

LIFE Project Number LIFE11 NAT/SE/848

Final Report Covering project activities from 01/09/2012 to 30/11/2018

Reporting Date **30/04/2019**

Project Name **RECLAIM**

Project Data

	1 Toject Bata	
Project location	roject location Örebro County, Sweden	
Project start date:	01/09/2012	
Project end date:	30/11/2017 Extension date: 30/11/2018	
Total Project duration (in months)	75 months (including Extension of 12 months)	
Total budget	2 910 555 €	
Total eligible budget	2 910 555 €	
EU contribution:	1 455 277 €	
(%) of total costs	50	
(%) of eligible costs	50	
	Beneficiary Data	
Name Beneficiary	The County Administrative Board in Örebro County	
Contact person	Mr Jesper Pietsch	
Postal address	S-701 86 Örebro, Sweden	
Visit address	Stortorget 22, S-701 86 Örebro, Sweden	
Telephone	+46(0)10 224 8762, cell +46(0)73 820 1595	
Fax:	+46(0)10 224 8131	
E-mail	Jesper.pietsch@lansstyrelsen.se	
Project Website	www.reclaim-life.se	

Instructions:

The final report must be submitted to the Commission no later than 3 months after the project end date.

One paper and one electronic version of the report is sufficient for the Commission. These documents must be sent in identical versions also to the monitoring team. The report must also be sent to the national authority.

Please refer to the Common Provisions annexed to your grant agreement for the contractual requirements concerning a final report.

1. List of contents

	List of contents	
2.	Executive Summary	5
	2.1 Project objectives	5
	2.2 Key deliverables	5
	Table 1. Key deliverables	5
	2.3 Outputs	6
	2.3 Summary	7
3.	Introduction	
	3.2 Project sites	
	3.2.1 Project site no.1 Tysslingen	
	3.2.2 Project site no.2 Venakärret	
	3.3 Target habitat and species	
	3.4 Conservation issues targeted and threats	
	3.5 Project responses to identified threats	
	3.6 Socio-economic context	
	3.7 Expected long-term results	
1	Administrative part	
ᅻ.	4.1 Description of the management system	
	4.1 Presentation of the coordinating beneficiary	
	·	
	4.2 Description of project management	
	Table 2. Project Communications with Commission and Monitoring team	
	4.5 Changes due to amendments to the Grant Agreement	
_	4.6 Answers and comments to commission letters	
Э.	Technical part	
	5.1 Technical progress, per task	
	5.2 Dissemination actions	
	5.2.1 Objectives	
	5.2.2 Dissemination: overview per activity	
	5.2.3 List of deliverables	
	5.3 Evaluation of Project Implementation	
	Table 3. Evaluation of project tasks	
	5.3.1 Monitoring results	
	Table 4. Comparison expected long-terms results and monitoring results	
	5.4 Analysis of long-term benefits	
	5.5 Gantt-chart (electronic version please see Annex Gantt-chart)	
6.	Comments on the financial report	
	6.1 Summary of Costs Incurred	62
	6.2 Accounting system	64
	6.2.1 General description	64
	6.2.2 Project codes	64
	Table 5. Project codes used at different periods of the project	64
	6.2.3 Personnel costs for the Project Management Team	65
	6.2.4 Expenses	66
	6.2.5 Invoicing	
	6.2.6 Co-financing payments	
	6.3 Partnership arrangements (if relevant)	
	6.4 Auditor's report/declaration	
	Table 6. Summary of costs per action	

7. Annexes	
7.1 Administrative affices	
7.2.1 A1 Management strategies (deliverable)	
7.2.2 A3 Reed bed survey and management plan (deliverable)	
7.2.3 D2 Monitoring documentation	
7.2.4 Map 1: Project site No.1 - Tysslingen	
• •	
7.2.6 C6 Photographs equipment-use	
7.2.7 F4 After-LIFE Conservation plan	
7.3.1 Layman' report (deliverable)	
7.3.3 Other dissemination annexes	
7.4 List of annexes included with the electronic version of the report	
7.4.1 A5 Vegetative survey	
7.4.2 E13 Site folder	
7.4.3 D1 Socio-economic survey 2014	
7.4.4 D2 Socio-economic survey 2018	
8. Financial report and annexes.	
8.1 Standard Payment Request and Beneficiary's Certificate	
8.2 Beneficiary's Certificate for Nature Projects	
8.3 Financial Statement of the Individual Beneficiary	
8.4.1 Project costs and project codes	
8.4.2 Personnel costs Jesper Pietsch (electronic report only)	
8.4.3 Personnel costs Michael Andersson (electronic report only)	
8.4.5 Restoration transformation building (electronic report only)	

2. Executive Summary

This is the final report of the wetland restoration project *Reclaim* (LIFE11 NAT/SE/848). It is proceeded by five reports and constitutes a complete description of objectives, deliverables, and outputs from the 6-year long project. Prior to this report a progress report was submitted 22/03/2018.

2.1 Project objectives

The main objectives of the project are to reverse the negative trends contributed by overgrowth in two wetlands, and to create favourable site conditions for continued, and sustainable, management of targeted habitats and species. The project targets two sites (**project site no.1** *Tysslingen* and **project site no.2** *Venakärret*), both of which host habitats characterized by historical grazing and mowing and species intrinsically linked to those conditions. Thus, project actions are intended to restore site conditions as to allow grazing and/or mowing to be performed in a sustainable manner, in relation to the conservation values and to managers and landowners.

2.2 Key deliverables

Several deliverables have been produced during the project. While folders, posters, and work plans describe the project and its immediate actions there are also several plans that have been produced as means to facilitate future management of both project sites after the project, considering the sustainability of their long-term conservation status. These key deliverables are listed in the table 1.

Table 1. Key deliverables

Deliverable (action)	Delivery date	Description
Management strategies (A.1)	30/04/2019	A conglomerate of documents attached as complementary material to the legally operational management plans for both project sites . Included documents are site-specific historical reports pertaining to site-conditions and land use and summary reports of existing water legislation. For <i>project site no.1</i> a reedbed management plan (action A.3) and a topographic map (action A.5) enabling vegetation prediction modelling are also included.
Layman's Report (E.7)	30/04/2019	Accessible and visually compelling information about results and experiences from the project, targeting stakeholders, authorities, and general public.
After-LIFE Conservation Plan (F.4)	30/04/2019	Incorporates experiences and results from the project into a comprehensive plan for the monitoring and long-term management of project results.

2.3 Outputs

Project outputs include tangible deliverables, onsite infrastructural solutions, equipment for management and monitoring, and concrete changes to habitats due to restoration actions. Project outputs will directly improve the unfavourable conservation status seen for affected habitats and species, facilitate their long-term management, and make the areas more accessible and educational to visitors. Listed below are all project outputs:

Deliverables

- 2 comprehensive management strategies
- 1 reed bed management plan
- 1 topographic map
- Project specific dissemination materials: LIFE-project folder, posters, roll-ups, website, and notice boards
- Post-project information materials: Natura 2000 folder, Layman's report, site specific information signs and folders, nature exhibit, species information guides, and audio guides
- 2 viewing platforms and 1 foot-path for visitors

Infrastructure

- 5.5 kilometres of access- and oversight roads
- 9 kilometres of fencing
- 500 meters meandering waterway
- 1.2 kilometres of bank wall, creating an 8-hectare catchment basin
- 15 culverts and repairs to 8 bank walls improved hydrological conditions and grazing access
- 1 steel beam bridge and 1 wooden bridge for improved grazing and management access

Concrete restoration and management equipment

- 214 hectares of vegetative restoration
- 8 hectares of reed bed restoration
- Procurement of a tract wetland vehicle and a mower plus round baler for longterm site management
- 0.25 hectares new open water surface and habitat improvements for nesting birds

Project management and monitoring equipment

- Project vehicle
- D-SLR camera with two lenses
- Spotting scope
- 2 pairs of hand-binoculars
- Handheld computer (GPS)
- Laptop

2.3 Summary

The project is owned by the County Administrative Group in Örebro County. Its steering group and project management team are employed with the County. Supporting staff, such as site managers, communications professionals, and water and agricultural officials are also employed with the County. There have been no partnerships within the project. A project of this magnitude has had a significant effect on a single County's regular operations. While the scope and requirements of the project have put a heavy administrative burden on the management group it has also yielded significantly more concrete results than would have been possible within the regular means for the County's management of protected areas. Implementation has been successful, but an appealed nature deserve decision caused significant delays to some actions, necessitating two time-extensions before project objectives and goals could be achieved.

Targeted overgrown areas have been restored, an infrastructure for allowing sustainable long-term management has been erected, management equipment has been procured, information-and visitor facilities have been installed, and plans and material for both sites long-term management has been prepared. The project has restored site conditions and provided the infrastructure needed for habitats and species to once again enjoy overgrowth-free conditions and farmers to enjoy sustainable farming practices.

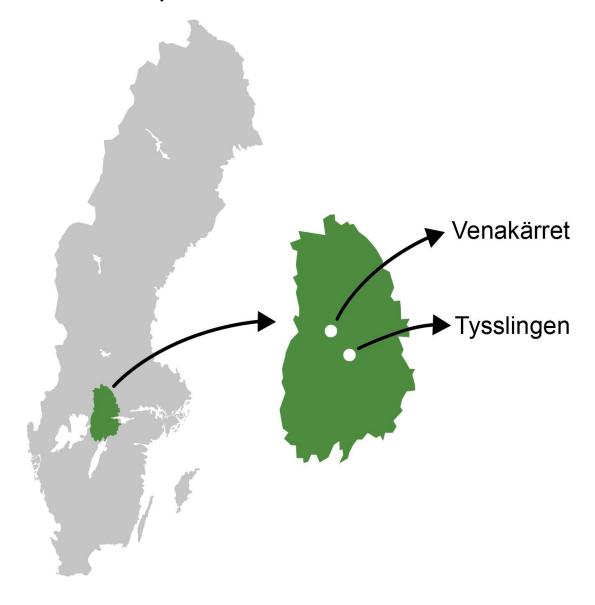
Total incurred cost for the project is reasonably close (99%) to the grant agreement budget. There are however discrepancies between cost categories. The appealed nature preserve process and overall personnel efforts required for project implementation exceeding allocated funds caused higher personnel costs (120%). Infrastructure spending, a significant part of the project budget and for reaching project objectives, was severally delayed because of the appealed nature preserve decision but landed within reach of its allocated budget (91%) once the appeal process had finally transpired.

3. Introduction

The project targets two Natura 2000 sites which both have an unfavourable conservation status, extensive restoration needs, and poor incentives or conditions for landowners or farmers to manage the areas as needed. The restoration needs outweigh the County's regular means for restoring protected areas. The project is expected to breathe new life into the two areas by reversing the negative trend caused by overgrowth and creating conditions for sustainable management. Project actions will allow the overall conservation status for targeted habitats and species to remain favourable. After the project both sites have been included with the County's regular management of state protected nature preserves and will be managed according to the management plans (Action A.1) produced within the project.

3.2 Project sites

The project targets two sites (**project site no.1** *Tysslingen* and **project site no.2** *Venakärret*), both of which host habitats and species favouring conditions characterized by historical grazing and mowing. The map below shows the location of each project site within Örebro County and Sweden.



3.2.1 Project site no.1 Tysslingen

Tysslingen is a shallow and nutrient rich lake located on the foothills of the Kilsbergen mountains. The lake is located approximately 6 kilometres (km) west of the city of Örebro. The lake surface is 557 hectares (ha) and the maximum water depth is 0,9 meters (m). The lake catchment area includes lakes and streams in Kilsbergen, and the cultivated fields in its immediate surroundings. Water enters the lake through numerous smaller canals and creeks dispersed around its perimeter, but it is primarily fed from the north. A canal was built in the 1860's, redirecting the outflow of the lake to the south and lowering its water table. The water table is regulated through two dams, located at the southern outlet of the lake, where it empties into nearby river, Svartån.

Tysslingen is a clay plain lake, with a muddy shore line consisting of partly composed organic materials mixed with clay. The area surrounding the lake is characterized as a cultural landscape consisting of open cultivated land, wetlands, and farms. The shore line is primarily made up of open grazed shore meadows, but also includes one segment of shore woodland in its north-eastern reach. Sporadic smaller stands or rows occur throughout the meadows. Tree species found along the shore line include alder (Alnus glutinosa), downy birch (Betula pubescens), aspen (Populus tremula), and pedunculate oak (Quercus robur). Vegetative communities change with proximity and elevation to the lake. The areas furthest from the lake and most upland are dry and wet meadows, changing from dry to wet towards the lake. Closer to the lake the wet meadow transforms into a more distinct wetland associated community consisting of sedges (Carex spp.), bulrush (Typha latifolia), flowering rush (Butomus umbellatus), blunt-leaved pondweed (Potamogeton obtusifolius), and yellow iris (Iris pseudacorus). A nationally red-listed bulrush species (Scirpus radicans) occur in dense clusters along the shoreline. The lake perimeter is lined with thickets of common reed (Phragmites australis). Common clubrush (Schoenoplectus lacustris) is also found in the lake, with the open water area being dominated by white water lily (*Nymphaea alba*). Fish species of the lake include common roach (Rutilus rutilus), crucian carp (Carassius carassius), spined loach (Cobitis taenia), all of which are species associated with nutrient rich waters. Hosting a wide variety of habitats for migratory and nesting birds makes the lake one of the most important bird lakes in central Sweden. Lake Tysslingen is probably the most important stop-over site in Europe for whooper swan (Cygnus cygnus) during spring-migration. In Sweden it is the most visited site among the bird-watching public for spotting whooper swans, with 30-40 000 visitors a year.

Tysslingen is influenced by surrounding agricultural activities and is rapidly overgrowing. Only the north-eastern extent of the lake has had a continuation in lowland grazing, evident from e.g. the presence of grazing-continuation demanding Crucifix ground beetle (*Panageus crux-major*). Restoration of the lake was initiated in 1986 and included cutting of trees and bushes. Today, large portions of the wetlands are once again grazed. Grazing is instrumental in maintaining the wet and low growing meadows, which are crucial to the wetland fauna and flora.

Tysslingen contains two of the targeted habitat types for the project, 3150 (Natural eutrophic lakes with Magnopotamion or Hydrochartition – type vegetation) and 6410 (Molinia meadows on calcareous, peaty or clayey-silt-laden soils [Molina caeruleae]) and hosts at least eighteen bird species from the Birds Directive. Although the lake is naturally eutrophic it is susceptible to overgrowth due to additional nutritional input and

sedimentation. This is the result of a landscape transformation caused by drainage and canalization enterprises.

3.2.2 Project site no.2 Venakärret

Venakärret is the largest alkaline fen in central Sweden. It is surrounded by both forest and cultivated land, and is bisected by a river, Venaån. River flow is controlled by an upstream dam. The bedrock in the area primarily consists of limestone and mica schist. The fen is characterized by wide belts of Brown Bog-rush (Schoenus ferrugineus). Historically, the fen has been used for hay making, but is today succumbing to overgrowth from shrubs and trees, and in areas by dense reed thickets. Trees and shrubs have rooted on the outskirts of the fen. Progressing west, towards upland solid ground, trees and shrubs occur at an increasing frequency and the fen gradually changes into a wet-meadow habitat, albeit overgrown with trees and shrubs. The dwindling number of reed free areas hosts a series of alkaline fen (habitat 7230, Alkaline fen, Annex I of Natural Habitats) associate species: Tawny sedge (Carex hostiana), Yellow sedge (Carex lepidocarpa), Early Marsh-orchid (Dactylorhiza incarnata), Marsh helleborine (Epipactis palustris), Grass-of-Parnassus (Parnassia palustris), Common butterwort (Pinguicula vulgaris), Brown Bog-rush (Schoenus ferrugineus), liverwort (Moerckia hibernica), Cosson's Limprichtia Moss (Scorpidium cossonii/revolens), scorpidium moss (Scorpidium scorpioides), and Tomentypnum moss (Tomentypnum nitens).

