggested project changes require an amendment.	b) The amendment was sent 17.06.2019

15.11.2019	<ul style="list-style-type: none"> a) C5 – reintroduction problems with raising minnows b) Timesheets c) Personnel costs 	<ul style="list-style-type: none"> a) The question was commented in the third progress report, se section 6.1.9 for further answer. b) Revised timesheets were presented at the virtual meeting 20.04.2020 with the monitor and sent to the monitor 27.11.2020. c) Se section 6.2
16.02.2021	<ul style="list-style-type: none"> a) A1 + A3 and delay in relation with Covid-19 b) C5 – problems with reintroduction c) D2 Socio-economic monitoring d) Documentation for activity E2 e) KPI-database f) Personnel cost - annual productive hours and annual gross salary g) Personnel cost - the daily lunch break h) External assistance 	<ul style="list-style-type: none"> a) Se section 6.1.1 and 6.1.3 b) Se section 6.1.9 c) Se section 6.1.11 d) Se section 6.1.14 e) The Key Project Indicators (KPI) have been updated by March 2021. f) Se section 6.2 g) Se section 6.2 h) Documentation of the selection procedure of the successful tenderer, Per Aarsleff A/S and a copy of the contract is included in annex 10 and 11

6. Technical part

6.1 Technical progress, per Action

6.1.1 Action A1 – Biological and technical surveys

Site	Subproject name	Status Action A1	Activities ahead Action A1
1	Øvre Suså	The management plan for the <i>Unio crassus</i> in the river Suså (“ <i>Strategies to re-introduce Unio crassus and its affiliated host fish in the River Suså</i> ”) was finished in 2017. (Annex no 5). Surveying the watercourse has been done in Spring 2019 (14,5 km) and in Spring 2020 (11,5 km).	No further surveying of the watercourse is needed. Detailed planning in relation to action C1, C2 and C4 is almost finished, and will happen before deadline 05/2021
2	Nedre Suså	Technical and biological feasibility studies have been completed. (Annex no 6).	No further actions
3	Odense Å	The detailed project was completed in early 2020 by the consultant COWI A/S. The report is in annex 12.	No further actions
4	Sallinge Å	Technical and biological feasibility studies have been completed prior to amendment no. 2 in the summer of 2019. The study is therefore not part of the LIFE budget, but the study is presented in annex 13.	No further actions

Timetable status

EASME asked for additional information about the timetable status for this action in a letter dated 16.02.2021 in relation to the Covid-19 outbreak.

The action is being performed according to the GA timetable. However, the detailed planning in subproject 1 has not been presented to all the landowners, due to the outbreak of Covid-19. The detailed plans are nearly finished and will be done before the deadline. But they will need adjustments prior to implementation according to the dialog with the landowners. During the spring of 2021 we expect to present the plans to 35 landowners at individual meetings, but due to Covid-19, there is a risk that this process will be further delayed.

6.1.2 Action A2 – Applications to authorities

Prior to the construction works and reintroduction of species, the necessary permits must be in place. This will be based on specific applications from the project partners to the relevant authorities. The following acts are relevant for the action:

- A) The Nature Protection Act (LBK 240-13032019)
- B) The Conservation Act
- C) The Watercourse Act (LBK 1217 25112019)
- D) The Fishing Act
- E) The Planning Act (“VVM”)
- F) The Agroforestry Act
- G) Århus konventionen
- H) Update of the habitat directive
- I) The Museum Act (LBK 358 08042014)

Site	Subproject name	Status Action A2	Activities ahead Action A2
1	Øvre Suså	<p>Permission from The Nature Protection Act (A) and The Watercourse Act (C) to make the first physical improvements of the watercourse of 400 m has been obtained. Annex 14 and 15</p> <p>Approval has been obtained from the Fishing Act (D) to move the minnows and the <i>Unio Crassus</i> larva to the Suså river. Annex 16.</p> <p>Permission from the Swedish authorities (Distriktsveterinärerna) to export and from the Danish authorities (Miljø- og Fødevarerministeriet) to import European bullhead. Annex 17 and 18</p> <p>Permission from the Fishing department to reintroduce bullhead to river Suså (D). Annex 19.</p> <p>A public meeting was held in 2016 and 2020 according to the “Århus konventionen” (G), se section 6.1.13.</p> <p>Approval from MST from the protection of species (artsfredningsbekendtgørelsen) to take DNA-samples of the thick shelled river mussel. Annex 20</p> <p>Permission from The Nature Protection Act to make the first two canoeing sites is obtained. Annex 28</p>	<p>In addition, Næstved Municipality must give permission from the Nature Protection Act and the Watercourse Act to make physical improvements in 11,6 km of the watercourse. This will be applied during 2021.</p> <p>Update of the habitat directive - Application to MST will be send before deadline 06/2022.</p>
2	Nedre Suså	Not relevant	Not relevant
3	Odense Å	Permission from The Conservation Act to the project (B), se annex 22.	No further actions

		<p>Permissions from The Nature Protection Act (A) and The Watercourse Act (C) were obtained from Odense Municipality to remove obstacle and make adjustment to the watercourse. Included in annex 21.</p> <p>Permission from Odense Municipality from "Planloven (VVM)" (E). Annex 23</p> <p>Public announcement of the project of removal of the obstacle 20/12/2019 to the 17/2/2020 according to the "Århus konventionen" (G)</p> <p>Approval from MST from the protection of species (artsfredningsbekendtgørelsen) to move the thick shelled river mussel before working in the watercourse. Annex 24.</p>	
4	Sallinge Å	Approval was obtained from the Fishing department to reintroduce minnows infected with glochidia from the thick shelled river mussel to Sallinge Å. Annex 25.	No further actions

Timetable status

The action is being performed according to the GA timetable. Permission from the Agroforestry act and The Museum Act were not needed due to the project changes.

6.1. 3 Action A3 – Dialogue with the landowners

Site	Subproject name	Status Action A3	Activities ahead Action A3
1	Øvre Suså	In Februar 2020 dialog with the landowners was initiated as a public meeting held 05.02.2020, see action E1. All landowners were invited.	Dialog with the landowners was delayed due to the outbreak of Covid-19, this action will continue during 2021.
2	Nedre Suså	Extensive dialog with the landowners during 2017 and 2018	No further actions
3	Odense Å	Statement of consent was achieved 13.03.2019 and 10.12.2019 from the involved landowners.	No further actions
4	Sallinge Å	The landowners have been informed ahead of the reintroduction of the minnows at part of the project area. Spring 2020.	This action will also be completed in the rest of the project area in 2021.