Within the Natura site boundaries, the lime rich bedrock and the consistently hydrated soil have also given the forested parts high biological values. The forest combines with the fen for a heterogeneous landscape, hosting Lady's Slipper (*Cypripedium calceolus*), Marsh Fritillary (*Euphydryas aurinia*), Slender Green Feather-moss (*Hamatocaulis vernicosus*), and Geyer's Whorl Snail (*Vertigo geyeri*), all listed in the European Commission's Habitats Directive, Annex II – Animals and Plants of Community Interest Whose Conservation Requires the Designation of Special Areas of Conservation. North of the fen is a calcareous coniferous forest with large old growth trees, classified as a Key Habitat (protected in perpetuity from logging) by the Swedish Forest Agency and also listed as habitat 9070 – Fennoscandian wooded pastures in the Habitats directive. Western Taiga associates Long-tailed Tit (*Aegithalos caudatus*), Lesser Spotted Woodpecker (*Dendrocopos minor*), Eurasian Pygmy-owl (*Glaucidium passerinum*) and Black Woodpecker (*Dryocopus martius*) can be found in the area, of which the latter two are listed in Annex 1 of the EU Birds Directive.

An additional thirteen bird species listed in Annex I of the Birds Directive have been observed within project site, either during migration or while foraging. Species also found in the area that are on the Swedish IUCN (International Union for Conservation of Nature) red list include Fen Bovist (*Bovista paludosa*) (NT - Near Threatened), Hudson Bay Sedge (*Carex heleonastes*) (EN – Endangered), and a liverwort (*Scapania brevicaulis*) (VU – Vulnerable).

3.3 Target habitat and species

Four different habitat types and 11 species are directly targeted by the actions in the project:

Project site no.1

Habitat - 3150 Natural eutrophic lakes with Magnopotamion or

Hydrochartition – type vegetation

- 6410 Molinia meadows on calcareous, peaty or clayey-silt-

laden soils (Molinia caeruleae)

Species - Botaurus stellaris

Circus aeruginosusPhilomachus pugnax

Philomachus pugn
 Sterna hirundo
 Chlidonias niger
 Porzana porzana

- Crex crex

Project site no.2

Habitat - 7230 Alkaline fens

- 9070 Fennoscandian wooded pastures

Species - Euphydryas aurinia

- Vertigo geyeri

Hamatocaulis vernicosusCypripedium calceolus

3.4 Conservation issues targeted and threats

There are three main conservation issues, and similarly threats, targeted within the project; overgrowth due to insufficient management, eutrophication, and sedimentation.

Threat 1 – Overgrowth due to insufficient management

At both project sites vegetation unfavourable to targeted habitats and species has developed to levels that are threatening their conservation status. For targeted habitats wooden plants, tussocks, and reed-beds are outcompeting associate species and give the habitat types an uncharacteristic composure. The same problem is seen for the targeted species. The problem is mainly due to changes in agricultural practices since the 1950's and to changes in hydrological conditions, i.e. canalization and drainage enterprises, since the 1860's.

Threat 2 – Eutrophication

At both project sites eutrophication influences reed bed dynamics and the species living there, including project targeted birds identified in the Birds Directive. All the open water bodies targeted by the project require reed cutting and management to not be overgrown by reeds and bushes. Cultivating practices, such as mowing and grazing animals, means a reversal of nutrients (nitrogen and phosphorous) from the wetland to more solid upland areas. Mowing will remove vegetative material and nutrients from the wetlands, as will grazing animals foraging in the wetlands, but defecating on higher and dryer grounds. This enables an outtake of nitrogen and phosphorous from the wetlands.

Threat 3 – Sedimentation

At **project site no.1** sedimentation causes a huge problem in maintaining habitat 3150. Contributory waterway 'Blackstaån', which enters Tysslingen from the north, contributes an extremely high count of particles to the lake.

3.5 Project responses to identified threats

At both project sites, the problems facing target habitats and species have been dealt with through a series of restoration actions, including tussock and stump grinding, girdling and clearing of vegetation, and restoration grazing and mowing (action C.1). Improvements to the management of grazing animals, i.e. bridges, culverts, roads, and access depots (action C.3), combined with fencing (action C.4) and the procurement of management equipment (action C.6) will facilitate the management of the restored areas and will alleviate the overgrowth due to insufficient management threat. Dredging and removal of the reed-beds (action C.2) in habitats 3150, 6410, and 7230 (burning only) will allow continued management to maintain desirable characteristics of the thickets, i.e. sun-exposure and ecotone availability, and control the distribution of thickets within each project site. For project site no.1 water management through dam structures and culverts (action C.5), is expected to give site managers the means necessary to control the volumes in flooding events, both for the benefit of grazing access, but also to create advantageous inundation periods for associate species in habitat 6410.

3.6 Socio-economic context

Project actions will make the financial conditions for living within the vicinities of both project sites more attractive and raise the appreciation and acceptance for Natura 2000 areas. A project of this magnitude will also be covered by the media, thus raising public awareness and appreciation for both areas. A few expected effects at each project site are described below.

Project site no.1 – Tysslingen

The people that today are responsible for management of the wetlands associated with the site are local farmers. The Natura 2000 site is divided into 33 different properties, with a total of 40 different landowners, Swedish EPA being one of them. Out of those, there are 7 individual landowners actively participating in livestock and habitat management. Their practices are strongly linked to the areas within the Natura 2000 site. The financial yield for managing these biologically valuable areas is low. This is contributed by unpredictable flooding events and by the currently low profitability of meat production. The vast and elongated wetland of the site has had several access points, but very few of them have been connected down by the wetland. To farmers this has meant a big additional cost in managing the area has been contributed from inspection and oversight of the grazing animals due to driving up and down single access points. Machine assisted management of the wetlands, i.e. cutting, mowing, grinding etc., has also been cumbersome due this this limitation. Future management of the wetlands is vulnerably linked to the low profitability in meat production, contributed by the parameters described above. By establishing a proper access road network and providing fencing and infrastructure improvements for grazing management the financial viability of managing the wetlands is expected to improve for the farmers. This is also expected to lead to a better local acceptance for the area and securing its long-term management.

Project actions are also expected to improve the conditions for the local community to practice ecotourism. Project site no.1, one of Sweden's most important bird lakes, is already a popular tourist destination. Improved habitat conditions combined with sound

facilities for visitor will facilitate conditions for increased ecotourism practices by local entrepreneurs.

Project site no.2 - Venakärret

The site was continuously used for hay-making and grazing from no later than the 1700's to the 1950's. It had been left fallow for 50-60 years prior to the project. The Natura 2000 site has not contributed any recent economic gains to local farmers. By restoring the sites two habitat types, 7230 and 9070, and incorporating them in the European agrienvironmental scheme the site will once again contribute financially to local farmers. It is expected to lead to a better local acceptance for the area, while also securing its long-term management.

The site is located next to the village of *Älvhyttan*. Älvhyttan and surroundings is characterized by the regions mining history, with an old central village located within a landscape of meadows and fields. Many of the meadows and fields are now overgrown with deciduous trees. However, located next to the village is the nature preserve *Älvhytteängen*, one of the counties most valued meadows. The appealing environs, combined with the small-scale farming landscape, already provide a framework for conducting local ecotourism. Only modest ventures have so far explored this possibility. The Natura 2000 site is one of Sweden's largest and most interesting alkaline fens (7230). Despite being near the village, accessibility has been very limited. By providing facilities for visitors and site information accessibility and appreciation of the fen will improve. Ecotourism is also expected to benefit from these improvements.

3.7 Expected long-term results

At both project sites a decline in habitat quality has been seen for target habitats and species. Long-term results of the project are expected to stabilize these conditions, reverse the negative trends, and in some cases improve the populations of directly targeted or associated species. Table 4 shows expected long term results for target habitats and species and compares them to monitoring results in the project (found in section 5.3.1).

4. Administrative part

4.1 Description of the management system

The project is owned by the County, and its steering group and project management team are employed with the County. Supporting staff, such as site managers, communications professionals, and water and agricultural officials are also employed with the County.

4.1 Presentation of the coordinating beneficiary

The County Administrative Board in Örebro County (The County) has been the coordinating beneficiary for the project. The County is a regional authority directly under the national government. The County is the government's regional representative and coordinator of matters appointed by the government. One of the County's responsibilities is to manage state protected nature. The County manages approximately 231 (April 2019) nature preserves within the county. The County is responsible for preserving each areas conservation status and implement planning and management actions as needed according to their management plans. The County's Nature Protection Unit is responsible for managing and operating this project. The project had no associated beneficiaries.

4.2 Description of project management

Ensuring that the project management team has performed actions in the correct order, according to the time schedule, and in compliance with internal and national policies and regulations has been a big part of project management. Project finances have also been monitored as costs have diversified across actions and cost categories.

Internal planning and information meetings within the project management team initially followed a bi-weekly schedule, but since the time after the Mid-term Report their frequency have been adjusted according ongoing priorities and needs within the project. The meetings have been task-specific and included members from the project management team, internal support group, reference group, and steering group.

4.3 Organizational chart of the project team and the project management structure

The internal structure for managing the project has had a few changes during the project. Underlined in the chart below are people added since the time of the Inception Report

Steering Group

- Magnus Eklund (Department manager)
- Kristian Hagberg (Financial manager)
- <u>Johan Karlhager</u> (Nature unit manager)

Project Management Team

- Jesper Pietsch (Manager)
- Åsa Fjellström (Economist)
- Elisabeth Karlsson (Information)
- Daniel Gustafson (Monitor)

Site Managers

- Michael Andersson (Project site no.1)
- Åsa Forsberg (Project site no.2)

Internal Support Group

- Maria Thielebeule (Economist)
- Anneli Larsson (Communications)
 - Leif Gustafsson (Water legislation)
- Ernst Witter (Agriculture and water)
- Sophie Zetterström (Agriculture)

Replaced

- Johan Wretenberg (Nature unit mng.)
- Marie Hindemo (Economist)
- Karin Stenström (Communications)

Reference Group

- Sven-Olov Borgegård (Consultant nature conservation)
- Börje Ekstam (Professor plant ecology)
- Jan-Inge Tobiasson (Nature management)
- Hans Bergenarp (Eco-tourism)
- Mats Rosenberg (Wetlands biologist)
- Johan Bergman (Landowner and farmer)
- Torbjörn Eriksson (Landowner and farmer)
- Lars Eric Andersson (Landowner and farmer)
- Åke Pettersson (Ornithology)
- Rickard Södergren (Consultant visitor access)
 - Per Erik Persson (Botany, nature management)
- Roland Thuvander (Landowner, ornithology)
- Jesper Hansson (Consultant biology)
- Erik Persson (Landowner + farmer)
- Ted von Proschwitz (Professor mollusks)
- <u>Bengt Pettersson</u> (Equipment specialist)
- <u>Stefan Thorsell</u> (Consultant nature conservation)

4.4 Evaluation of the management system

The project process deviates somewhat from the continuous procedure of the County's previous management methodology for protected areas. The project has introduced the Nature Protection Unit to a much more defined project-based methodology for approaching its work. The requirements for achieving results, outputs, and deliverables within the project have made team- and goal-oriented work a much more central part in the County's proceedings. While it has put a much heavier administrative burden on the members of the project management group it has also yielded significantly more concrete results in the given time span. It is safe to say that LIFE has allowed the County to work at a higher level of efficiency with its conservation work. There have been no partnerships within the project.

Communications with the Commission and Monitoring team have been very satisfying. The monitoring system has helped the project match its efforts to fit the scope of the LIFE program. Monitor project visits, reports, and feedback communications thereafter have been clear and constructive while maintaining the sense that all parties involved want to see the project succeed in reaching its goals. Table 2 provides a summary of communication and correspondence with the Commission and Monitoring team.

Table 2. Project Communications with Commission and Monitoring team

Date	Activity
30/05/2013	Inception Report submitted to the European Commission (EC)
19/07/2013	Request for additional information pertaining to the Inception Report
	received from the EC
02/10/2013	Summary Report on questions pertaining to the Inception Report was
	submitted to the EC
21/11/2013	Response letter on Summary Report received from the EC
19-	Camilla Strandberg-Panelius from the Astrale external monitoring team
20/11/2013	visited the project
27/01/2014	Response letter on monitor visit received from the EC
13/03/2014	An amendment application was submitted to the EC
20/08/2014	Amendment No 2 was signed
30/09/2014	1 st Progress Report was submitted to the EC
03/12/2014	Response letter on 1 st Progress Report received from the EC
7-8/05/2015	Camilla Strandberg-Panelius from the Neemo external monitoring team
	visited the project
29/06/2015	Response letter on monitor visit received from the EC
11/04/2016	Midterm Report submitted to the EC
19/07/2016	Response letter on Midterm Report received from the EC
29/02-	Camilla Strandberg-Panelius from the Neemo external monitoring team
01/03/2016	visited the project
19/07/2016	Response letter on monitor visit received from the EC
31/01/2017	2 nd Progress report was submitted to the EC
07/04/2017	Response letter on 2 nd Progress Report received from the EC
31/01/2017	An amendment application was submitted to the EC
17/07/2017	Amendment No 3 was signed
19-	The project hosted the 2017 LIFE Nordic Platform Meeting
20/04/2017	
27-	Camilla Strandberg-Panelius from the Neemo external monitoring team

28/06/2017	visited the project	
18/10/2017	Response letter on monitor visit received from the EC	
31/01/2018	3 rd Progress report was submitted to the EC	
12/06/2018	Response letter on 3 rd Progress Report received from the EC	
22/03/2018	An amendment application was submitted to the EC	
29/06/2018	Amendment No 4 was signed	
20/06/2018	Camilla Strandberg-Panelius from the Neemo external monitoring team	
	visited the project	
09/11/2018	Response letter on monitor visit received from the EC	
23/01/2019	Camilla Strandberg-Panelius from the Neemo external monitoring team	
	visited the project	

4.5 Changes due to amendments to the Grant Agreement

There have been three amendments to the Grant Agreement.

Amendment No 2 includes two modifications to the grant agreement:

- 1. Forms FA, FB, F2, F4b, and F6 have been amended.
- 2. The border of project site 2 Venakärret is changed to follow the extended fence line outside the Natura 2000 area.

Amendment No 3 includes two modifications to the grant agreement:

- 1. Forms A1, C2, and C3 have been amended.
- 2. The duration of the project is extended to 30/06/2018.

Amendment No 4 includes two modifications to the grant agreement:

- 1. Forms A1, C2, and C3 have been amended.
- 2. The duration of the project is extended to 30/11/2018.

All above amended forms, in relevant chronological order, replace corresponding forms in Annex 1 to the grant agreement.

4.6 Answers and comments to commission letters

For issues and answers from previous reports see annex 8.4.

5. Technical part

The technical parts of the project involved concrete onsite restoration, monitoring project results and impacts, and producing documents for the long-term management of targeted sites. Concrete restoration tasks were completed by 2017 at project site no.2 and 2018 at project site no.1 Follow-up monitoring was completed in 2017 and 2018. Management plans and other supportive site-management documents were completed at the end of the project.

5.1 Technical progress, per task

Action-by-action descriptions of performed tasks, progress made compared to planned output and established time schedule, indicators used to test the performance of the action, modifications, problems encountered, consequences, and adjustments, complementary actions outside LIFE and perspectives for continuing the action after the end of the project, and a reference to deliverable or annexed material, tables, photographs and other action related materials can be found below. A Gantt-chart showing implementation and completion for each action can be found in section 5.5. Annexed **Maps 1 and 2** shows completed onsite actions.

Action:

A.1 – Management Strategies

Description of performed tasks:

There are 3 sub-actions related to this action

Water legislation investigation

An expert in Swedish water legislation looked at all known acts and resolutions pertaining to the two project sites and has produced a summary report of their content and range, designed to provide site managers with a reference summary for each site. The report is incorporated with each site's Management Strategy. *Norconsult AB* performed the task (completed April 2016).