Timetable status

EASME asked for additional information about the timetable status for this action in a letter dated 16.02.2021 in relation to the Covid-19 outbreak.

Dialog with the landowners was delayed due to the outbreak of Covid-19. During spring of 2021 we expect to continue dialog with 35 landowners, but there is a risk that this process will be delayed further due to Covid-19. However, though delayed we still have enough time to complete the action before deadline. We therefore believe that the C-actions dependent of action A3 will be performed according to the GA timetable.

6.1.4 Action B1 – Compensation to landowners

Site	Subproject name	Status Action A1	Activities ahead Action A1
1	Øvre Suså	The action will proceed as planned in relation to action A3.	Deadline July 2022
2	Nedre Suså	Not relevant	Not relevant
3	Odense Å	Not relevant	Not relevant
4	Sallinge Å	Not relevant	Not relevant

Timetable status

The action is being performed according to the GA timetable.

6.1.5 Action C1 - Improving the rived bed

Site	Subproject name	Status Action C1	Activities ahead Action C1
1	Øvre Suså	This action will proceed as planned in relation to action A3.	Deadline December 2022
2	Nedre Suså	Not relevant	Not relevant
3	Odense Å	The construction works were completed in the autumn of 2020. The obstacle in Odense river has been removed and the stream profile has been modified along 600 m. The bottom substrate in the riverbed has been improved to suit <i>Unio crassus</i> . Downstream, the modified profile a sand trap has been established to control sediments mobilized in the modified profile and in the previous stowing zone further upstream. By now the sand trap has been emptied twice.	No further actions
4	Sallinge Å	Not relevant	Not relevant

Timetable status

The action is being performed according to the GA timetable.

6.1.6 Action C2 - Improving the riverbanks and planting of trees

Site	Subproject name	Status Action C2	Activities ahead Action C2
1	Øvre Suså	This action will proceed as planned in relation to action A3.	Deadline December 2022
2	Nedre Suså	Not relevant	Not relevant
3	Odense Å	Not relevant	Not relevant
4	Sallinge Å	Not relevant	Not relevant

Timetable status

The action is being performed according to the GA timetable.

6.1.7 Action C3 - Watercourse restoration by removal of obstacles

Site	Subproject name	Status Action C3	Activities ahead Action C3
1	Øvre Suså	Not relevant	Not relevant
2	Nedre Suså	Not relevant	Not relevant
3	Odense Å	The obstacle in the Odense river was removed between the 29.06.2020 and the 16.10.2020. Map of new watercourse in appendix 38.	No further actions
4	Sallinge Å	Not relevant	Not relevant

Timetable status

The action is being performed according to the GA timetable.

6.1.8 Action C4 - Removal of unwanted aquatic plants and transplantation of native species of aquatic plants

Site	Subproject name	Status Action C4	Activities ahead Action C4
1	Øvre Suså	Removal of unwanted aquatic plants (<i>Phragmites australis</i> and <i>Sparganium sp.</i>) started in 2019 and continued in 2020 in a total of 1,7 km of the watercourse. In 2020, 2.700 plants equally divided between <i>Batrachium sp.</i> , <i>Callitriche sp.</i> and <i>Potamogeton crispus</i> were planted at three sites in the river Suså. Removal and planting will continue in 2021.	Removal will take place at a total of 8 km of the watercourse and planting at 3 km. The activity will proceed until deadline in September 2022,
2	Nedre Suså	Not relevant	Not relevant
3	Odense Å	Not relevant	Not relevant
4	Sallinge Å	Not relevant	Not relevant

Timetable status

The action is being performed according to the GA timetable.

6.1.9 Action C5 - Reintroduction of host fish

Site	Subproject name	Status Action C5	Activities ahead Action C5
1	Øvre Suså	In spring of 2018 the first 300 minnows were released. In 2019 and 2020 a total of 5.100 infected minnows were released. In the autumn of 2018, 2019 and 2020 European bullhead were collected in Swedish rivers in Skåne and released in the Suså river. A total of 1.300 (300 in 2018, 600 in 2019 and 400 in 2020) individuals were released, which is more than the goal of 1.200 in the GA. The activity is expected to continue in 2021.	Release of a total of 40.000 infested minnows and additional European bullhead.
2	Nedre Suså	Not relevant	Not relevant
3	Odense Å	Not relevant	Not relevant
4	Sallinge Å	2000 reintroduced minnows infected with glochidia from the thick shelled river mussel to Sallinge Å. The first of 4 reintroductions were in the spring of 2020.	The activity will continue in spring 2021, 2022 and 2023, until the deadline in August 2023.

Timetable status

EASME asked for additional information about the timetable status for this action in relation to the Covid-19 outbreak (in letter dated 15.11.2019 and 16.02.2021).

Due to low breeding success in 2019, there were less than 1.500 one-year old *Phoxinus phoxinus* to be released in 2020. This problem was discussed with our monitor Bent Jepsen, during his visit to our project on the 1.10.2019. An alternative plan for ensuring sufficient material for the reintroduction was discussed and planned. During the winter of 2019/2020 Fyns Laksefisk (the contractor rearing the fish) obtained information from literature studies and other projects in Europe on breeding minnow.

In the spring Fyns Laksefisk applied the authorities to get permission to electrofish one-year old minnows for rearing. Infection could then take place in captivity, and fish with glochida could thereafter be released in the river. However, the authorities would not give a permission to electrofish as many as 10.000 minnows. The result was a permission to electrofish a total of 4.000 minnows for subproject 1 and 4 (2.000 each).

Meanwhile Fyns Laksefisk worked hard on solving problems regarding raising and breeding minnows in captivity. The hard work was rewarded. By changing the water flow, male minnows were stimulated to go into breeding. Several other small adjustments in the aquariums contributed to breeding success.

During the monitor meeting on Skype in April 2020, we presented photos of the fry in Fyns Laksefisk, and the positive results. At that time 15-20.000 fry had hatched in the aquariums

at Fyns Laksefisk which is in accordance with numbers in the GA. Since then the mortality of the fry has been very low. We therefore expect to be able to handle an increased release of infected minnows during the coming years and the overall goal of releasing 48.000 infected minnows in Suså and Sallinge rivers are still realistic.

6.1.10 Action D1- Baseline and effect monitoring

Site	Subproject name	Status Action D1	Activities ahead Action D1
1	Øvre Suså	<p>Baseline monitoring has been done:</p> <p>A) 2017 measurements of “fysisk index” on 10 locations in Upper Suså (<i>Report: “Økologisk tilstand i dele af øvre og nedre Suså”</i>) Annex no. 3</p> <p>B) Search of UC on 9 locations and additional screening in 14 locations in Upper Suså was conducted in 2017. In 2019 the best locations were revisited. DNA results confirmed the finding of 6 UC in 2017, and one additional in 2019, unfortunately empty shells were found in 2019 of two of the UC found in 2017. (Report “<i>Current status of the thick-shelled river mussel Unio crassus in the River Suså: Version 2 - including results of DNA analyses</i>” and “<i>Results from a small mussel inventory in Suså and Torpe Kanal, 2019</i>”). Annex no. 1 and 2</p> <p>C) Fish survey on six locations in 2017 (“<i>Fiskeundersøgelse I Nedre og Øvre Suså 2017</i>”). Annex no. 4</p>	<p>Effect monitoring will be completed before September 2023, and will be a repetition of the baseline monitoring according to locations and parameters.</p> <p>Indicator D (photos) will be presented in Final report.</p>
2	Nedre Suså	<p>A) 2017 measurements of “fysisk index” on 10 locations in Lower Suså (<i>Report: “Økologisk tilstand i dele af øvre og nedre Suså”</i>) Annex no. 3</p> <p>B) Search of UC on 2 locations in Lower Suså was conducted in 2017. No living individuals were found. (Report “<i>Current status of the thick-shelled river mussel Unio crassus in the River Suså: Version 2 - including results of DNA analyses</i>”)</p>	No further actions

		Annex no. 1 C) Fish survey on four locations in 2017 (" <i>Fiskeundersøgelse i Nedre og Øvre Suså 2017</i> ") Annex no. 4	
3	Odense Å	No action in this reporting period	Effect monitoring will be completed before September 2023. Data from the MST water plans will be used as baseline.
4	Sallinge Å	No action in this reporting period	Effect monitoring will be completed before September 2023. Data from the MST water plans will be used as baseline.

Timetable status

The action is being performed according to the GA timetable.

6.1.11 Action D2 - Socio-economic indicators

This action monitors the socio-economic impact of the project based on five indicators:

- A) Activity in local companies
- B) Recreational fishery
- C) Increased settlement
- D) Employment due to project implementation
- E) Press coverage and a communication strategy

Site	Subproject name	Status Action D2	Activities ahead Action D2
1 + 2	Øvre Suså and Nedre Suså	<p>For practical reasons the indicators for the two subprojects hosted by NK are analysed in common.</p> <p>The baseline monitoring was reported in PR #1 and the results so far are summarized as follows:</p> <p>Indicator A: So far, we have placed orders with private companies for 293,550 €.</p> <p>Indicator B: No data is available on recreational fishing, since no leisure fishery takes place.</p> <p>Indicator C: At the end of the project, the settlement data will be extracted from a NK database. However, the extracted data are not expected to reflect the effects of the project – please see below.</p>	The activity will proceed until deadline in December 2023.