Hydrological management plan

An external consultant was contracted to investigate and provide a report describing historical background information and land use changes pertaining to the conservation values for each site and investigate and gather existing hydrological recommendations and managements methods for the habitats and species targeted by the project into a hydrological management plan. The historical background information and land use reports were completed in April 2018. While the search for hydrological management methodologies kept indicating a need for them, in-depth descriptions could not be found. The significance of natural and seasonal hydrological variations has been emphasized by experts and is stressed in conservation and managements plans for targeted species and habitats. However, despite exhaustive efforts by the consultant, and from the project management teams own research, nothing of substance relevant to modern hydrological parameters and site conditions was found. It is concluded that the historical background information and land use reports is the best material available for planning and management of hydrological conditions at each project site. The work was performed by Centrum för biologisk mångfald (completed May 2018).

Management plan

Management plans describing the long-term management and monitoring needs has been finalized, approved, and made legally operational for both project sites. Monitoring, concrete restoration efforts, and results from the project have been taken into consideration and constitutes the basis for how both sites will be managed after the project. Members from the project reference group, land-owners, stakeholders, conservationists, and other interest groups have been consulted during the development of these plans. Preparations, planning, and consultations for the final products have been performed through the entire project period and were finalized for **project site no.2** in in 2016, and for **project site no.1** in (February) 2019. The work was done by the internal support group with assistance from *Horisont natur och bild*.

The water legislation investigation reports (sub-action A.1), historical background information and land-use reports (sub-action A.1), reed-bed surveys and management plan (Action A.3), and topographic mapping (action A.5) will be attached as annexes to respective management plan, making them legally operational documents and providing the County with one comprehensive management strategy for each project site.

Progress compared to planned output and established time schedule:

Results are in accordance with planned output. While the sub-action for the hydrological management plan did not result in a concrete methodology description, as was desired, it provided the best available result. The action was delayed according to the original time schedule, but the result or other actions have not been affected by this delay.

Indicators used to test the performance of the action:

N/A

Modifications:

In hindsight, postponing completion of the action has proven valuable as it has allowed all concrete and monitoring actions of the project to be incorporated with the strategy material for future site management. This would not have been made possible should management plans have been completed earlier in the project.

Problems encountered, consequences, and adjustments:

Except for the above mentioned delays no major problems or drawbacks have been encountered within this action. The delays did not affect any other project actions or the final deliverables of the project.

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

With nature preserve decisions coming into place for both project sites, and all project actions and results taken into consideration with the approved, legally binding, and operational management plans, supportive materials for proper long-term management of the sites are comprehensive and thorough.

Deliverable or annexed material, tables, photographs etc:

Management strategies for each site is included as annex 7.2.1 with this report.

A.2 – Work Plans

Description of performed tasks:

Two Work plans have been developed, one for each project site. The contents of each plan have been made publicly available through the project website (in Swedish).

Progress compared to planned output and established time schedule:

The work plans were completed in the spring of 2014 and reported in the 1st Progress Report.

Indicators used to test the performance of the action:

N/A

Modifications:

The work plans have not been printed as deliverable material but have instead been made available electronically. Through the project website visitors can search the work plans by action reference or by an area search using a map. The electronic versions have allowed for quick updates to the work plans an updates per action when actual work has been performed.

Problems encountered, consequences, and adjustments:

No major problems or drawbacks have been encountered within this action.

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

The project website, and work plans, will be available for 5 years after the project completion date.

Deliverable or annexed material, tables, photographs etc:

Links to work plan descriptions for each project site (in Swedish only):

Work plan project site no.1

Work plan project site no.2

A.3 - Reed Bed Survey and Restoration Plan

Description of performed tasks:

2014: A map showing historical canals and openings within the reed thickets planned for restoration actions was obtained from a local landowner.

2016: Onsite confirmation by the project management team shows the map to be feasible as outline for reed mowing (action C.2). The reed-thickets are surveyed and planning project related actions (action C.2) is completed.

2017: Reed bed restoration work (action C.2) was performed.

2018: A follow-up monitoring visit is made to the areas restored in 2017, to assess continued restoration needs.

Above mentioned preparatory surveys, restoration assessment, future restoration needs, and suggested monitoring needs are summarized in the plan.

The plan is attached to the legally operation management plan for **project site no.1**.

Progress compared to planned output and established time schedule:

While delayed, the action has been implemented according to plan and reached planned output.

Indicators used to test the performance of the action:

N/A

Modifications:

The completion date was changed.

Problems encountered, consequences, and adjustments:

No major problems or drawbacks have been encountered within this action.

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

The plan is incorporated as a complement to the management plan and will form the basis for the long-term management of **project site no.1**.

Deliverable or annexed material, tables, photographs etc:

The plan is found as annex 7.2.2 with this report (English) and through these links: <u>Swedish</u> <u>English</u>

A.4 – Tendering

Description of performed tasks:

The project management team has procured contracts according to the Swedish Public Procurement Act, which also conforms to EC directives on public tendering procedures.

Progress compared to planned output and established time schedule:

Contracts have been procured as planned.

Indicators used to test the performance of the action:

Public tendering has allowed a fair and transparent tendering process, guaranteed best practice solutions, and offered the project with the most cost-effective solutions.

Modifications:

N/A

Problems encountered, consequences, and adjustments:

Although time consuming, no major problems or drawbacks have been encountered within this action.

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

N/A

Deliverable or annexed material, tables, photographs etc:

Annex 8.5 has a complete listing of all price quotes, direct treaties, restricted contracts, and framework contracts in the project.

A.5 – Topographic Mapping

Description of performed tasks:

A topographic map for **project site no.1** has been produced. It shows the topography difference for the entire Natura 2000 site and immediate surroundings at a 10-centimeter interval. The map has been derived from the Swedish Geological Survey's (Lantmäteriet) National Elevation Model (NNH). The internal support group has aided the project in obtaining the right data, external consultant *Geo Itkonsulten* has helped verify compliance between the National Elevation Model data and the data needed for the vegetative prediction software, and biologists *Henrik Flink* och *Emilie Nilsson* were hired to run transects for baseline vegetative- and topographic data.

Progress compared to planned output and established time schedule:

The completion date was changed as described and approved with the 1st Progress Report. The action took much longer to complete than anticipated but did not cause delays to any other actions. It has provided enough information for use with the vegetative progression model, thus enabling substantiated water regulation recommendations and scenarios in the Management Strategy (action A.1).

Indicators used to test the performance of the action:

Professor of ecology and software designer *Börje Ekstam* have compiled and tested the data and verified its compliance with the intended vegetation progression model.

Modifications:

A much greater collaboration of actors was used for obtaining the final deliverable than originally planned. The internal support group, the project reference group, and external consultants have all played integral parts for this action. The completion date was changed as described and approved with the 1st Progress Report.

Problems encountered, consequences, and adjustments:

Except for a series of delays and changed timeline, as discussed in the 1st Progress Report, no practical problems or drawbacks have been encountered as far as producing the intended deliverable.

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

Data obtained from the mapping effort will be readily available for use with a vegetation progression prediction software program and will play an integral part in all future planning and discussions pertaining to water regulations at **project site no.1**.

Deliverable or annexed material, tables, photographs etc:

A topographic map was delivered with the mid-term report. The map is found in the management strategy for **project site no.1** of this report. Link to <u>vegetative survey</u> (included with the Mid-term Report).

C.1 – Vegetative restoration

Description of performed tasks:

Project site no.1

April **2014** - Vegetative restoration on 2.3 hectares of the *Molinia meadows on calcareous*, peaty or clayey-silt-laden soils habitat (habitat 6410). Performed by *Bengt Pettersson*.

July/August **2014** - Vegetative restoration on 165 hectares of habitat 6410. Performed by *LVR Lindings Våtmarksrestaurering AB*.

The above-mentioned restoration efforts included tussock and stump grinding, clearing of shrubs and reeds, and cutting of overgrowth vegetation.

August/October **2015** - Vegetative restoration/tussock removal on 76 hectares of habitat 6410 was performed in August and another approximately 2 hectares were mowed in October. Performed by *Bengt Pettersson*.

July – October **2016** - Vegetative restoration (mowing and tussock removal) on 62 hectares of the *Molinia meadows on calcareous*, *peaty or clayey-silt-laden soils* habitat (habitat 6410). Performed by *Bengt Pettersson* and the County.

July – October **2017** - Vegetative restoration (mowing and tussock removal) on 53 hectares of the Molinia meadows on calcareous, peaty or clayey-silt-laden soils habitat (habitat 6410). It was the final effort of the two-year restoration mowing effort at the site. Performed by *Bengt Pettersson* and the County.

January – April **2018** – Clear cutting of trees and shrubs along 2.9 kilometers of previously restored habitat 6410. In accordance with landowner rights and the nature deserve decision cut material or income from the clearing effort was directly awarded to respective landowner. Performed by *Maskinring Örebro Ek. för*.

April 2018 – Stump grinding in above-mentioned clear-cut areas. Performed by *Bengt Pettersson*.

September – November **2018** – Clear cutting along 0.5 kilometers of previously restored habitat 6410. In accordance with landowner rights and the nature deserve decision all cut material was directly rewarded to the affected landowner. Performed by *Maskinring Örebro Ek. för*.

Project site no.2

January - Novmeber 2014 - In the western corner of the site approximately 7 hectares of the *alkaline fen* habitat (habitat 7230, where actions also benefit target species *Euphydryas aurinia*, *Hamatocaulis vernicosus*, and *Vertigo geyeri*) and 6 hectares of the *Fennoscandian wooded pasture* habitat (habitat 9070) were restored through cutting and clearing of overgrowth vegetation. 1 hectare of trees and shrubs has also been cleared for *Cypripedium calceolus*. The work was performed by *PJs Skogsvård AB*, *N-O Skogsentreprenad*, *Skogsstyrelsen*, *and Kurrboda HB*.

2014 - Restoration grazing was initiated for the parts of the site where restoration cutting and clearing had been completed (approximately 4,7 hectares).

2015 - Restoration grazing was performed across the entire 23 hectares targeted for grazing within the site. The 2-year restoration effort was completed on approximately 4.7 hectares, and the remaining 18.3 hectares will be completed by the end of the 2016 summer season. Restoration grazing is performed by *Westra Skrekarhyttan lantbruk*.

August 2015 - In the southwest corner of the site manual restoration of approximately 2 hectares of hay meadows in habitat 7230, where actions also benefit target species *Euphydryas aurinia*, *Hamatocaulis vernicosus*, and *Vertigo geyeri*. The task was performed by the Swedish Forest Agency (*Skogsstyrelsen*).

February through May 2015 - In the northern part of the site work was performed on tree and shrub clearing on 11 hectares of habitat 9070 and has now been completed on approximately 11 hectares. The task was performed by *PJ:s Skogsvård AB* from February through May 2015.

September 2015 - Through cutting and clearing of overgrowth vegetation on approximately 4 hectares of Fennoscandian wooded pasture habitat (habitat 9070) planned restoration efforts for the habitat type were completed. Performed by *PJs Skogsvård AB*.

December 2015 - Stumps and resprouting vegetation in areas previously restored within the project was mechanically cleared on 1 hectare of habitat 9070 in the southwestern corner of the site. The effort has facilitated grazing management and management of the adjoining hay meadows. The task was performed by *Bengt Pettersson*.

Fall 2015 - Manual restoration and preparations for target species *Euphydryas aurinia*, *Hamatocaulis vernicosus*, and *Vertigo geyeri* on approximately 2 hectares in the northeast corner of the site. Overgrowth vegetation was removed, and the area was prepared for subaction tussock and stump grinding (performed in the summer of 2016). The area is very diverse with alkaline associate species and target species of the project. Performed by *Jespers Naturvård och inventering*.

August 2016 - Restoration mowing on approximately 2 hectares of the alkaline fen habitat (habitat 7230, where actions also benefit target species *Euphydryas aurinia*, *Hamatocaulis vernicosus*, and *Vertigo geyeri*). It was the second and final year of the restoration mowing effort for the site.

May – September **2016** - Restoration grazing on 17 hectares of project restored areas (habitats 7230 and 9070). It was the final year for the restoration grazing efforts on the site.

Summer **2016** - The restoration efforts for target species *Euphydryas aurinia*, *Hamatocaulis vernicosus*, and *Vertigo geyeri* were concluded on 2 hectares of habitat 7230. It included thoroughly planned and carefully executed tussock removal on approximately 1 hectare previously overgrown habitat. Performed by *Jespers Naturvård och inventering* and *Bengt Pettersson*.

Starting in 2017, and continuing in 2018, grazing was performed as a part of the County's long-term management of the site (i.e. not part of the project).

Progress compared to planned output and established time schedule:

Project site no.1

The conservation status has improved on (no less than) 187 of the target 184 hectares planned for this action.

Project site no.2

All of the targeted 11.4 hectares of 7230 have been restored.

All of the targeted 15 hectares of 9070 have been restored.

All of the intended 1 hectare has been restored for *Cypripedium calceolus* (Yellow lady's slipper).

Indicators used to test the performance of the action:

Vegetative restoration, clearing of overgrowth, has already proven successful at both sites as habitats demonstrate desired characteristics and long-term management practices have been successfully tested. Species respondence is not expected to be detectable in the relatively short time frame of the project.

Modifications:

There have been no significant modifications to the original plan.

Problems encountered, consequences, and adjustments:

Due to a delayed government decision regarding an appealed nature preserve decision, planning for tree clearing along the western extent of habitat 6410 was delayed and had to be revisited a few times. A new extent for the sub-action was planned and approval had to be granted from each affected landowner. A few delays due to high water levels have occurred, but these did not cause delays out of compliance with the original plan for the project.

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

With both project sites becoming nature preserves during the project period the County is responsible for their long-term management. Project results and experiences are well documented and are included with respective sites legally operational management plan (action A.1), thus ensuring future monitoring and management efforts prioritize their continuation.

Deliverable or annexed material, tables, photographs etc:

Maps 1 and 2 illustrate onsite areas where project actions have been performed.

C.2 – Reed bed restoration

Description of performed tasks:

Project site no.1

August **2015** – Digging and dredging in habitat 3150 and 6410 habitats created approximately 1 100 meters new ecotone (400 meters reed to open water ecotone), 0.8 hectares of new open water surface, and four new islets for nesting birds.

The task was performed by LVR Lindings Våtmarksrestaurering AB.

2014 – A map showing historical canals and openings within the reed thickets was obtained from a local landowner.

Summer 2016 – Onsite confirmation by the project management team shows the map to be feasible as outline for reed mowing. The reed-thickets are surveyed and planning of the action is completed.

2017 – Action efforts were conducted three times:

- Winter-removal of thatch for delineation of openings and canals. Using the project-acquired hand-mower County staff cleared 2 hectares of reed-thatch (January 2017). Removing the thatch in winter effectively reduces the chances of later cutting efforts disturbing or damaging nesting activities in the reeds. Also, by timing the effort to when the wetland was frozen allowed a much quicker and cost-effective solution compared to working in actual water.
- <u>Spring-cutting of sprouting reeds</u> in the areas cleared during the winter effort. An amphibious vehicle equipped with mowers was used (May/June 2017).
- <u>Summer-cutting of re-sprouting reeds</u> in the same areas as previously cleared. An amphibious vehicle equipped with mowers was used (July 2017). By cutting the reeds a second time in the same season the project expects to reduce the vigor at which the reeds will re-establish in the cut canals and openings.

Spring- and summer cutting was performed by Sala Vassklippning.

The Reed bed management plan (action A.3) incorporate the methods, results and findings of this effort. It also includes maps for the targeted area and recommendations for future management and monitoring methods to maintain and further develop the results of this action.

Project site no.2

April 2014 - 3 hectares of reeds thickets in habitat 7230 were burned (southern segment). April 2015 - 3 hectares of reeds thickets in habitat 7230 were burned (northern segment).

The task was performed by the Swedish Forestry Agency (Skogsstyrelsen) both years.

Progress compared to planned output and established time schedule:

Project site no.1

Planned output was reached with 0.25 hectare of reeds being dredged and 1 900 meters (800 – 1000 meters planned) of new ecotone being created. Dredging resulted in 1 100 meters of new ecotone being created (400 meters within old reed thickets, 700 meters in wet meadows not covered in reeds). Mowing resulted in 800 meters of new ecotone being created.

Project site no.2

6 out of the planned 6 hectares of reed thickets have been cleared through burning. After two seasons of regular site-management grazing (2017 and 2018) no complimentary clearing or burning of the reeds have been necessary but will be assessed on an annual basis through the County's continuous monitoring and management of the site.

Indicators used to test the performance of the action:

Short-term indicators are positive as physical features of the reed beds have improved. As expected no response have been seen from species inventories. With Long-term management of already restored areas this is expected to improve.

Modifications:

For **project site no.2** the original plan for restoring the reed thickets did not include burning, but listed mowing as the main method. This is described with more detail in the 1st Progress Report.

Problems encountered, consequences, and adjustments:

No major problems or drawbacks have been encountered within this action.

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

Grazing and management of the areas restored within LIFE will continue as part of the long-term management of both project sites.

Deliverable or annexed material, tables, photographs etc:

Maps 1 and 2 illustrates the area where this action has been performed.

C.3 – Access roads

Description of performed tasks:

Project site no.1

2017 – 1 225 meters of access roads were constructed. Performed by *Maskinring Örebro Ek. för*.

April – November **2018** – 1 140 meters of access roads were constructed, and drainage pipes and road construction material was installed at 16 different drainage ditches, enabling 5 410 meters of continuous access road along the wet meadows. Performed by *LIP AB*.

June **2018** – Construction of bridge over contributory waterway *Frösvidalsån*. Performed by *Gunnar Bärlund*.

September – November **2018** – 1 010 meters of access roads were constructed. Performed by *Maskinring Örebro Ek. för*.

November **2018** – 1 492 meters of access roads were constructed. Performed by *Tranab AB*.

November **2018** – Construction of bridge over contributory waterway *Frösvidalsån*. Performed by *Sundkvist Schakt & Transport*.

Total road construction 4 867 meters. Action and sub-actions have enabled 5 410 meters of access roads along the wet meadows.

Project site no.2

2013 - An access point was constructed between a nearby public road and the site. It has been used for animal access to the site during the grazing restoration effort in the project. Performed by *Skrekarhyttan AB*.

Progress compared to planned output and established time schedule:

A complete access road system, in accordance with planned output, has been established for restored areas at project site no.1. The action was delayed due to the appealed nature preserve decision.

Indicators used to test the performance of the action:

While no tests have been done to provide a quantifiable indicator, allowing the entire western side of **project site no.1** to be accessible from just one access point rather than the several necessary before the action has greatly reduced the amount of time needed for oversight of grazers. Accessibility for restoration and management tasks have also significantly improved, as was proven during performance of clearing and cutting of vegetation (action C.1) when newly created access routes were used. At **project site no.2** grazing access would not have been possible without the access point created at the start of the project.

Modifications:

No major modifications have been made.

Problems encountered, consequences, and adjustments:

The appealed nature preserve decision for project site no.1 halted the action, necessitated new agreements and arrangements to be made with landowners, and made the public tendering process more complicated. The action would not have been completed according to plan without the time-extending amendment agreements.

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

Access roads will be used for facilitating grazing and long-term management at both project sites

Deliverable or annexed material, tables, photographs etc:

Maps 1 and 2 illustrates where this action has been performed.

Action:

C.4 – Fencing

Description of performed tasks:

Project site no.1

November 2017 - Three corrals of electrical fencing with a total length of 2 950 meters were installed. The corrals connect to already established and fenced pastures in the lower wet meadows, allowing animals to temporarily be relocated should water levels unexpectedly or suddenly rise. Performed by the Swedish Forest Agency (*Skogsstyrelsen*).

Project site no.2

2014 – 2015 - Started in the summer of 2014 and completed in June of 2015. 5 kilometers of fencing was created, creating one northern and one southern grazing corral. Within each corral hay making meadows have been fenced off, and within the southern corral an area with *Cypripedium calceolus* (Yellow lady's slipper) has also been fenced off to regulate grazing during flowering. It was performed by *PA Stängsel service*.

Progress compared to planned output and established time schedule:

According to planned output and established time schedule for both project sites.

Indicators used to test the performance of the action:

At project site no.1 grazing intensity can be maintained and labor intensity for the farmers reduced thanks to the action. At project site no.2 fencing has proven adequate for steering and managing desired grazing intensity.

Modifications:

For **project site no.1** the functionality and size of the final alignment is as originally planned, but the length of installed fence is shorter than first planned. This is explained by the new fence connecting to already existing fencing (installed by the farmer) for the corrals within the habitat. Despite the modification the objective of the action is still met and contributes to an improved conservation status on at least 125 hectares of habitat 6410.

For **project site no.2** the final fencing alignment was modified compared to the original plan. It has been extended to cover an area outside the Natura 2000. The changes have been approved by the Commission and are included with Amendment no 2 to the Grant Agreement for the project. The modification has not incurred an increased cost to the project.

Problems encountered, consequences, and adjustments:

No problems encountered.

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

For both project sites agreements for grazing signed with farmers also include upkeep and management of fencing.

Deliverable or annexed material, tables, photographs etc:

Maps 1 and 2 illustrates complete fencing for respective site.

C.5 – Hydrological management

Description of performed tasks:

Catchment basin

August – December **2016** – Construction of a wall structure between two existing north-to-south aligned waterways and an east-to-west aligned meandering waterway. The wall was installed with a plastic liner to prevent seepage. Performed by *Jan Josefson AB*.

February **2017** – Based on recommendations from the project reference group it was decided to complement the initial effort by adding material to the already completed structure. Similar local construction efforts performed by the City Municipality of Örebro required 2-3 seasons of fixings and repairs, due to erosion and soil settlement, before having a sound wall. Soil was taken from the banks of contributory waterway *Blackstaån*, transported across the still frozen meadows, and added on top of the most hard-to-reach outer rim of the existing wall structure. Performed by the City Municipality of Örebro (*Örebro kommun*).

November **2018** – Strengthening and repairs due to settlements in the above-mentioned structure. Additional soil was added to the outer rim and where soil settlement caused the structure to go below desired spring water level. Material for reinforcing the top of the wall structure is purchased and on-site but could not be properly installed due seasonally warm and wet conditions. It will remain on-site and be installed in the summer of 2019. Performed by *Sundkvist Schakt & Transport* and *Horisont Natur och Bild*.

Water pump

November 2018 - Installment of water pump and relevant practical and electrical installments. After consultation with the project reference group, and based on flooding patterns within the catchment basin, it was determined to prepare installment of a second water pump within the catchment basin. The second water pump will be purchased by the County at a later date but will ensure better adaptability for mowing within the easily flooded wet meadows. Performed by *Sundkvist Schakt & Transport* and *Assemblin AB*.

Repairs of bank walls

Fall **2017** – 3 out of 5 bank walls along the western extents of the project site were reinforced with new materials and drainage pipes as to allow cattle to use them for reaching further into the wet meadows. The sub-action was not fully completed due to unexpectedly early high waters in the fall of 2017. A time-extended contract was signed, and the effort will resume as soon as winter is over and water levels subside enough for machinery to reach the worksite.

July **2018** – Remaining bank walls, as mentioned above, were completed. 823 meters of bank walls have been reinforced and made accessible to grazing animals, enabling grazing access to hard-to-reach wet meadows.

September **2018** – 3 additional bank walls were reinforced in hard-to-reach pastures in the wet meadows. This work was initiated following an immediate grazing accessibility improvement seen in areas affected by earlier repaired bank walls. 70 meters of bank walls were repaired.

Performed by Sundkvist Schakt & Transport.

Progress compared to planned output and established time schedule:

All tasks (construction of bank walls, meandering water way, purchase and installment of water pump, restoration of existing bank walls and installment of culverts and crossings) within the action have been completed according to plan.

Indicators used to test the performance of the action:

The catchment basin has proven successful in inundating the targeted area longer than that of the surrounding wet meadows. The repaired bank walls for improving grazing accessibility have already proven effective as animals have reached further into the meadows than in previous years.

Modifications:

N/A

Problems encountered, consequences, and adjustments:

No problems have been encountered.

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

After the project bank walls and meandering water way will be managed and maintained within the framework of County nature preserve management.

Deliverable or annexed material, tables, photographs etc:

Map 1 shows location of bank walls and catchment basin

C.6 - Purchase of machinery and equipment

Description of performed tasks:

The following items have been purchased and delivered to the project:

- Spotting scope (for **monitoring** species)
- Single axle carrier with mower and grass collector (**project site no.2**)
- Round baler (**project site no.2**)
- Trailer for transport of mower and round baler (**project site no.2**)
- Tracked vehicle modified for wetland use equipped with a forage harvester with a fan tower and attached round baler (**project site no.1**).

Progress compared to planned output and established time schedule:

All equipment purchases planned for the project have been made accordingly.

Indicators used to test the performance of the action:

Purchased machinery has been successfully used for restoration tasks within actions C.1 and C.2. The spotting scope has been used during base line and follow-up monitoring in the project.

Modifications:

Changes to the items listed for purchase at **project site no.2** has been made compared to stipulations in the Grant Agreement. The costs have been kept within the original budget. All changes have been mentioned in the 1st progress report and a modified Form F4b.

The wetland vehicle purchased for **project site no.1** has some practical differences compared to the Grant Agreement but maintains the same functionality and meets all the long-term management needs that the items listed for purchase in the Grant Agreement demonstrates.

Problems encountered, consequences, and adjustments:

N/A

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

An ongoing multi-year collaboration between The County and the City Municipality of Örebro is investigating solutions for utilizing biomass from mowing activities in local wetlands as an energy and nutrient source for agriculture. There is approximately 1 200 hectares of wetlands suitable for mowing and haymaking within the County. The County and the City is currently working together with a local biogas company to test biomass from **project site no.1** as a source for biogas production. If the result proves positive project site no.1 and the above-mentioned wetland preparation vehicle purchased for management will not only be important to site management but will also play an integral part in delivering biomass from the site, giving it an added value to site management.

All purchased equipment will continue to be owned, operated, and in the possession of the County, and will continue to be used for the long-term management of both project sites.

Deliverable or annexed material, tables, photographs etc:

Annex 7.2.6 shows the modified wetland vehicle and single axle carrier in use during the project.

C.7 – Habitat 6410 improvements

Description of performed tasks:

August 2015 - digging/dredging in the 3150 and 6410 habitats resulted in an approximately 0.6-hectare pond, created an additional 0.2-hectare open water surface connected to the 3150 habitat, 4 islets with 0.2-hectare ground nesting habitat for birds, and approximately 1 100 meters of new water to land ecotone. Willow shrubs within the area were also cleared as to reduce perching spots for birds threatening to poach nests during the breeding season.

The task was performed by LVR Lindings Våtmarksrestaurering AB.

Progress compared to planned output and established time schedule:

A approximately 0.6-hectare pond was created (0.25 hectares originally planned). After consulting the project reference-group it was determined that the planned size would have to be increased to provide ample predatory protection for nesting birds.

Indicators used to test the performance of the action:

Bird surveys part of follow-up monitoring (action D.2)

Modifications:

After consulting the project reference-group it was determined that the planned 0.25 hectares pond would have to be increased to provide ample predatory protection for nesting birds. During preparations and planning it was also decided to incorporate dredging of the reed thickets (action C.2) with the excavation effort for the pond since the same machinery is used for both tasks. However, the buoyancy and structure of the wet meadows proved more fragile than expected which significantly slowed the work down. It was then decided to prioritize the quality of the pond over quantity of reed beds affected. Therefore, a much smaller surface area of the reed beds was restored than originally planned for this effort.

Problems encountered, consequences, and adjustments:

N/A

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

All habitat improvements will continue to be monitored and management within the County's long-term obligation to the site.

Deliverable or annexed material, tables, photographs etc:

Map 1 shows where this action has been performed.

D.1 – Monitoring of the socio-economic impact and ecosystem function

Description of performed tasks:

Fall **2014** - An external consultant was hired to perform the baseline monitoring effort. It was conducted as survey including a questionnaire sent to 160 people from different target groups (landowners, farmers, conservation and ecotourism entrepreneurs, conservation professionals, local politicians, and stakeholders in the two areas). 52 replies were received (33%) from which 20 people were also selected for a more in-depth phone interview.

Spring **2018** – Follow-up socio-economic survey, copying the methodology from 2014 except that in-depth phone interviews were held with all respondents this time. The survey targeted 122 people out of which 57 replied (47%). 40 of the respondents are linked to **project site no.1** and 17 to **project site no.2**.

Findings and results from both surveys have been made available on the project website and have also been partially used for the Layman's report (action E.7).

The task was performed by Markör marknad och kommunikation both times.

Progress compared to planned output and established time schedule:

The initial survey was delayed with approximately one year but is not believed to have effected its results.

Indicators used to test the performance of the action:

Data from the initial baseline survey 2014 was compared to the data from the follow-up survey performed in 2018.

Modifications:

No modifications or problems have been encountered.

Problems encountered, consequences, and adjustments:

No problems have been encountered.

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

N/A

Deliverable or annexed material, tables, photographs etc:

Findings and results from both surveys have been made available on the project website ($\underbrace{Survey\ 1}$ $\underbrace{Survey\ 2}$, in Swedish only) and are included as attachments with the digital version of this report.

Action:

D.2 – Monitoring of habitats and species

Description of performed tasks:

Project site no.1 Tysslingen

- Bird surveys habitat 3150 and 6410 (2013, 2017 and 2018), performed by temporary employees Toni Berglund, Albin Lundkvist, and Billy Lindblom
- Water sampling habitat 3150 (April 2013 December 2014 and January 2016 June 2018), performed by the internal support group, temporary employee Elin Andersson

and Hjälmarens Vattenvårdsförbund.

• Vegetation height survey (October 2013 and October 2017), performed by external consultant *Jespers Naturvård och inventering*

Project site no.2 Venakärret

- Percent cover by trees and shrubs, vegetation height, indicator species for vascular plants and bryophytes, *Sphagnum* presence/absence, negative indicator species in habitat 7230, and *Hamatocaulis vernicosus* surveys (July September 2013 and July September 2017), performed by external consultant *Jespers Naturvård och inventering*
- *Vertigo geyeri* surveys (August 2013 and October 2017), performed by external consultant *Ted von Proscwhitz*
- Euphydryas aurinia and host plant surveys (July August 2013, August 2014, August 2015, August 2017 and August 2018), performed by external consultant Jespers Naturvård och inventering
- Cypripedium calceolus surveyed by the internal support group (once every year 2013 2018)

Analysis of results found in section 5.3.1.2 *Species and habitat monitoring*.

Progress compared to planned output and established time schedule:

According to schedule.

Indicators used to test the performance of the action:

Data from the initial baseline surveys in 2013 was compared to the data from the follow-up surveys.

Modifications:

No modifications or problems encountered at this point.

Problems encountered, consequences, and adjustments:

N/A

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

Habitats and species will be monitored as part of the County's regular management and monitoring of protected areas after the end of the project.

Deliverable or annexed material, tables, photographs etc:

A summary of all performed species and habitat monitoring is provided in annex 7.2.3.

F.1 – Project Management

Description of performed tasks:

The project management team have:

- Ensured that actions are performed in accordance with the Grant Agreement
- Ensured that actions follow the time schedule
- Monitored project finances
- Held and/or attended meetings within the project group, with the steering group, reference group, colleagues, and informs media on progress within the project

Progress compared to planned output and established time schedule:

According to plan but overall delays necessitated two time-extending amendment agreements.