		<p>Indicator D: So far, the project has resulted in the employment of 900 person days.</p> <p>Indicator E: In 2017 the project produced a communication strategy (annex 26). The project has received substantial attention from the press on several occasions listed below.</p> <p>02.10.2015, Sjællandske Medier, Susåens vandstand skal sænkes – 100 mio. kroner kan spares</p> <p>03.03.2016, Sjællandske Medier, Kreativt miljøprojekt eller ødelagt landskab</p> <p>17.09.2016, Sjællandske Medier, "Naturelker kalder Suså-projekt for miljøkatastrofe".</p> <p>02.11.2016, Sjællandske Medier, Omstridt vandmiljøprojekt får masser af EU-millioner</p> <p>09.11.2016, Sjællandske Medier, Naturprojekt på Susåen med højt lixtal</p> <p>14.01.2017, Sjællandske Medier, Jagten på fertile muslinger</p> <p>07.04.2017, Sjællandske Medier, Læserbrev, Et visionært projekt i Susåen</p> <p>15.06.2017, Sjællandske Medier, Muslingejubel i Torpe Kanal</p> <p>28.08.2017, Sjællandske Medier, Sjælden udrydningstruet musling er fundet i Susåen</p> <p>23.09.2017, Sjællandske Medier, Læserbrev, Prestigeprojekt på bekostning af landskabet</p> <p>22.01.2018, Læserbrev, Sjællandske Medier, 'Susåen er under angreb'</p> <p>23.01.2018, Læserbrev, Sjællandske Medier, 'Projekt Torpe Kanal og Susåen'</p>	
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	<p>25.01.2018, Læserbrev, Sjællandske Medier, 'Susåen tilbage til naturen'</p> <p>17.05.2018, Pressemeddelelse, 'Fynske elitser får ny bolig i Susåen'</p> <p>22.05.2018, Pressemeddelelse i Ugebladet, 'Fynske elitser skal hjælpe truet musling'</p> <p>23.05.2018, Facebook opslag fra Næstved Kommune, 'Fynske elitser får ny bolig i Susåen'</p> <p>23.05.2018, TV-indslag, TV2 Øst, 'I dag blev 300 baby-karper sluppet løs i Susåen'</p> <p>08.10.2018, Artikel, Sjællandske Medier, 'Turisme vinder over vandmiljøet'</p> <p>10.10.2018, Læserbrev, Sjællandske Medier, 'Det er naturen, som har vundet på Susåen'</p> <p>04.12.2018, Artikel, Fyens Stiftstidende, 'Ulken kommer: Fynske fiskefolk hjælper Sjællands største å'</p> <p>19.11.2018, Pressemeddelelse, Länsstyrelsen Skåne, 'Framgångsrikt musselprojekt exporteras till Danmark – 450 stensimpor fiskas upp från Fyleån'</p> <p>19.11.2018, Artikel, Ystad Lokaltidningen, 'Skånska stensimpor ska rädda musslor i Danmark'</p> <p>21.11.2018, Artikel, Folkbladet, 'Fiskflytt från Skåne ska rädda musslorna'</p> <p>21.11.2018, Artikel, Kuriren, 'Fiskflytt från Skåne ska rädda musslorna'</p> <p>21.11.2018, Artikel, Ystads Allehanda, 'Här flyttar Fyleåns fiskar till Danmark'</p> <p>21.11.2018, Artikel, SVT nyheter, 'här är den skånska fisken som renar danskt vatten'</p> <p>22.11.2018, Artikel, Aftonbladet, 'Skånsk fisk ska hjälpa hotad mussla rena danska vatten'</p>	
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	<p>23.11.2018, Artikel, Fiskejournalen, 'Svenska stensimpor ska rädda musslor i Danmark'</p> <p>29.04.2019 Pressemeddelelse: 2.000 elritser inficeret med malermuslingelarver udsættes</p> <p>29.04.2019 Danske kommuner: Næstved Kommune udsætter inficerede fisk for at hjælpe sjælden musling.</p> <p>02.05.2019 Radio-indslag, DR P1, Nyhederne</p> <p>06.05.2019 TV-indslag, DR Nyhederne (national television) 19.55 and 21.30: Biodiversitet</p> <p>21.05.2019 Sjællandske Medier, 2000 rugemødre svømmer i Susåen</p> <p>05.06.2019 Ferskvandsfiskeribladet: EU giver 9,3 millioner til flere fisk i Susåen</p> <p>14.10.2019 Sjællandske Medier: Ulken tilbage i Susåen</p> <p>14.10.2019 Radio-indslag, DR P4, Nyhederne</p> <p>11.12.2019 Ferskvandsfiskeribladet: Svenske ferskvandsulke er flyttet til Susåen</p> <p>28.01.2020 Pressemeddelelse: EU giver syv millioner kroner til den tykskallede malermusling</p> <p>29.01.2020 TV-indslag, TV2 Øst, Nyhederne kl. 19.30: Millioner skal forbedre dyrelivet i Susåen</p> <p>31.01.2020 Sjællandske Medier: Syv millioner kroner fra EU skal redde lille bløddyr fra udryddelse</p> <p>21.05.2020 Sjællandske Medier: Susåen har fået 3.500 nye beboere</p> <p>29.10.2020 TV-indslag, TV2 Øst, Ud i Naturen: Dansk musling skal reddes af svensk fisk.</p>	
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		27.01.2021. EASME news: A LIFeline for Europe's threatened invertebrates.	
3	Odense Å	<p>Indicator A: We have placed orders for 521,160 €.</p> <p>Indicator B: Prior to the project some leisure fishery took place in river Odense in the upstream stowing zone. However, the stowing zone has been eliminated as part of the project implementation and the effect on leisure fishery will be analysed as part of the effect monitoring.</p> <p>Indicator D: So far, the project has resulted in employment of 45 person days.</p> <p>Indicator E: 06.09.2020 Fyns Stiftstidende: Vær velkommen tykskallet malermusling: Opstemning af Odense Å fjernet.</p> <p>29.10.2020 Fyns Stiftstidende: Drastisk fald i Odense Å truer Dalum Havn på eksistensen: – Foreningens grundlag er smadret</p>	The activity will proceed until deadline in December 2023 with a mid-term monitoring in medio 2021 and a final monitoring in late 2023
4	Sallinge Å	<p>Indicator A: So far, we have placed orders for 6,720 €.</p> <p>Indicator D: So far, the project has resulted in employment of 11 person days.</p> <p>Indicator E: 05.05.2020 Fyns Stiftstidende: Underlig fisk leverer muslinger til midt-fynsk å.</p>	The activity will proceed until deadline in December 2023 with a mid-term monitoring in medio 2021 and a final monitoring in late 2023

Timetable status

Overall, the collection of socio-economic data proceeds as foreseen. However, the indicator C concerning settlement seems to be a poor indicator of project success because settlement is influenced by a large number of factors (such as job opportunities, home pricing etc.) with a much larger influence on the settlement than the effect of the project. The subject is also mentioned in the EASME letter dated 16.02.2021. Since the action involves several other indicators, which can be influenced by the project implementation we propose to skip indicator C.

As part of the approved amendment the KPI has been updated at the time of submitting the Mtr.

6.1.12 Action D3 – Ecosystem Services

This action monitors the ecosystem services of the project based on three indicators:

- A) Watercourses with natural dynamics
- B) Recreational possibilities and tourism
- C) Protection of genetic variation and gene pools

Site	Subproject name	Status Action D3	Activities ahead Action D3
1	Øvre Suså	Overall, the collection of baseline data was described in the PR#1. In short, we have achieved the following: Indicator A: the physical baseline index is part of the feasibility studies. Indicator B: Answers to a questionnaire on recreational purposes have been collected. Indicator C: Data collected as part of the biological monitoring.	The activity will proceed until deadline in December 2023 with a mid-term monitoring in medio 2021 and a final monitoring in late 2023.
2	Nedre Suså	Not relevant	Not relevant
3	Odense Å	Overall, baseline data for indicator A and C will be extracted from the baseline mapping which is part of the Natura-2000 planning.	The activity will proceed until deadline in December 2023 with a mid-term monitoring in medio 2021 and a final monitoring in late 2023
4	Sallinge Å	Overall, baseline data for indicator C will be extracted from the baseline mapping which is part of the Natura-2000 planning.	The activity will proceed until deadline in December 2023 with a mid-term monitoring in medio 2021 and a final monitoring in late 2023.

Timetable status

The action is being performed according to the GA timetable.

6.1.13 Action E1 – Public awareness (website, public meeting etc.)

Action E1.1: Establishing a website (www.uclife.dk) and making two short cartoons has made a great platform for the project and a lot of public awareness. The front page of the website presents all four subprojects, and detailed information, articles, movies etc. about the subprojects are also available.