Indicators used to test the performance of the action:

N/A

Modifications:

The project management team and steering group has seen a few personnel changes during the project (as seen in the organizational chart in section 4.3 of this report). The project was extended and has included 4 amendment agreements.

Problems encountered, consequences, and adjustments:

There have been no problems or major adjustments to management of the project.

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

N/A

Deliverable or annexed material, tables, photographs etc:

See organizational chart in section 4.3.

F.2 – Networking

Description of performed tasks:

September 2012 - the project manager attended the Denmark Regional LIFE Platform Meeting

Study trips 2013

The project visited Poland two times in 2013. The first trip was already planned for the project and included six members from the project management team and internal support group. Its purpose was to gain insight into actions never performed by the County and thus improve overall project implementation. The second trip was not initially part of the project but was inspired from the first study trip. It included one member from the project management team and three people from the project reference group. Its purpose was to improve proper implementation of action C.6 (purchase of machinery and equipment). Each trip, its contents, and result is summarized below.

August 2013 (first study trip) - Given the County's previously limited experience with larger projects and the scope of planned actions it was decided that networking with and visiting other projects would significantly improve project implementation. Although a few successful Swedish LIFE-projects had already been visited during the application process the County saw even more similarities to its own project with ongoing Polish projects. The number of projects and their relative proximity to each other made Poland a more comprehensive alternative compared to a Swedish study trip and traveling abroad offered the promise of possible new insights and methods to restoration practices. Taking into consideration proposed project actions a consultant was asked to put together a study trip to Poland. 25-31/08/2013 the project management team visited 10 different LIFE-projects in Poland. The project management team met with project managers, biologist, and other members from these projects and discussed their actions, problems, and solutions. Here the project management team got a firsthand perspective on action-implementation pertaining to many of its own planned actions, including mowing methods in wetlands (action C.1 and C.6), habitat restoration for sensitive and specialized species (action C.1, C.3, C.7), restoration of hydrological parameters in wetlands (action C.2, C.5), monitoring of habitats and species (D.2) increasing public awareness about conservation work (E-actions), and visitor accessibility (action E.15). The width and scope of methods and actions in these projects provided the project management team with inspiration and encouragement for implementing not only the actions of the project but also food for thought on the long-term management and potential future restoration needs for both project sites. Visited project on the study trip

- <u>LIFEGALLINAGO</u> Active protection of Great Snipe Gallinago media in Dolina Gornej Narwi Natura 2000 site (LIFE11 NAT/PL/436)
- <u>BISON-LAND</u> <u>European Bison conservation in the Bialowieza Forest, Poland</u> (LIFE06 NAT/PL/105)
- <u>LIFEAQUILA</u> <u>Restoring populations of Lesser Spotted Eagle at chosen areas of Natura 2000 (LIFE08 NAT/PL/510)
 </u>
- <u>Life/Amphibia/2012/PL Amphibians protection on the Natura 2000 areas in north-eastern Poland (LIFE12 NAT/PL/063)</u>
- <u>Capercaillie Protection Active protection of lowland populations of Capercaillie in</u>
 <u>the Bory Dolnośląskie Forest and Augustowska Primeval Forest</u> (LIFE11
 <u>NAT/PL/428)</u>
- Ostoja Wigierska Endangered species and habitats protection of the Natura 2000
 "Ostoja Wigierska" site (LIFE11 NAT/PL/431)
- Renaturyzacja Restoration of hydrological system in the Middle basin of Biebrza

- Valley Phase I. (LIFE09 NAT/PL/258)
- Biomass use for Aquatic W Facilitating Aquatic Warbler (Acrocephalus paludicola)
 habitat management through sustainable systems of biomass use (LIFE09 NAT/PL/260)
- AQC Plan Securing the population of Aquila clanga in Poland: preparation of the National Action Plan and primary site conservation (LIFE08 NAT/PL/511)
- Polskie Ostoje Ptaków Protection of water and marsh birds in five national parks reconstructing habitats and curbing the influence of invasive species (LIFE09 NAT/PL/263)

October **2013** (second study trip) - members from the internal support group and project reference group visited Biomass use for Aquatic W - Facilitating Aquatic Warbler (Acrocephalus paludicola) habitat management through sustainable systems of biomass use (LIFE09 NAT/PL/000260) to look at the machinery they successfully use to manage wetlands in Poland. The Reclaim project based its idea of machinery needs for **project site no.1** on similar equipment. The procurement process for the wetland preparation vehicle (action C.6) was based on the findings of this trip and helped the project management team decide how to equip their own vehicle to fit the needs and circumstances at **project site no.1**.

September **2013** - the project manager attended the Östersund 2013 Regional LIFE Platform Meeting

October **2013** - the project manager and project economist visited Vindeln, Sweden, (hosted by <u>Vindel River LIFE</u> - <u>Restoration of tributaries of the Vindel river combined with monitoring and evaluation of ecological responses of species and habitats (LIFE08 NAT/S/266)</u> for the Swedish LIFE projects meeting.

June 2014 - the project management team visited Foder och Fägring - Pastures and meadows in the middlemost part of Sweden (LIFE08 NAT/S/000262) for their seminar on machinery assisted solutions in wetlands. Foder och Fägring has tested a range of solutions (tractors, slope preparation vehicles, and amphibian vehicles), all fitting the scope of wetland management. The seminar effectively reinforced the project management team's notion that no wetland is the other one alike and that the equipment solutions and methods found for managing them is equally diverse.

June 2014 - the project manager attended the Rovaniemi Regional LIFE Platform Meeting.

October **2014** - the project management team visit the final seminar for MIA - Lake Mälaren Inner Archipelago - Restoration and Management (LIFE07 NAT/S/902)

November **2014** - the project manager and project economist visited the annual Swedish LIFE projects meeting, hosted by <u>LIFE Coast Benefit</u> - <u>Restoration of ancient agricultural</u> landscape, natural forests and wetlands at the Baltic coast (LIFE12 NAT/SE/131)

May **2015** - the project manager and project economist visited the annual Swedish LIFE projects meeting, this year hosted by <u>LIFE ELMIAS - Saving wooded Natura 2000 habitats</u> from invasive alien fungi species on the Island of Gotland, Sweden

9-10 November **2016** - the project hosted the annual Swedish LIFE Nature projects meeting. The meeting was attended by 18 people and included project managers and economists from

the following LIFE projects: Bush, Coast Benefit, Elmias, Grace, Reborn, Reclaim, Remibar, Sand, Semiaquatic, Taiga, Triple Lakes, and Vänern. Day 1 included brief project presentations followed by discussions concerning problems, successes, and tips regarding LIFE-project implementation and management. Day 2 was spent in the field at project site no.1 and included visits to finished and ongoing project actions.

19-20 April **2017** - the project hosted the annual LIFE Nordic Platform Meeting (see action E.17).

11-13 June **2018** – the project manager attended the LIFE Nordic Platform Meeting in Punkaharju, Lusto, Finland.

Problems encountered, consequences, and adjustments:

No problems encountered.

Progress compared to established time schedule:

According to schedule.

Modifications:

The Grant Agreement states Green Week in Brussels as a platform for the projects networking activities (one trip in 2013 and one in 2017). With an abundance of opportunities for networking on a regional level the project group decided the above attended regional and national LIFE-meetings to be more relevant to project needs and a sufficient substitute for attending Green Week.

Problems encountered, consequences, and adjustments:

There have been no problems or major adjustments.

Complementary actions outside LIFE and perspectives for continuing the action after the end of the project:

N/A

Deliverable or annexed material, tables, photographs etc:

The itinerary for the study trip to Poland was submitted with the 1st Progress Report. A report from the study trip is published on the project website <u>Swedish English</u>.

The agendas for the 2016 Swedish LIFE and 2017 LIFE Nordic Platform meetings were submitted with the 2^{nd} and 3^{rd} Progress Reports respectively and are attached with the electronical version of this report.

5.2 Dissemination actions

5.2.1 Objectives

While restoration actions and management plans are critical components for the long-term health of both project sites conservation values, public accessibility and appreciation of the sites are also important as they are closely linked to long-term decision making and prioritization of funding for management of protected areas. Through a thorough information platform at both project sites a higher appreciation for the conservation values and conservation work has been enabled. By providing onsite information, sound practical and visitor friendly infrastructure, and an informative website the attractiveness and public interest in the sites has increased during the project.

5.2.2 Dissemination: overview per activity

Below is a description of performed dissemination actions within the project. Each action is described in quantifiable terms, objectives reached, and with a reference to a deliverable where applicable.

Action:

E.1 – Life-project folder

Description (quantifiable) and responsibility:

A folder describing the project, its two sites, LIFE+, and Natura 2000 was produced during the first reporting period. It is printed in Swedish, but also contains a summary in English. It has been printed in 2000 copies and has been available at all project activities. Posters were produced by the project management team and printed by *TMB Tabergs*.

Objective reached compared to planned activity and reactions and feedback:

The folder has been distributed and made available throughout the county at various information points for nature tourism and as handouts at meetings attended or arranged by the project and the County's nature protection unit. It is also available electronically from the project website. Both the public and entrepreneurs have discovered the project thanks to these handouts, confirmed through e-mails and phone calls to the project management team.

Deliverable or annexed material, tables, photographs etc:

A link to the <u>final deliverable</u> can be found in the List of deliverables (5.2.3). The folder was also submitted as Annex 1 with the Inception Report (30/05/2013).

E.2 – Posters

Description (quantifiable) and responsibility:

2 different posters were initially produced for the project. One for the actions performed within the project and one for the targeted species within the project. Each poster has been made in Swedish and English (i.e. a total of 4 different posters have been made).

4 additional posters were produced for the Theme-day (action E.16) and Final Seminar (action E.17), showing before-and-after images of ongoing or already completed actions within the project. They were only made in Swedish.

Posters were produced by the project management team and printed by *Arkitektkopia*.

Objective reached compared to planned activity and reactions and feedback:

The posters have been used at all networking events and public information meetings attended or held by the project.

Deliverable or annexed material, tables, photographs etc:

A link to the final deliverables can be found in the List of deliverables (5.2.3)

Action:

E.3 – Roll-up

Description (quantifiable) and responsibility:

A roll-up display consisting of two roll-ups presenting the project was produced during the first reporting period. Roll-ups were produced by the project management team and printed by *Rollup-Kungen AB*.

Objective reached compared to planned activity and reactions and feedback:

The roll-ups have been used at external meetings and events hosted by the project.

Deliverable or annexed material, tables, photographs etc:

A picture of the roll-ups was submitted as Annex 5 with the Inception Report (30/05/2013) and a link to the final deliverables can be found in the List of deliverables (5.2.3).

Action:

E.4 – Project Website

Description (quantifiable) and responsibility:

A project website was launched in September 2012. It contains information about the project and its purpose, has site specific information, has provided news about ongoing activities, has links to other Life-projects, and provides information and links to the Life programme and Natura 2000 network. It also has work-plan descriptions (action A.4), two short movies from the project sites, a panoramic viewer for each project site (based on D.2 monitoring), has included announcements of ongoing tenders within the project, and reports and plans produced by the project.

Objective reached compared to planned activity and reactions and feedback:

The public, entrepreneurs, and other conservation managers have found the project when searching related topics online, confirmed through e-mails and phone calls to the project management team.

Deliverable or annexed material, tables, photographs etc:

The website can be found at www.reclaim-life.se and the same link can be found in the List of deliverables (5.2.3)

Action:

E.5 – Notice boards about the project

Description (quantifiable) and responsibility:

Notice boards describing the Project have been produced. Two different versions have been made, one for each project site. 7 copies have been made for **project site no.1** and 1 copy for **project site no.2**. In November and December 2013, they were installed according to the maps in the grant agreement. The noticed boards describe the project, its objectives, and its partners and includes an illustrative map and pictures of targeted species for respective project site. All notice boards were taken down and replacement with permanent information boards (actions E.9 and E.11) at the end of the project.

Work-in-progress signs have also been produced following implementation of the project. Their use has been temporary for currently ongoing actions.

All notice boards produced by the project management team, printed by *Svanströms Repro Center AB*, and mounted by *Loch G Karlssons stiftelse*, *Naturens teater*, *Rånnesta*.

Objective reached compared to planned activity and reactions and feedback:

No reactions or feedback has been given regarding these signs, but their visibility has been confirmed through phone-calls and e-mails to the project management team.

Deliverable or annexed material, tables, photographs etc:

Digital versions of both information signs found here site no.1 site no.2.

Action:

E.6 – Theme-folder Natura 2000

Description (quantifiable) and responsibility:

200 copies were printed in May 2018 for the information meetings (action E.8) at both project sites. A finalized version was printed in 2000 copies in November 2018. The folder is also available from both the project- and County websites. The folder has been made by the project management team. *Danagårdliho AB* printed the folder.

Objective reached compared to planned activity and reactions and feedback:

Less copies have been printed than originally planned (2 200 instead of 20 000). A Government decision regarding expansions of existing and creation of new Natura 2000 was expected to be finalized in 2017, but this never happened. Several new areas were expected within County and the action was postponed as to include these with the folder. Given no final decision was made during the project a folder has been produced, but the number of copies printed is less than first intended. The folder has been written as to allow for updates to be made, should a future government decision be made regarding the extent of the Natura 2000 network.

Deliverable or annexed material, tables, photographs etc:

The folder can be found as Annex 7.3.3.1 in this report and is linked from the List of deliverables (5.2.3)

Action:

E.7 – Layman's report

Description (quantifiable) and responsibility:

A report was published in May 2018. It has been printed in 1 000 Swedish and 500 English copies. The report was made by the project management team. *Danagårdliho AB* printed the report.

Objective reached compared to planned activity and reactions and feedback:

The report has been delivered according to plan. Positive feedback on layout and contents has been given by SEPA.

Deliverable or annexed material, tables, photographs etc:

The report can be found as 7.3.1 in this report (English and Swedish). Links **Swedish** English

Action:

E.8 – Information meetings

Description (quantifiable) and responsibility:

2012 - Two public start-up information meetings, one for each project site, were held on the 11th and 13th of November 2012. Invitations were sent by regular mail to landowners and domicile groups in the areas surrounding both project sites. Open invitations were also posted on public notice boards around each area. Invitations were also posted in the biggest regional newspaper (Nerikes Allehanda) and a press release was made.

Each meeting was an introduction to the project and its objectives, the Life programme, and the Natura 2000 network. Members from the project group described the history and objectives for the project, the possibilities and procedures of a Life-project, and a more in depth look at the planned actions and timeline within the project. The first meeting was held for project site no.1 on the 11th of November and was attended by 50 guests. The second meeting was held for project site no.2 on the 13th of November and was attended by 45 guests. The guests at both meetings were almost exclusively nearby landowners or residents, many of them farmers, contractors, and/or people with a high involvement in nature conservation. Aside from a few sceptical comments regarding the scope of the project, both meetings were received with positive feedback. Because of these meetings the regional newspaper wrote an informative article about the project and its objectives. *Next Stop You AB* was used as monitor for both start-up meetings.

2014 - Two public information meetings, one for each project site, were held on the 14th and 28th of May 2014. Invitations were distributed and posted the same way as for the start-up meetings in 2012.

Each meeting briefly reintroduced the project, the project group, and the project timeline. Preliminary findings from the monitoring efforts were presented, including presentations

from some of the biologists that had performed the actual surveys. An in-depth perspective of the excitement of finding minute mosses and plants after days of searching in a secluded alkaline fen or how magical and wild a wetland can feel in the early morning hours of summer was shared and highly appreciated by the audience at both meetings. A more detailed look at performed, ongoing, and upcoming concrete conservation actions was also presented, as well as a navigational tutorial for all the information available from the project website.

The first meeting was held for project site no.2 on the 14th of May and was attended by 50 guests. The second meeting was held for project site no.1 on the 28th of May and was attended by 45 guests. The guests at both meetings were almost exclusively nearby landowners or residents, many of them farmers, contractors, and/or people with a high involvement in nature conservation. Aside from a few sceptical comments regarding the scope of the project, both meetings were received with positive feedback. As a result of these meetings the regional newspaper wrote an informative article about the project and its objectives.

2015 - An afternoon public information field meeting was held at project site no.2 on the 10th of September 2015. It was attended by approximately 30 people. The project management team and one of the biologists surveying the area during project base-line monitoring looked at and described the purpose of some of the actions performed and talked about the species and their interactions in the fen. Invitations were distributed and posted the same way as for the start-up meetings in 2012 and follow-up meetings in 2014.

2018 – two public information meetings, one for each site, were held on 17th of May and 7th of June. Invitations were sent by regular mail to landowners and interest-groups in the areas surrounding both project sites. Open invitations were also posted on public notice boards around each area. Each meeting was attended by approximately 30 people. The format for both meetings was a guided tour hosted by the project management team and included guests from the project reference group. Each tour described project objectives, showed project implementation sites, and related project results. Each tour lasted approximately 3 hours. At **project site no.1** the tour was by bus, as to cover the entire width of the site. It also included an informal opening of the viewing platform (action E.15). At **project site no.2** the tour was by foot. For both meetings plentiful of positive feedback about project results and guided tours was received.

Objective reached compared to planned activity and reactions and feedback:

Each information meeting has given the project management team a great opportunity to inform landowners and the public about the project, explain current and planned actions, and describe some of the developments and findings the project has contributed with at each project site. Visits to the project website, e-mails and phone calls inquiring about project progress have all increased before and after these meetings, showing their value in bringing public attention to the objectives and goals of the project. The on-site information meetings proved to be much appreciated as visitors had many questions during presentations and stayed afterwards for further discussions with the project management team.

Deliverable or annexed material, tables, photographs etc:

Invitations to the 2012 meetings were included with the Inception Report Invitations to the 2014 meetings were included with the 1st Progress Report Invitations to the 2015 meeting was included with the Mid-term Report Invitations to the 2018 meetings are included annex 7.3.3.2 of this report.

E.9 – Site specific information signs regarding biological and cultural values

Description (quantifiable) and responsibility:

Signs have been designed for both project sites. For **project site no.2** two different signs have been printed and were installed in the spring of 2017. For **project site no.1** one sign was produced and was installed in 6 different locations in May 2018. The project management team produced the signs, illustrations and pictures by *Niklas Johansson* and *Jonas Lundin AB*, and printing was done by *Danagårdliho AB*.

Objective reached compared to planned activity and reactions and feedback:

Objectives reached and feedback from site visitors have been positive. An awareness and appreciation for project efforts and purpose of conservation at each site has been noted when meeting people.

Deliverable or annexed material, tables, photographs etc:

Electronic versions included as annex 6 with the 2nd Progress Report (31/01/2017). Link <u>site</u> no.1 site no.2

Action:

E.10 – Nature exhibit site no.1 – Tysslingen

Description (quantifiable) and responsibility:

Information and exhibit materials were installed in the restored transformation building (part of action E.15) in the summer and fall of 2016. The Nature exhibit had its premier opening on October 1st 2016. The nature exhibit is open from March through October each year. Information material was produced by the project management team, printing was done by *Svanströms Repro Center AB*, illustrations by *Tecknare Nils Forshed*, and design and display items were made by *Vadsdala Slöjd*.

Objective reached compared to planned activity and reactions and feedback:

According to plan. Spontaneous positive feedback has been received from visitors.

Deliverable or annexed material, tables, photographs etc:

Pictures included as annex 7 with the 2nd Progress Report (31/01/2017). <u>Link</u> to page showing facilities for visitors at project site no.1.

E.11 – Species information guides

Description (quantifiable) and responsibility:

Species information guides (signs) were installed at **project site no.1** in May 2018. Two different designs have been made and have been installed at 5 different locations. The signs include habitat associate species and target species within the project. The signs were produced by the project management team, illustrations and pictures by *Jonas Lundin AB*, and printing was done by *Svanströms Repro Center AB*.

A species guide was installed at **project site no.2** in the spring of 2016. It includes habitat associate species and target species within the project. In addition to the permanent on-site instalment a smaller folder has been made with the same information. The guide was produced by the project management team, illustrations were made by *Jonas Lundin AB*, the stand was made by *Bygg och hantverk i Karlskoga AB*, and printing was done by *Danagårdliho AB*.

Objective reached compared to planned activity and reactions and feedback:

Objective reached. All signs have been noted as appreciated by site visitors. An appreciation for the diversity of species at each site has been noted.

Deliverable or annexed material, tables, photographs etc:

Annex 7.3.3.3 shows digital versions of the signs at **project site no.1**. The species guide installed at **project site no.2** was printed and included with the 2nd Progress Report (31/02/2017). Links: Species information guides site no.1 site no.2

Action:

E.12 - Audio guides

Description (quantifiable) and responsibility:

Audio guides for both project sites are available from the project website and phone numbers have also been included with the site information signs (Action E.9) installed at **project site no.2** in 2017, and at **project site no.1** in 2018. Phone numbers for each site: **project site no.1**: +46(0)10-224 8767, **project site no.2**: +46(0)10-224 8748). Recordings are made by *Tomas Öberg/Natur i Norr*.

Objective reached compared to planned activity and reactions and feedback:

According to plan. Positive feedback has been received from listeners, both about contents and quality of recordings.

Deliverable or annexed material, tables, photographs etc:

Audio guides can be listened to from the project website under the 'Ljudguider' heading. Links here. Project site no.1: 1 2 3 4 5 6 7 8 English Project site no.2: 1

Action:

E.13 – Site specific information folder

Description (quantifiable) and responsibility:

A final version of the folder was produced and printed in May 2018. The project management team produced the folder and printing was done by *Danagårdliho AB*.

Objective reached compared to planned activity and reactions and feedback:

Objectives reached. No feedback yet.

Deliverable or annexed material, tables, photographs etc:

E.14 – Fact sheets

Description (quantifiable) and responsibility:

A fact sheet has been produced for **project site no.2**. It can be viewed and printed from the project website (follow link in material section below) and nature preserve page for the nature preserve. Fact sheet produced and printed by the County.

Objective reached compared to planned activity and reactions and feedback:

The information objectives established in the work plan have been achieved. The number of printed copies has been reduced compared to the work agreement. Through experiences gained with onsite fact sheets at other sites within the county and with information being readily available through mobile devices it was decided to not print copies of the fact sheet for **project site no.2**. A fact sheet was intentionally not made for **project site no.1**. The folder for the site (action E.13) contains the same information and is available just like a printable fact sheet from the County website (and project website). Printed facts sheets were not planned for **project site no.1** according to the grant agreement.

Deliverable or annexed material, tables, photographs etc:

Fact sheet was submitted as a deliverable with the 3rd Progress Report (31/01/2017) Fact sheet link: site no.2 Folder (action E.13): site no.1

Action:

E.15 – Facilities for visitors

Description (quantifiable) and responsibility:

Project site no.1

Restoration of the transformation building (to be used as a nature exhibit according to action E.10) was completed in the fall of 2014. The work needed to restore the building turned out to cost significantly more than was predicted when the application for the project was written (ϵ 6 857 in expected cost versus a final cost of ϵ 45 757). Knowing it would cost more the project management team decided the sub-action is still motivated as the resulting structure and exhibit will provide a long-lasting point of interest and information-hub for visitors. Construction work included groundwork surrounding the building (removal of vegetation, gravel, concrete plating), masonry repairs, sheet metal repairs, new windows and door, complementary inside paneling, and touch-up painting on old and new materials. The task was performed by *Puts & Tegel i Örebro AB*) and *Arkitektur & Byggnadsvård*.

A viewing platform was completed in April 2018. Work included construction of a parking lot and accessibility trail. An informal opening ceremony was held during the guided tour in May 2017 (action E.8). Work was performed by the Swedish Forest Agency (*Skogsstyrelsen*) and *Arkitektur & Byggnadsvård*.

Project site no.2

A footbridge has been constructed across Venån (the creek bisecting the benefit area in the western extent of the project site). Work was performed by the Swedish Forest Agency (*Skogsstyrelsen*).

Objective reached compared to planned activity and reactions and feedback:

Apart from the higher cost at **project site no.1** objectives have been reached. The new nature exhibit is open from March through October each year. Spontaneous positive feedback has been received from visitors.

At **project site no.2** the footbridge has proven invaluable for contractors and site managers to reach work areas during action implementations. Site-visitors have expressed their gratitude for making the area accessible to visitors.

Deliverable or annexed material, tables, photographs etc:

See Maps 1 and 2 for location of all visitor facilities.

Link to page showing pictures of facilities for visitors at **project site no.1**.

<u>Link</u> to page showing pictures of facilities for visitors at **project site no.2**.

Work description, invoices, protocols from construction meetings and the final inspection of the work with the transformation building (only available in Swedish) is found as annex 8.4.5 in the electronic version of this report.

Action:

E.16 – Theme day

Description (quantifiable) and responsibility:

On 01/10/2016, the project management team hosted a full day of presentations, guided tours, and display of equipment related to the project and **project site no.1**. Local ornithologists and members from the project reference group participated and offered their knowledge and experience related to the site and its conservation values. The day attracted approximately 70 guests.

Objective reached compared to planned activity and reactions and feedback:

The action has been postponed from 2015 to 2016. This was discussed during a Monitor Project visit in May 2015 and confirmed in the follow-up letter from the Commission sent 29/06/2015.

Deliverable or annexed material, tables, photographs etc:

A website report of the day and pictures can be found through <u>this link</u>. Invitation and pictures from the day were submitted with the 2^{nd} Progress Report (31/01/2017). <u>Link</u> to invitation.

Action:

E.17 – Final Seminar

Description (quantifiable) and responsibility:

On the 19-20 April 2017 the project hosted the annual LIFE Nordic Platform Meeting. The meeting had a different overall scope than previous Nordic Platform Meetings. The meeting was given a thematic focus, Multi-purpose management of grasslands. The meeting also constituted the Final Seminar for this project. The meeting was opened by Jean-Claude Merciol, Head of the European Commission LIFE Unit and Maria Larsson, Governor of Örebro County, followed by presentations from new LIFE-projects, the European Commission LIFE-unit, and the external monitoring team. The meeting also

included thematic-specific presentations from LIFE-projects and partners, a work-shop on challenges and solutions in LIFE, poster sessions from participating projects, and a field excursion day.

Objective reached compared to planned activity and reactions and feedback:

By combining the project Final Seminar with the thematic platform meeting dissemination of project actions and results have reached a wider audience of conservation experts within the LIFE-network than likely would have been possible without the pull of the Platform Meeting. This format allowed for an in-depth focus on implementation and management aspects of a LIFE-project, making it not just a dissemination event, but also making it practically applicable to future conservation efforts, and thus also an attractive networking opportunity to other ongoing LIFE-projects.

Deliverable or annexed material, tables, photographs etc:

Program for the 2017 LIFE Nordic Platform Meeting, program for day two, program for the work-shops, and photos from the meeting was included with the 3rd Progress Report (22/03/2018) and as electronically attached to this report.

5.2.3 List of deliverables

A list of dissemination materials produced within the project and other dissemination materials produced by other parties. Products listed as deliverables in the Grant Agreement are marked with an asterisk (*) and are available as annexes of this report. Where applicable a link is provided to the material.

Action	Description (and link if applicable)
A.1*	Management Strategy project site no.1
A.1*	Management Strategy project site no.2
A.2*	Work plan project site no.1 (only electronically available, in Swedish)
A.2*	Work plan project site no.2 (only electronically available, in Swedish)
A.3*	Reed bed management plan <u>Swedish</u> <u>English</u>
A.5*	Topographic map of project site no.1 (included with A.1)
A.5	Vegetative Survey Report (for topographic mapping)
E.1*	<u>Life project folder</u>
E.2	Posters (swe1) (swe2) (eng1) (eng2)
E.3	Roll-ups
E.4	Project website
E.5	Notice boards about the project (project site no.1) (project site no.2)
E.6*	<u>Theme-folder Natura 2000</u> (Swedish only)
E.7*	Layman's report Swedish English
E.9	Site specific information signs site no.1 site no.2
E.11	Species information guides site no.1 site no.2
E.12	Audio guides site no.1 : <u>1 2 3 4 5 6 7 8 English</u> site no.2 : <u>1</u>
E.13*	Site specific information folder
E.14*	Fact sheet site no.1 site no.2
F.4	After-LIFE conservation plan <u>Swedish</u> <u>English</u>
Media	Nerikes Allehanda 15/11/2012, article about the project
Media	Nerikes Allehanda, 25/06/2013, article about species monitoring in the project
Media	Fåglar i Närke, nr 4 2013, article about bird monitoring at project site no.1
Media	T-Veronikan n1 2014, about conservation actions at project site no.2
Media	<u>Vi i Viker nr 2 2014, about project site no.2</u>
Media	Nerikes Allehanda 07/08/2014, article about actions at project site no.1
Media	Nerikes Allehanda, 26/04/2015, article about actions at project site no.2
Media	Swedish National Television website and Swedish National Radio, 20/07/2016,
	article about modified slope preparation vehicle used for mowing, <u>link to article</u>
Media	Örebrokuriren 19/04/2017, local news site, article about the 2017 LIFE Nordic
	Platform Meeing in Örebro, <u>link to article</u>
Media	Swedish National Radios weekly radio show about nature, Naturmorgon, aired live
	from project site no.2 on 26/08/2017. Link to recording

5.3 Evaluation of Project Implementation

Identifying the restoration needs at both project sites and comparing them to the resources available for recurring site management necessitated the project. Both sites had negatively spiralling conservation statuses with extensive restoration needs, limited means for regular long-term management practices, and a lacklustre public support and understanding of their biological values. Only by improving all those parameters will the vitality of the sites be maintained. By providing a sound substrate for long-term planning, conservation practises, and accessibility the project has steered the trends of both sites towards sustainability. Below is a breakdown of performed tasks, their foreseen results, and evaluation of success or changes to fit overall objectives.

Table 3. Evaluation of project tasks

Task	Foreseen	Achieved	Evaluation
Management	Complementary	Yes	Incorporated with legally
Strategy	material for long-	105	applicable management plans.
Strategy	term site		Changing the planned
	management.		completion date from the early-
	management.		to the final stages of the project
			allowed results from the
			implementation process to be
			considered and incorporated.
Work-plans	Ensure proper	Yes	Instrumental for planning of
r	action		actions in the early stages of the
	implementation.		project.
Reed bed	Substrate for proper	Yes	Development enabled thorough
survey and	action		understanding of site history
management	implementation and		and planning for project actions
plan	long-term		and long-term management
	management.		methodology.
Call for	Cost effective	Yes	Fair and transparent
tenders	action		methodology for announcing-
	implementation and		and signing contracts. More
	compliance with		time consuming than expected.
	existing		
	procurement laws		
	and policies.		
Topographic	Substrate for	Yes	Significant for future long-term
mapping	vegetation		prioritization of site
	modelling and		management. More time
	implementation of		consuming and involved more
	relevant actions.		partners than first expected.
Vegetative	Reversal of	Yes	Both sites demonstrate targeted
restoration	overgrowth,		conditions and restored areas
	creation of		are already managed through
	conditions for long-		planned practices. Compliance
	term management		with funding programs have not
	practices and in		yet been tested but is expected
	compliance with		to meet no trouble. Would only

	environmental funding programs.		have been partially completed without Amendment agreements no.3 and 4 (time-extensions).
Reed bed restoration	Reversal of overgrowth, reduction of reed-thickets and creation of ecotone.	Yes	Restored reed areas have a higher conservation status thanks to applied tasks. Physical results are immediately in compliance with objectives but require annual management to be maintained. Making sure actions would be considered and in compliance with the reed bed management plan (action C.3) prolonged completion of the task.
Access roads	Creation and improvement of management accessibility	Yes	Immediate improvements seen. Would only have been partially completed without Amendment agreements no.3 and 4 (time-extensions).
Fencing	Pastures designed for sustainable grazing.	Yes	Immediate improvements seen. Amendment agreement no.2 allowed necessary change of delineation.
Hydrological restoration	Extended spring flooding, improved grazing accessibility to hard-to-reach pastures	Yes	Immediate hydrological and accessibility results seen. Longterm species and habitats result not yet seen. Settling material and necessary follow-up work when creating structures in water was not foreseen but could be adjusted for within the project.
Purchase of machinery	Procurement of machinery for long-term management	Yes	Now functional components of site management. Modifications were made from stipulated specifications in revised proposal to fit site circumstances and management needs.
Habitat (6410) improvement s	Creation of a small open water surface and breeding grounds for birds	Yes	Habitat characteristics immediately visible but species response is as expected still limited.
Socio- economic monitoring	Notice changes in attitudes and relations to sites and conservation work	Yes	Preparatory work was more time consuming than expected and surveys exceeded expected budget. Comparatively positive results between surveys.