Site	Subproject name	Status Action E1	Activities ahead Action E1
1 + 2	Øvre Suså and Nedre Suså	Action E1.2: Temporary information signs are set at local tourism and information sights (Kongskilde Friluftsgård, Næstved Bibliotek, Næstved Rådhus). Annex nr. 27	E1.2: Another temporary information sign will be put up at

		<p>Action E1.4:</p> <p>A) A public meeting was held on 8.11.2016, and after approval of the amendment a new public meeting was held 5.02.2020.</p> <p>B) 15.06.2017, 04.06.2018, 20.07.2018.</p> <p>C) "Kanobrugerråd" (14.11.2019) and "Det grønne Råd / Naturråd" (21.11.2016, 15.11.2017, 27.08.2018, 21.08.2019 and 13.01.2020), "Ålaug" (21.06.2017, 22.01.2019)</p> <p>D) On May 8th 2018, we had a public guided tour "Mød den tykskallede malermusling".</p> <p>In addition, several posts on Facebook and on the project web-side. The project was presented with other LIFE-projects at "Naturmødet" 2019 in Hirtshals with 30.000 participants.</p> <p>Action E.1.5: Permissions have been given to the first two canoeing facilities.</p>	<p>the construction site.</p> <p>Permanent info signs will be put up, when the project is completed and before deadline 12/2023</p> <p>E1.3: Layman report will be completed before deadline 11/2023</p> <p>E1.5: The facilities will be established before 12/2023</p>
3	Odense Å	<p>E1.2:</p> <p>Temporary info signs are placed in the project area, including sailing restrictions during the construction period.</p> <p>The website is updated with pictures and video of the construction period.</p> <p>Annex no. 28</p> <p>E1.4:</p> <p>B) Local green organisations in a follow group had meetings 11.03.2020 and 21.10.2020</p> <p>C) The project was originally presented at "Grønt Råd" meeting 26.02.2018 prior to amendment no. 2, and UC in Denmark was presented at a meeting 25.02.2020.</p> <p>D) Prior to amendment no. 2 a public guided tour in January 2018 with about 500 participants. Guided tour with the Nature Conservation Society was held 19.10.2020</p>	<p>E1.2:</p> <p>Permanent info signs will be put up ultimate 2021</p>
4	Sallinge Å	<p>So far, no activity, besides contribution to the web-side, has been done.</p>	<p>E1.2 Info signs will be put up before 12/2023</p> <p>E1.4: We are planning a public meeting in spring 2021 at the next reintroduction</p>

			<p>in Sallinge Å. If It will be possible in regards to Covid-19.</p> <p>E1.6: Leaflet will be published before 12/2022</p>
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Timetable status

The action is being performed according to the GA timetable. The first canoeing facility is expected to be established in the spring/summer of 2021. However, the neighbors to site number two have complained, and we are awaiting the appeals board decision. The site can be moved or removed, and the resources can be put in site no three in subproject 1. It is important that the public can visit the area, and this goal will still be achieved by establishing canoeing facilities at two sites.

6.1.14 Action E2 – Workshop and networking

E2.1: The workshop was arranged as a meeting with national experts within the field of thick shelled river mussel (*Unio crassus*) management. The workshop took place on the 20.3.2017. Notes from the workshop are in Annex 7.

E2.2: The 17.05.2017 we visited the Swedish UC4LIFE project (LIFE10 NAT/SE/000046). Notes from the visit are in Annex 8.

In April and November 2018, we visited the Rest-unio project in Luxemburg (LIFE11 NAT/LU/000857). Notes from the visit are in Annex 9.

The project group has attended the Nordic Platform Meeting three times (2017, 2018 and 2019), and at the latest the PM gave a presentation: *Treats to the Thick-shelled River Mussel (Unio Crassus) by the invasive Zebra Mussel (Dressena polymorpha) and test of new technology – underwater drone.*

E2.3: The project was presented on a national conference in Nyborg the 21.08.2019: “Genudsættelse af den tykskallede musling, elritser og hvidfinnet ferskvands ulk i Susåen”. The project presentation was part of a session about biodiversity and reintroduction along with presentations from Oostvaardersplassen, LIFE-ClimaBombina and LIFE-aurinia. EASME asked for additional information in a letter dated 16.02.2021, and program is included in annex 36.

The project was also presented at a poster session at national meeting for municipality employees the 11.03.2020. Program in annex 37.

The remaining activity concerns action E2.3 in relation to the project group, which will continue during the rest of the project period.

6.1.15 Action E3 – Replication and transfer

The database was established in the spring 2017 and is updated regularly (<https://www.merelivisusaaen.dk/database/>). Currently the database holds app. 60

documents along with videos and photos representing our own project and other LIFE projects.

6.1.16 Action F1 – Næstved Municipality’s project management

The project group was established with participation of the three partners. Næstved Municipality has entered into partnership agreements with Odense and Faaborg-Midtfyn Municipality. So far, there has been no issues for the steering group to discuss, also the Covid-19 outbreak and the official health directions have limited the possibility to meet.

6.1.17 Action F2 – Supervision of construction works

Site	Subproject name	Status Action F2	Activities ahead Action F2
1	Øvre Suså	NK have participated in reintroduction of minnows and bullhead.	Will proceed as planned in relation to C-actions.
2	Nedre Suså	Not relevant	Not relevant
3	Odense Å	8 supervision meetings were held by the consultant COWI A/S and OK during the construction period in 2020. Minutes from the supervision meetings are in annex 30.	No further actions
4	Sallinge Å	FMK took part in the day, when minnows infected with glochidia from the thick shelled river mussel were reintroduced to Sallinge Å. Spring 2020.	Will proceed as planned in relation to C-actions.

Timetable status

The action is being performed according to the GA timetable.

6.2. Main deviations, problems and corrective actions implemented

The main problems and deviations were solved with the amendment approved by EASME in November 2019.

The outbreak of Covid-19 has made dialogue with the landowners in subproject 1 difficult, but the dialogue will continue, and we still expect it to follow the GA timetable.

As requested by EASME (letter dated 16.02.2021 and letter dated 15.11.2019) an explanation in the MTR for the calculation of the personnel costs follows: How are the annual productive hours and annual gross salary calculated for all beneficiaries?

For NK the annual productive hours are the total working hours deducted vacation, public holidays, lunch, sickness and legal absence.

For OK and FMK the annual productive hours are the total working hours deducted vacation, public holidays, sickness and legal absence.

Gross salary is for all beneficiaries’ the employers’ total expenses for the employee, i.e. pension, obligatory social charges and salary in total.

In letter dated 16.02.2021 EASME also requests, an explanation for the practise of NK not to include the daily lunch break, 0,5 hour in the calculation of the annual productive hours.

NK presumed that the daily lunch break, 0,5 hour was not included in the calculation for the annual productive hours when project and timesheets were implemented in 2016. However, we have learned that this was a mistake, and OK and FMK do include the daily lunch break when calculating the annual productive hours. It will be possible to change the timesheets and the calculation of the annual productive hours moving forward. It will however be very time consuming to change the calculation of the annual productive hours from 2016 until 2021, and all the timesheets will be wrong. EASME has expressed acceptance of the timesheets in letters dated 07.05.2018 and 15.11.2019, and we therefore kindly ask EASME that the calculation of the annual productive hours without the daily lunch break can also be accepted.

Omitting the daily lunch break in the calculation of the productive hours influences the daily rates. These rates will become higher compared to a situation, where the lunch break is included in the productive hours. In some cases, this contributes to daily rates which exceed the daily rates in the budget with more than 20 %. In addition, the salary of some of the staff is substantially higher than foreseen in the budget, where the specific project staff were not yet appointed. EASME made a comment on this in the letter of 07.05.2018. We therefore kindly ask EASME to accept daily rates that exceed the budget with 20 % for certain staff members (Bent Hummelose, Dorte Lillelund, Sofia Kølmeel, Palle Myssen, Søren Madsen, Tonny Larsen, Søren skov Hansen, Daniel Johannesen, Jan Hald Kjeldsen).

6.3.Evaluation of Project Implementation

Objectives and targets foreseen in the revised proposal	Achieved	Evaluation
<i>Physical improvements of the watercourse on app. 18 km making the appropriate bottom substrate and continuity conditions for both the river mussel and its host fishes.</i>	Physical improvements of the watercourse and removal of an obstacle thereby connecting existing populations of the river mussel and elimination a 3.7 km stowing zone in subproject 3, river Odense.	The objectives achieved were very cost-efficient because there was no compensation to landowners.
<i>A comprehensive stocking programme of the river mussels host fishes. European bullhead and minnow infected by mussel larvae and released in the</i>	The stocking programme is running, and good results has been achieved. Some planning, trial and error were necessary before the	It takes more time, and several attempts to work with living organisms, but we believe that we are on track now.

<i>watercourse will create the starting point for rebuilding a viable and reproductive population of the river mussel on app. 16 km watercourse.</i>	programme yielded the foreseen results.	
<i>The population of the river mussel is expected to increase from zero individuals to about 0,1-0,2 individuals / m² of watercourse during the project and the reintroduction program. This is equivalent to about 10.000 new individuals.</i>	This objective is too early to evaluate.	
<i>By reintroducing the host fishes in the watercourses, the reproductive cycle of the river mussel is secured.</i>	So far, the host fishes have been successfully reintroduced in subproject 1 and 4, and preliminary fish survey has shown that the fish thrive. But it is still too early to know if they also reproduce.	Creating a thorough management plan for the <i>Unio crassus</i> in the river Suså was important for the success of the reintroduction, and the conclusions from the management plan were directly transferable to other watercourses in Denmark.
<i>In a socio-economic context the project will increase public awareness of watercourse biodiversity in Denmark and EU by establishing information boards, public meetings, a website and numerous reports in the press</i>	The project has been reported several times in the press. Newspapers, local tv-stations and national television has brought numerous stories about the project and the species in the project thereby increasing the public awareness about watercourse biodiversity.	Making a website and a recognizable logo is a good platform for a project. The website must frequently publish a new article, video, carton, Facebook-story etc. to maintain the interest of the media.

6.4. Analysis of benefits

6.4.1 Environmental benefits

This project targets the highly threatened thick shelled river mussel (*Unio crassus*) in the Continental biogeographical region of Denmark. The planned activities markedly increase the possibility for achieving a favourable conservation status of the target species.

The projects support the Water Framework Directive in relation to remove an obstacle in the river Odense in order to restore continuity in watercourses.

6.4.2 Economic benefits

The project at Site 2 along river Odense is situated in a former industrial area which is being converted to a suburban residential area. In this development project the river restoration plays an important role for the green image and thus plays a role for the economic value of the development project. At site 1 along the river Suså, the restoration project is expected to increase public awareness of the site which eventually will result in more visitors and support for the local economy.

6.4.3 Social benefits

The project supports employment throughout the project's lifetime in relation to technical advisors and constructors. Several dissemination initiatives have been taken to improve the general involvement of the public and the local communities which will add to promote the N-2000 network.

6.4.4 Replicability, transferability, cooperation

The project has exchanged knowledge with other LIFE projects by visits to the Swedish UC4LIFE project (LIFE10 NAT/SE/000046) and the Rest-unio project in Luxemburg (LIFE11 NAT/LU/000857), as well as participating in three platform-meetings in Sweden, Finland and Denmark. This networking has made cooperation between the UC in Denmark and the UC4Life / LifeConnects possible. Thereby contributing to the management plan of the *Unio crassus*, techniques for finding gravid mussels, infection of fish and helping the reintroduction of the European bullhead in Denmark.

The databased developed in action E3 serves as replicability towards other similar projects in a future perspective. Already another danish municipality; Kerteminde Municipality is repeating the method of reintroduction of minnows infected with glochidia in another location of the Odense river system, where the *Unio crassus* has lived historical.

6.4.5 Best Practice lessons

The restoration project at Site 3 along river Odense is a best practice project for river restoration by removing obstacles. The same will apply to the river restoration work which will take place soon in river Suså at Site 1. Fyns Laksefisk, the contractor rearing the fish, has great experience with rearing of freshwater fish (salmon and trout), and this part of the stocking programme is a best practice lesson.

6.4.6 Innovation and demonstration value

The stocking programme for minnows and *Unio crassus* has not been implemented before in Denmark and only to a rather limited extent in other EU countries. Many lessons about the suitable stocking methods for minnow have been learned in our stocking programme.

6.4.7 Policy implications

At the EU level the project supports The Biodiversity Strategy 2020 and 2030 in relation to the protection of species and their biotopes, protection, and restoration of vulnerable ecosystems and of free flowint rivers, and to stop the loss of biodiversity. This occurs by river restoration and by the stocking and release program of minnows which are the hosts for the *Unio crassus* larvae.

7. Key Project-level Indicators

The Key Project Indicators (KPI) have been updated by March 2021.

The KPI has been updated with the two additional sites in river Odense and river Sallinge. The KPI follows the GA and therefore no further changes have been made.