Species and habitat monitoring Project folder	Establishing baseline species and habitat data for long-term monitoring of site conditions.	Yes	Data collected before and after project implementation show expectedly small changes, but methods are easily replicable, and results will be relevant for noticing long-term trends and developments. Appreciated handout to
Troject rolaer	information about project goals and objectives	163	landowners, farmers, stakeholders, and entrepreneurs. Only been printed in Swedish, with a small summary available in English, which unfortunately limited dissemination at some network activities.
Posters	Eye-catching information at external meetings and events	Yes	Copies were made in both Swedish and English. Limited use at networking events as these are often in the field but highly appreciated at project information meetings.
Roll-up	Attention attractor at information meetings and external events	Yes	Two roll-ups used at different dissemination events, accompanied by posters and folders, providing good visible representation of sites and objectives in the project.
Website	The main source for information about project background and news	Yes	Provided a backbone for all information relevant to the project and its implementation. Many inquiries about the project and conservation work in general have stemmed from the site being found on the web. Available in Swedish and English.
Project noticeboards	Onsite information about ongoing actions and overall project objectives	Yes	Placed at popular points of interest around the sites and temporarily close to currently ongoing actions. Removed at end of project. Several project and conservation related inquiries stemmed from these noticeboards.
Natura-2000 folder	Information about the Natura 2000 network, with emphasis on the County.	Yes	Delayed government decision on expansion of network postponed the action. Final production was printed to a limited quantity as to not result in large volumes of obsolete

			material the day the expansion decision is made.
Layman's report	Information about results and experiences from the project, targeting stakeholders, authorities, and general public.	Yes	Appreciative feedback has been given by the public and SEPA.
Information meetings	Inform interested parties and stakeholders about objectives and developments within the project	Yes	Publicly open meetings (eight) with the County, stakeholder, landowners, and the public, focused on project objectives, progress, and results. A positive trend towards higher appreciation and understanding for project actions and conservation efforts in general have been noted during the project.
Noticeboards and guides	Site information and guides to species, habitats, conservation work, and historical use.	Yes	Immediately visible and appreciated by site-visitors.
Audio guides	Accessible information about species, habitats, conservation work, and historical use.	Yes	Immediately audible onsite and online. Appreciated by sitevisitors.
Site specific information folder and fact sheets	Information for site visitors	Yes	Complementary to permanent onsite noticeboards and guides. Allows visitors to have all relevant site information throughout their site visit.
Facilities for visitors	Improved visitor- accessibility	Yes	Significant and immediate improvements. Through a nature exhibit, viewing platforms, parking lots and prepared walk-ways a site visit is more appreciated and less cumbersome than before the project.
Theme-day	Show practical aspects of project implementation to the public	Yes	Methods of conservation work and in-depth looks at species and habitats were offered. Positive feedback received.
Final seminar	Dissemination of project experiences	Yes	Modified as to be incorporated with the LIFE Nordic Platform

	and results		Meeting. Lured a wider network of conservation experts than would have been possible with a regular final seminar.
Networking	Dissemination of project intentions and results, gaining experiences and acquiring information relevant for project implementation	Yes	Study strips, platform meetings, and attendance at seminars of other projects has been instrumental for completion of several project actions.
After-LIFE conservation plan	Continuation of project results	Yes	Incorporates experiences and results from the project into a comprehensive plan for the monitoring and long-term management of project results.

5.3.1 Monitoring results

5.3.1.1 Socio-economic monitoring

Surveys results from the socio-economic monitoring show that for both project sites each areas importance for ecotourism and outdoor recreation is of great importance and has increased during the project (ecotourism - from 43% to 78%, outdoor recreation – from 35% to 59% between 2014 and 2018 surveys). A few results and differences seen between the two surveys (2014 and 2018):

- More participants know about LIFE and its purpose (31% to 49%)
- More participants know about Natura 2000 and its purpose (53% to 68%)
- More participants claim project areas have some or great importance to their occupation or income (12% to 43%)
- Less participants are negative about the Reclaim project (14% to 2%) and how it is managed (18% to 4%)
- More participants are positive about **project site no.1** becoming a nature preserve (67% to 88%) and about conservation work at the site (71% to 90%)
- More participants are positive about **project site no.2** becoming a nature preserve (57% to 82%) and about conservation work at the site (54% to 76%)

5.3.1.2 Species and habitat monitoring

Surveys of habitats and species has been performed before and after project actions. For most species, surveys have been conducted in 2013 and 2018. Most of the project-actions are expected to have long-term effects on species population development and habitat quality. However, due to the short time between action and follow-up it is often difficult to see any direct results. To be able to detect long-term effects, the after LIFE-plan prescribe continuous surveys of species and habitats.

Nevertheless, some interesting results are detectable from the species and habitat studies of the project. For example, *Hamatocaulis vernicosus*, *Euphydryas aurinia* and *Vertigo*

geyeri seems to be stable or increasing in the rich and restored fens of Venakärret. Also, Cypripedium calceolus has had a remarkably positive development following restoration of its habitat.

In Tysslingen, some of the designated species seems to have a positive development in number of individuals. Furthermore, bird surveys indicate that ducks and waders has benefited from improved hydrological characteristics (open water surface (action C.7) and catchment basin (action C.5)). It is more difficult to see obvious effects on birds breeding on the wet grasslands. Such effects are expected to be detectable on a more long-term basis.

Table 4. Comparison expected long-terms results and monitoring results

Habitat / species	Expected long-term result
Habitat 6410	 Maintained favourable conservation status on 184 hectares Improved oversight of grazers on 125 hectares Improved grazing and equipment access to 125 hectares Improved grazing continuation to 125 hectares Improved habitat and hydrological characteristics on 45 hectares Year-round complementary machine assisted management on 250 hectares
Monitoring result	Results achieved during the project.
Habitat 3150	 Restored reed bed dynamics on 2 hectares Improved conservation status to the entire lake area
Monitoring result	Results achieved during the project
Habitat 7230	Maintained favourable conservation status and sustainable annual management on 8 hectares
Monitoring result	Results achieved during the project
Habitat 9070	Maintained favourable conservation status and sustainable annual management on 15 hectares
Monitoring result	Results achieved during the project
Philomachus pugnax	Increase in number of staging individuals
Surveys results	There has been an increase in number of staging individuals between surveys 2013 and 2018.
Botaurus stellaris	Increase by one courting male (12.5%)
Surveys results	According to surveys there has been an increase with two courting males between 2013 and 2018.
Circus aeruginosus	Stabilize the dwindling population
Surveys results	The surveys show no obvious changes in number of individuals or breeding success.
Crex crex	Increase by 1 or 2 courting males (100%)
Surveys results	The surveys show no obvious increase in number of courting males.
Porzana porzana	Increase by 1 or 2 courting males (100%)
Surveys results	The surveys show no obvious increase in number of courting males.
Sterna hirundo	Increase by 10 breeding pairs (100%)

Surveys results	The surveys show no obvious increase in number of breeding
	pairs.
Chlidonias niger	Increase by 2 breeding pairs (100%)
Surveys results	The surveys show no obvious increase in number of breeding
	pairs.
Euphydryas aurinia	Stable population thanks to favourable habitat status
Surveys results	The surveys show that the population is stable and probably
	increasing. The species has apparently spread to new zones in
	the Natura 2000 area.
Vertigo geyeri	Stable population thanks to favourable habitat status
Surveys results	The surveys show that the population is stable and probably
	increasing.
Hamatocaulis vernicosus	Stable population thanks to favourable habitat status
Surveys results	According to surveys, the covered area and number of tufts has
	increased significantly.
Cypripedium calceolus	Stable population thanks to favourable habitat status
Surveys results	The number of vegetative and flowering shoots has increased
	significantly.

5.3.1.3 Effectiveness of dissemination

A comprehensive plan for introducing the project and its objectives has been instrumental in gaining public support for concrete conservation actions and long-term management at both sites. Initiating the project with two locally held information meetings, where the project folder was made available and the homepage introduced, helped the County establish the background and intentions of the project. An immediate surge in interest was seen from both nature enthusiasts and entrepreneurs alike. Follow-up information meetings during the project has maintained public interest, stimulated requests for updates on project progress, and been appreciated moments of feedback for the project management group. Onsite information signs have also spurred an interest towards the completion and results of the project rather than questions as to why actions are performed as they are. Several regional conservation entrepreneurs previously unknown to the County have also contacted the project with an interest in potential work. At the end of the project, a site visit to either site is often accompanied by positive feedback from site visitors. While the exact source for information and interest in the project has not always been clear, the combination of actions has clearly been fruitful.

5.4 Analysis of long-term benefits

Direct environmental benefits

Project actions have established site conditions allowing long-term management to be funded through the Common Agricultural Policy (CAP), thus further securing the longevity on no less than 225 hectares of target habitats within both Natura 2000 boundaries. Both project sites suffered an unfavourable conservation status prior to the project and restoration needs and incentives or conditions for landowners or farmers to manage the areas as needed were cumbersome, to say the least. The restoration needs are far greater than what is possible to handle with the County's regular means for restoring protected areas and site conditions show little financial promise and great practical hurdles for sustainable grazing. The project has restored site conditions and provided the

infrastructure needed for habitats and species to once again enjoy overgrowth-free conditions and farmers to enjoy sustainable farming practices.

Long-term qualitative benefits and sustainability

The project has halted and is expected to reverse the overgrowth trend seen at both target sites. Project actions will make it easier to maintain open and sun exposed habitats sought after by associate and target species.

Economic and socio-economic benefits

Actions within the project are expected to make it financially feasible for farmers to maintain the conditions favouring the open landscapes required by target habitats and species, for the County to perform actions as needed to uphold the conditions described in the management plans, and for ecotourism entrepreneurs to make each site a component in their business. Similarly, with a favourable conservation status and sounds facilities and information for visitors the two sites are expected to make these areas more attractive and educational to the visiting public, offering a place for personal reflection or an arena for bringing people together.

Continuation of actions by the beneficiary or by other stakeholders

After the project both sites have been included with the County's regular management of state protected nature preserves and will be managed according to the legally operational management plans (Action A.1) produced within the project. Both sites will be grazed by animals owned by local farmers.

Replicability, demonstration, transferability, cooperation

The diverse set of actions performed or planned within the project and its relatively comprehensive dissemination package has spawned a spontaneous amount of interest from local and regional conservation professionals, nature preserve managers, and stakeholders. Inquiries about practical and financial parameters to the best practice solutions demonstrated within the project have been many. The project has also intentionally through its own actions, and through channels facilitated by the LIFE program, established a network with professionals facing similar problems and working on similar solutions as this project. This has allowed the project to be implemented according to practically and financially sound methods, while at the same time spawning an interest in its concluding actions and the results thereof.

Best Practice lessons

The methods used for restoring the overgrowth conditions seen on each site have been through a combination of manual and machine assisted solutions. While each method has proven efficient in its own right, it has been shown that a combination of methods for a given area is usually required to yield desired results, for example a combination of manual and machine assisted methods, rather than one single method, can be required to establish sought after parameters for a given habitat, or follow-up stump grinding may be needed in an area already manually restored. While the conservation professional may have envisioned this combination of tasks it's not always clear to the entrepreneurs performing the tasks. It is therefore of great importance to explain to final goal for a given area and the task at hand for each contract signed.

Innovation and demonstration value

The project has allowed the County to perform restoration actions not possible within the means available in its regular practices. A diversity of actions happening within a relatively short time frame in two relatively concentrated areas gives the project, and the LIFE program, a significant demonstration value. While short-term observations largely have been qualitative the long-term effects of the project will be qualitatively and quantitatively visible through planned long-term monitoring. It is expected to show, as is already indicated, that a significant allocation of resources can reverse staggering conservation threats and spark interest and appreciation for conservation work.

Long term indicators of the project success

Long-term indicators for project success will ultimately be best determined using the quantifiable parameters found for habitats and species in Table 4 and comparing them to the results from the County's reoccurring monitoring of protected areas, planned to occur at regular intervals following the project. Habitats demonstrating desired characteristics and species maintaining targeted population sizes will be indicative of project success.

5.5 Gantt-chart (electronic version please see Annex Gantt-chart)

6. Comments on the financial report

The County Administrative Board in Örebro County is the only beneficiary in the project.

6.1 Summary of Costs Incurred

	PROJECT COSTS INCURRED					
	Cost category	Budget according to the grant agreement*	Costs incurred within the project duration	%**		
1.	Personnel	587 439	705 940	120,2%		
2.	Travel	54 984	24 337	44,3%		
3.	External assistance	957 474	897 917	93,8%		
4.	Durables: total <u>non-depreciated</u> cost					
	- Infrastructure sub- tot.	655 999	593 957	90,5%		
	- Equipment sub-tot.	371 853	391 158	105,2%		
5.	Consumables	27 788	21 875	78,7%		
6.	Other costs	64 608	44 294	68,6%		
7.	Overheads	190 410	187 563	98,5%		
	TOTAL	2 910 555	2 867 040	98,5%		

^{*)} If the Commission has officially approved a budget modification indicate the breakdown of the revised budget Otherwise this should be the budget in the original grant agreement.

Comments:

The total incurred cost for the project is reasonably close to the grant agreement budget. There are however discrepancies for most of the cost categories. Below is a per-category commentary on those discrepancies.

Personnel

The total incurred cost for personnel is higher than budgeted costs. There are two big contributing factors to this:

- 1. The project time-extensions. The appealed nature preserve decision for **project site no.1** did not only halt the implementation process and necessitated two amendment agreements, it also forced the project management team to seek new agreements with landowners and do a far more extensive tendering process than originally planned before implementing planned actions.
- 2. A budget allocation mistake during the planning of the project. Site managers Michael Andersson and Åsa Forsberg have been listed as the internal support group to the project, but their expected time contribution was for some reason not allocated to the budget. Successful project implementation would not have been possible without their time committed to the project. Their site experience has been instrumental for planning and implementing the onsite work.

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

Part of monitoring of habitats and species (D2) has been done by temporary staff instead of consultants which affects the budget for both personnel and external assistance (and travel and consumables). The beneficiary has found this much more cost effective than to use consultants which was the original plan.

Travel

The total incurred cost for travel is significant less than budgeted costs. By procuring a field vehicle at the start of the project (amendment agreement no.2) the need for rental vehicles for site visits was reduced, as was the corresponding budget allocation. Given the timeline of project implementation at respective project site the need for rental vehicle to conduct site visits all but vanished after the field vehicle was acquired, thereby greatly reducing travel expenses.

In October 2013 part of the reference group and the site manager at **project site no.1** went on a study trip to Poland (action F.2). This trip was not budgeted but was necessary to make before the purchase of wetland machinery (action C.6). The trip was discussed with the monitor before it was done.