8. Comments on the financial report

The financial information presented in this report is updated until 31.12.2020 parallel to the technical report.

The financial report and payment request are composed of the following documents:

- Financial reports from all beneficiaries – Annex 31
- Signed (in PDF) financial statements from all beneficiaries – Annex 32
- Signed (in PDF) consolidated payment request from NK – Annex 33

8.2. Summary of Costs Incurred

Overall costs

The overall costs per cost category is shown in the table below. The overall consumption is almost 59 % of the budget which is in good balance with the overall progress of the project 's duration (59 %). The Personnel cost is relatively high, because of the time spent on the problems with the landowners in subproject 2, and the whole reconstruction of the project. Considering this work, it seems reasonable.

PROJECT COSTS INCURRED			
Cost category	Budget according to the grant agreement in €*	Costs incurred within the reporting period in €	%**
1. Personnel	488.615	375.599	76,9
2. Travel and subsistence	12.158	5.758	47,4
3. External assistance	1.371.156	821.434	59,9
4. Durables goods: total <u>non-depreciated</u> cost			
- <i>Infrastructure sub-tot.</i>			
- <i>Equipment sub-tot.</i>			
- <i>Prototype sub-tot.</i>			
5. Consumables	9.380	4.372	46,6
6. Other costs	54.637	16.483	30,2
7. Overheads	119.660	0	0
TOTAL	2.077.261	1.223.647	58,9

*) If the EASME has officially approved a budget modification through an amendment, indicate the breakdown of the revised budget. Otherwise this should be the budget in the original grant agreement.

***) Calculate the percentages by budget lines: e.g. the % of the budgeted personnel costs that were actually incurred

The travel costs are related to several knowledge exchange visits to other projects taking place in Action E2 and in relation to LIFE platform meetings. Transportation around in the project area are paid by the beneficiaries, and not included in the project. The external assistance costs are related to the comprehensive feasibility studies and monitoring. To this should be added specific restoration activities which have taken place at River Odense and in relation to the stocking program for minnows and the *U. crassus*. The consumables costs and other costs are primarily related to handling of specific management activities and support of dissemination activities.

Action costs

The table below shows the costs per action. Our comments to the most substantial costs at this stage are as follows:

Action A1: Most of the feasibility studies have been performed but some of the detailed projects remain. The remaining budget seems to be realistic.

Action A2: The authorization procedures have been running for some of the activities but especially permits remain for the activities in Øvre Suså (site 1). The budget for the remaining authorization procedures seems to be realistic.

Action A3: Within the remaining budget additional landowner dialogue will take place in order to be able to implement activities at site 1 (Øvre Suså).

Action B1: Costs in this action will depend on the outcome of Action 3. The budget seems to be realistic.

Action C1 and C2: Costs in these actions will depend on the outcome of Action 3. The budget seems to be realistic.

Action C3: The costs in this action are related to implementation of the project at site 3 (River Odense). The costs are higher than foreseen and the overspend will be covered by OK.

Action C4: The remaining budget seems realistic to be able to fulfil the targets of this action.

Action C5: The reintroduction of minnows etc. is progressing after a difficult start. We therefore expect the remaining budget to be realistic to be able to reach the targets.

Action D1-D3: The actual use is relatively high compared to the fact that the effect monitoring remains. Considering the effect monitoring the expected costs probably will exceed the remaining budget. However, we expect this to be covered by savings in other actions.

Action E1: Some of the obligatory activities remain as well as some of the public facilities. The remaining budget is expected to cover these expenses.

Action E2: Most of the travel costs have been spent in relation to scheduled activities and the remaining budget seems realistic for additional activities.

Action E3: The replication activities are running, and we will probably be able to carry out the remaining activities below budget.

Action F1: A large effort has been put into the amendment request and reorganization of the project. Therefore, the cost so far are relatively high and the remaining budget seems realistic.

Action F2: The supervision activity is running continuously with implementation of the C-actions. A large effort was put into the supervision at site 3 (River Odense) and the remaining budget will be used for supervision at site 1 (Øvre Suså).

Action number	Action description	Foreseen costs in €	Spent so far € 31122020	Remaining in €	Projected final costs in €
A1	Biological and technical surveys	224.009	181.433	42.576	224.009
A2	Applications to authorities	7.147	1.332	5.815	7.147
A3	Dialogue with the landowners	31.374	15.547	15.827	31.374
B1	Compensation to landowners	43.132	0	43.132	43.132
C1	Improving the rived bed	198.192	0	198.192	198.192
C2	Improving the riverbanks and planting of trees	50.912	0	50.912	50.912
C3	Watercourse restoration by removal of obstacles	412.516	532.547	-120.031	412.516
C4	Removal of unwanted aquatic plants and transplantation of native species of aquatic plants	66.596	4.017	62.579	66.596
C5	Reintroduction of host fish	366.310	130.369	235.941	366.310
D1	Baseline and effect monitoring	45.958	38.189	7.769	45.958
D2	Socio-economic indicators	11.488	1.254	10.234	11.488
D3	Ecosystem Services	11.152	1.467	9.685	11.152
E1	Public awareness (website, public meeting etc.)	106.658	41.411	65.247	106.658
E2	Workshop and networking	23.918	19.072	4.846	23.918
E3	Replication and transfer	23.500	5.774	17.726	23.500
F1	Næstved Municipality's project management	307.461	230.400	77.061	307.461
F2	Supervision of construction works	27.278	20.837	6.441	27.278
	Total (without OH)	1.957.601	1.223.647	733.954	1.957.601

8.3. Accounting system

The accounting system in NK was until 2018 Prisme, and after 2018 KMD Opus. In OK it is MicroSoft Navision/ØS Indsig, and in FMK it is Prisme. All systems are basically similar systems for handling of invoices.

The general procedure for all beneficiaries are as follows:

All invoices are received electronically and registered in the accounting system.

Each invoice is sent to a member of the project group for control (LIFE number, project name, action number etc.) and approval. The invoices are sent back to the accountant, who takes care of the payment of the invoice. Payment is registered in the accounting system at the correct action number according to the accounting system. The invoice and the bank receipt are printed in paper and kept. Both are scanned together, and kept in the filing system, where it is possible to identify each payment in the financial report in excel.

Accounting plans from OK og FMK were sent 10.06.2020 to Bent Jepsen as requested at our meeting 20.04.2020.

8.4. Partnership arrangements

Partnership agreements has been entered between NK and OK and between NK and FMK. The agreements were sent to EASME together with Progress report no 3, se annex 34.

8.5. Certificate on the financial statement

NK uses the BDO as auditor with the following contact information:

BDO Statsautoriseret revisionsaktieselskab
Fælledvej 1
DK-5000 Odense C
Email: odense@bdo.dk
Tel: +4563127100

8.6. Estimation of person-days used per action

The table below shows the use so far of person days in the project by the staff members. Compared to the duration of the project period of 59 % so far, the use of person-days seems to be balanced. Compared to the remaining duration of the project period the personnel resources therefore are available.

Action type	Budgeted person-days	Estimated % of person-days spent
All projects when applicable Action A: Preparatory actions	319	235 (74%)
NAT and CLIMA projects Action B: Purchase/lease of land and/or compensation payment for payment rights		
ENV projects Action B: Implementation actions		
GIE projects Action B: Core actions		
NAT projects Action C – Concrete conservation actions	142	15 (11%)
CLIMA projects Action C: Implementation actions		
ENV and GIE projects Action C: Monitoring of the impact of the project action		
NAT and CLIMA projects Action D: Monitoring and impact assessment	108	37 (34%)
ENV and GIE projects Action D: Public awareness/communication and dissemination of results		
NAT and CLIMA projects Action E: Communication and Dissemination of results	138	132 (96%)

ENV and GIE projects Action E: Project management		
NAT and CLIMA projects Action F: Project management (and progress)	800	538 (67%)
TOTAL	1507	956 (63%)

9 Envisaged progress until next report

During the coming months focus will be on the implementation of specific management activities at site 1 (Øvre Suså) and on continuing the restocking program for minnows. If the Covid-19 situation allows it activities towards the public will be resumed or alternatively other ways of communicating the project will be taken into consideration.

In Annex 35 is an updated Gantt Chart.

10. Annexes

Midterm report contains the following annexes (on WeTransfer).

Annex no.	Deliverable submitted with the MTR	Deliverable submitted previously	Other reports - Not a deliverable	Title
1	x			Current status of the thick-shelled river mussel <i>Unio crassus</i> in the river Suså: Version 2 - including results of DNA analyses.
2	x			Results from a small mussel inventory in Suså and Torpe Kanal, 2019.
3			x	Økologisk tilstand i dele af øvre og nedre Suså
4			x	Fiskeundersøgelse I Nedre og Øvre Suså 2017
5		Included in Progress report no 2, annex no. 1		The management plan for the <i>Unio crassus</i> in the river Suså ("Strategies to re-introduce <i>Unio crassus</i> and its affiliated host fish in the river Suså")
6		Included in Progress report no 2, annex no. 3		Technical and biological feasibility studies Subproject 2.
7		Included in Progress report no 1, annex no. 5		Workshop meeting 20th of March 2017.
8		Included in Progress report no 1, annex no. 6		Networking with the Swedish UC4LIFE project (LIFE10 NAT/SE/000046).
9		Included in Progress report no 2, annex no. 5 and 6		Networking with the Rest-unio project in Luxemburg (LIFE11 NAT/LU/000857).
10	x			Documentation of the selection procedure of the successful tenderer, Per Aarsleff A/S
11	x			The contract with Per Aarsleff A/S
12			x	The detailed project was completed in early 2020 by the consultant COWI A/S.

Annex no.	Deliverable submitted with the MTR	Deliverable submitted previously	Other reports - Not a deliverable	Title
13			x	Technical and biological feasibility studies from Sallinge Å
14	x			Permission from the Nature Protection Act
15	x			Permission from the the Watercourse Act
16	x			Permission from the Fishing Act (D) to move the minnows and the <i>Unio crassus</i> larva to the Suså river.
17	x			Permission from the Swedish authorities (Distriktsveterinärerna) to export European bullhead.
18	x			Permission from the Danish authorities (Miljø- og Fødevareministeriet) to import European bullhead.
19	x			Permission from the Fishing department to reintroduce bullhead to river Suså (D).
20	x			Approval from MST from the protection of species (artsfredningsbekendtgørelsen) to take DNA-samples of the thick shelled river mussel.
21	x			Permission from The Nature Protection Act (A) and The Watercourse Act (C) to remove obstacle and adjustment of the watercourse.
22	x			Permission from The Conservation Act to the project.
23	x			Permission from Odense Municipality from "Planloven (VVM)"
24	x			Approval from MST from the protection of species (artsfredningsbekendtgørelsen)
25	x			Approval from the Fishing department to reintroduce minnows infected with glochidia

Annex no.	Deliverable submitted with the MTR	Deliverable submitted previously	Other reports - Not a deliverable	Title
26		Included in Progress report no 1, annex no. 4		Communication strategy
27	x			Temporary information signs at display at Næstved Bibliotek.
28	x			Permission from The Nature Protection Act to make the first two canoeing sites.
29	x			Temporary information sign OK
30	x			8 supervision meetings OK
31	x			Financial reports from all beneficiaries
32	x			Signed (in PDF) financial statements from all beneficiaries
33	x			Signed (in PDF) consolidated payment request from NK
34		Included in Progress report no 3		Partnership agreements
35	x			Gantt Chart
36	x			Program of conference in Nyborg
37	x			Program KL-netværksmøde
38	x			Map of Odense river

Instructions / guidelines for the submission of deliverables / annexes

- Please make a reference to the deliverables in the report text. In case the deliverables are presented in a national language other than English, please include a summary in English, in the deliverable, outlining the purpose, outcomes, results and conclusions.
 - All the deliverables due in the reporting period shall be provided unless already submitted with previous report(s). Deliverables should only be resubmitted if a revised version has been requested by EASME.
 - Please date deliverables with the actual date of completion (and the date of revision if applicable).
6. You may annex any other document **only if** particularly useful to assess the success of the project but which is not part of the planned deliverables.
 7. Please note that For LIFE Nature & Biodiversity and LIFE Climate Action with land purchase you need to submit digital copies of the land register, including a "conservation clause" (in exceptional cases the purchase / lease acts can be accepted) as this is a prerequisite for the costs to be considered eligible. All land sections purchased or leased must be shown on a map, which also provides the boundaries of the project area and the Natura2000 site boundaries.