External assistance

Incurred cost is less than budgeted costs. Costs for monitoring of species and habitats were greatly reduced by hiring temporary staff rather than hiring external consultants. Costs for all concrete conservation actions were slightly higher than budgeted. For hydrological management (action C.5) and facilities for visitors (action E.17) costs were not foreseen in the grant agreement but has been added due to consultation services necessary for preparation of tenders, oversight during action implementation, and inspections of final work.

Infrastructure

Several actions within this category were affected by the appealed nature preserve process. With a favorable ruling coming into place while initial efforts having already commenced on modified actions all the originally planned work was again possible, as seen in the relatively sharp increase in spending during the last six months of the project (11% to 91%).

Equipment

Costs were slightly higher than budgeted. The wetland preparation vehicle cost a bit more than expected and a trailer not included in the budget was purchased for transport of the round baler and single axle carrier purchased for **project site no.2**.

Consumables

With the final seminar (action E.17) being included with the 2017 LIFE Nordic Platform Meeting and conference facilities (including lunch and refreshments) being provided through and external consultant the allocated dinner expense for the final seminar was no longer a cost for the project. No other major discrepancies within the category.

Other costs

With amount of printed copies of the Natura 2000 folder (action E.6) greatly reduced and printing costs for the Layman's report (action E.7) being much less than budgeted

the category is significantly lower than expected. No other major discrepancies within the category.

6.2 Accounting system

6.2.1 General description

The County Administrative Board in Örebro County (the County) uses Agresso version 6.5.3 as its accounting system. Some of The County's financial processes are centrally performed and coordinated through a joint financial administration entity for all county administrations within Sweden (Lst EA). Lst EA has the responsibility to coordinate a common accounting model so that the financial information from all counties are uniform, comparable, and fair.

From 20 November 2013 the County use the system Visma Proceedo for the electronic invoice processing. In Visma Proceedo the review and approval of invoices is done electronically. Agresso is nevertheless The County's accounting system and invoices are booked there thru a file loaded from Visma Proceedo. From 20 November 2013 it is Statens servicecenter distributes invoices to the persons that shall review them. When invoices are assigned to an account Statens servicecenter sends the payment via an encrypted file to Danske Bank. The County's own staff approves the payment file in Danske Bank after verifying it with the payment confirmation.

6.2.2 Project codes

During the project period the costs can be found on the project codes 42001, 41036 and 31. Although the project codes have been changed during the project period, the costs are unified by the specification codes 5A-5F2.

Table 5. Project codes used at different periods of the project

	2012	2013	2014	2015-
Personnel				
costs				
Project	31	31	41036 (31 was	41036
management			used January-	
team			April, time that	
			was registered on	
			project 31 is later	
			adjusted to	
			41036).	
Site	21163	Å Forsberg time	21163 during the	21079
managers		registration on	year. Part of the	January-
		21163, but the	costs is adjusted	February
		costs is later	to project code	41036 March-

_

¹ Statens servicecenter (The Swedish governments service center for administrative services) is a government agency under the Ministry of Social Affairs, which manages the administration for a large part of the state authorities in Sweden. The Authority was established on 1 June 2012.

		adjusted to	21079 at the end	December
		project 31.	of the year.	
		M Andersson 31		
Expenses	42001	42001	41036 (42001	41036
		(incl costs for	January-March,	
		temporary	but the costs is	
		personal).	later adjusted to	
			41036).	

6.2.3 Personnel costs for the Project Management Team

Name	Role
Jesper Pietsch	Project manager
Daniel Gustafson	Monitoring
Elisabeth Karlsson	Information
Åsa Fjellström	Financial management
Marie Hindemo	Financial management
Maria Thielebeule	Financial management

Besides these people Åsa Forsberg and Michael Andersson work as site managers in the two project areas within Reclaim.

Costs for time incurred by the project management team towards the project is charged to the County's Nature Protection Units budget (either to project 31, org 6184, the costs are financed through administrative allocations from the County or to project 21079, org 6184). These allocations constitute the County's financial contributions to the project and are expected to cover approximately 20 percent of the project's total expenses.

Responsibility for approving all expenses under org 6184 (Personnel costs Nature Protection Unit) is the manager for the Nature Protection Unit, Johan Karlhager (replaced Johan Wretenberg), unit manager.

All County employees are required to time register in Agresso in a timely manner (i.e. daily). Time registration information includes:

- Time code (e.g. 0 = time worked, SEM = holiday)
- Project (see Annex coding strand)
- VHT (see Annex coding strand)
- Spec (see Annex coding strand)

Time registration includes the number of hours worked within the different strands of the system (i.e. Projects, Vht, Spec, etc.) All monthly salaried employees register their time worked per day.

At the end of each week the employee reviews the time registration and sends it for approval. Approval is usually performed by the unit manager.

The person responsible for approval will verify and approve correctly filed time registrations. If incorrectly filed, the time registration will be rejected and sent back to the employee for corrections before once again being reviewed for approval.

Reports of approved time registrations are automatically run by Agresso five times per week (can also be manually initiated). Each report will enable a query for corresponding time registrations, the hours will receive a value and will be posted in Agresso. Recordings within a time registration will not be included with a report unless they have been approved. Time registration processes, i.e. what has been reviewed/approved, who reviews/approves, and when something is reviewed and approved, can be followed through Agresso.

Time registrations are read and recorded after the end of each month by the County's financial department. The costs are recorded in account 9410, and to the Project, Vht, and Spec that were given during time registration. The Org where the cost will be recorded corresponds to the persons work-unit.

From 1 January 2014:

A change of project accounts has been made from the start of 2014. All costs relating to the project are accounted on the project code 41036. The unit manager, head of the is responsible for the project and for approving all time and invoices that are booked there.

In addition to the regular County staff within the project group temporarily employed individuals can perform tasks related to the project. Temporary contracts based on an hourly wage will differ slightly in their time registration and recording process compared to what has been described above. Staff on hourly wage will record their hours on a time registration sheet. Hours will be filled in daily to relevant Project, Vht, and Spec. After the end of each month the time registration sheet will be signed and approved by a manager and sent to a payroll administrator. The payroll administrator will record the time sheet in Agresso and prepare the payment. Wages for hourly employees are paid the month after which the work has been done (if the approved time sheet is received by the payroll administrator no later than the 8th of the month, or it will be postponed until the following month). The number of hours an hourly employed person works during a month is registered in Agresso monthly - not per day.

6.2.4 Expenses

1 September 2012—31 December 2013:

A cost center for expenses charged to the project, a project code, has been created: Project 42001 RECLAIM – Life (financed through administrative allocations from the County), which is a so-called multi financed project. When a cost has been posted towards the project a transaction trigger (T040) will distribute the amount to three sub-projects.

The recorded amount will be distributed according the Reclaim-project budget to projects 21221 "RECLAIM – Life (NV)" by 62.96 percent and 22016 "RECLAIM – Life (EU)" by 37.04 percent

From 42999 contra account co-finance SCR (financed through administrative allocations from the County) 100 percent will be withdrawn. The total amount of charged project expenses can be read from the balance of project 42001 (project 42001 and 42999 adds up to 0 and no charge is weighed towards the County's administrative allocations).

The unit manager is responsible for approving projects 42001, 21221, and 22016.

From 1 January 2014:

For all project costs there is a special project code: 41036 – "Reclaim Life". The reason why we started a new project number is that project 42001 was wrongly registered on a non-interest yielding project code when it should be registered on an interest yielding project code. This means that the project's costs during the period September 2012 - December 2013 can be found on project code 42001 and costs recorded from January 2014 on project code 41036.

Project 41036 is a so-called multi-funded project. When a cost has been posted towards the project two transaction triggers will distribute the amount to four subprojects. One trigger (T065) is designed to distribute the personnel costs to correct financier and the second trigger (T066) benefits expenses to correct financiers.

The amount is distributed according to the project budget for the projects:

21221 "Reclaim - Life (NW)" with 62.96 percent of the cost and

21256 "Reclaim - Life (EU)" with 37.04% of the costs

31 " administrative allocations from the County " with 100% of the cost for the project management team's effort/time in the project. From year 2015 the personal costs for the project manager is distributed to project code 21079.

From 41997 contra account Reclaim (financed through administrative allocations from the County) 100 percent will be withdrawn.

The total amount of charged project expenses can be read from the balance of project 41036.

The"unit manager is responsible for approving projects 41036, 21221, 21256 and 21079. A stand-in is designated during vacations etc.

6.2.5 Invoicing

6.2.5.1 1 September 2012—19 November 2013

Purchases

Purchases can be made by the individuals included in the project group. All invoices are required to have a clear project reference (Reclaim LIFE11 NAT/SE/848), an action reference if applicable, and a billing reference to the project manager (TJESPIE). A template for project invoicing, to be used at time of purchase, has been created.

Registration

All invoices are sent to the Itella scanning central in Strömsund, Sweden (adress: Länsstyrelsen i Örebro län, FE 56, 833 33 Strömsund). There all invoices will be scanned and sent electronically to the County Administrative Boards in Örebro and Västra Götaland Counties (central recording for all counties) where they are registered to Agresso.

Distribution

Registered invoices are immediately distributed for review to the reference identification indicated on the invoice (for Reclaim to the project manager as TJESPIE). If the reference has not been indicated correctly the invoice will manually be distributed to the reviewer by the Finance unit.

Reviewing

The project manager, Jesper Pietsch (reference TJESPIE), reviews all invoices. The information and data are reviewed and corresponding codes for Project, Vht, Fin, and Spec are assigned. Written comments can also be added to clarify the invoice. When an invoice has been reviewed it is submitted electronically for approval.

Approval

The person responsible for approving a reviewed invoice will verify that its information and assigned codes are correct. When an invoice has been saved and approved it is submitted for verification. The unit manager is responsible for approving invoices related to Reclaim.

Verification and accounting

An approved invoice is verified by the Financial unit and assigned to an account and is then finalized.

Payment/report

When an invoice has been finalized the Financial unit will submit a payment proposal. When approved the Financial unit will confirm the invoice as to be submitted in a payment file to the payment distributor (Danske Bank). The invoice will be paid on the expiration date registered when the invoice was finalized. When the invoice has been paid a file from Danske Bank will report and register it in Agresso. The ordered payment is then accounted for and is verified against the bank statement from Danske Bank. As a receipt, the bank report is then printed and attached to a copy of the invoice.

6.2.4.2 From 20 November 2013

From 20 November 2013 The County uses *Statens Servicecenter* for supplier's invoice processing and payments.

Purchases

Purchases can be made by the individuals included in the project group. All invoices are required to have a clear project reference (Reclaim LIFE11 NAT/SE/848), an action reference if applicable, and a billing reference to the project manager (Jesper Pietsch). A template for project invoicing, to be used at time of purchase, has been created.

Registration

All invoices are sent to a scanning central. From 1 June 2014 the address is Länsstyrelsen i Örebro län, FE 56, 833 73 Frösön. There all invoices will be scanned and sent electronically to the system Visma Proceedo.

Distribution

Registered invoices are assigned a suggested account and are distributed for review to the reference identification indicated on the invoice. If the reference has not been indicated correctly the invoice will be distributed to the Finance unit that distribute it to the person who shall review it.

Reviewing

The project manager, Jesper Pietsch, generally reviews all invoices. The information and data is reviewed and corresponding codes for Project, Vht, Fin, and Spec are assigned. Written comments can also be added to clarify the invoice. When an invoice has been reviewed it is submitted electronically for approval.

Approval

The person responsible for approving a reviewed invoice will verify that its information and assigned codes are correct. When an invoice has been approved it is submitted for verification. Johan Karlhager is responsible for approving invoices related to Reclaim.

Verification and accounting

When an invoice has been approved in Visma Proceedo is it ready to be assigned to an account, this occurs via a file loaded to Agresso every night.

Payment/report

When an invoice has been finalized Statens Servicecenter will submit a payment proposal. When approved they will confirm the invoices as to be submitted in a payment file to the bank (Danske Bank). The invoices will be paid on the expiration date. When the invoice has been paid a file from Danske Bank will report and register it in Agresso. The ordered payment is then accounted for and is verified against the bank statement. As a receipt, the bank report is then printed and attached to a copy of the invoices that belongs to the project.

Travel expenses and own expenses

When a County employee has had to cover expenses on their own or if they have been travelling and have the right to collect subsistence costs it is registered in Agresso. The employee will indicate type of expense, date, amount, and assign corresponding codes (Project, Org, Vht, Fin, Spec). Registered and saved claims will be submitted for approval. If the registration contains an own expense the registration form must be printed and the receipts for the expense must be attached and filed manually for approval.

During approval the expense, assigned codes, and attached information is verified and accounted for. An approved registration is submitted and finalized for registration in the accounting system.

6.2.6 Co-financing payments

1 September 2012—31 December 2013:

Co-financing payments from the European Commission (EC) are registered to project 22016 "RECLAIM – Life (EU)" and co-financing from the Swedish Environmental Protection Agency (SEPA) to project 21221 "RECLAIM – Life (NV)".

From 1 January 2014:

Co-financing payments from the European Commission (EC) are registered to project 21256 "Reclaim – Life (EU)" and co-financing from the Swedish Environmental Protection Agency (SEPA) to project 21221 "Reclaim – Life (NV)".

During the project time SEPA is announcing occasions when it possible to requisition co-financing. Requisition of co-financing from the EC is in accordance with stipulated conditions for LIFE+ projects.

6.3 Partnership arrangements (if relevant)

_

6.4 Auditor's report/declaration

The name of the external auditor for the project is Peter Ohlson. Peter is employed as an internal auditor at Stockholm county administrative board (Regeringsgatan 66, 104 22 Stockholm).

6.5 Summary of costs per action

The presentation in Excel format is found as an own data sheet in the Financial reporting document.

Table 6. Summary of costs per action

		1.	2.	3.	4.a	4.b	6,		
Actio		Personne	Travel and	External	Infra-	Equipme	Consuma	7.	
n	Short name of action	1	subsistence	assistance	structure	nt	bles	Other costs	TOTAL
A1	Management strategy	8 131	0	22 267	0	0	1 154	0	31 552
A2	Work-plans	2 193	0	0	0	0	0	0	2 193
А3	Reed bed survey and management plan	708	0	0	0	0	178	0	886
A4	Call for tenders	65 082	0	2 112	0	0	39	0	67 233
A5	Topographic mapping	10 427	194	7 373	0	0	6	0	18 001
C1	Vegetative restoration	91 495	5 521	483 819	0	0	1 424	0	582 259
C2	Reed bed restoration	7 992	103	72 982	0	0	6	0	81 083
C3	Access roads	14 017	0	6 543	371 842	0	571	0	392 973
C4	Fencing	2 747	0	102 730	0	0	0	0	105 477
C5	Hydrological management	19 631	181	61 526	132 061	0	653	0	214 052
C6	Purchase of machinery	8001	2 175	-1423	484	349 405	254	0	358 897
C7	Habitat 6410 improvements	4 198	56	13 391	896	0	0	0	18 541
D1	Monitoring socio-economic	6 040	0	13 016	0	0	0	0	19 056
D2	Monitoring of habitats and species	54 320	1977	43 716		3 028	5 965	419	109 424
E1	Life-project folder	3 336	0	0	0	0	0	460	3 796
E2	Posters	1 074	0	0	0	0	0	176	1 249
E3	Roll-up	732	0	0	0	0	0	240	972
E4	Project website	15 805	0	468	0	0	626	123	17 022
E5	Notice boards	3 892	43	0	0	0	0	1 657	5 593
E6	Theme-folder Natura 2000	3 958	0	0	0	0	0	1013	4 972
E7	Layman's report	5 155	0	0	0	0	0	1792	6 947
E8	Information meetings	23 421	330	6 180	0	0	1 888	5 362	37 182
E9	Site specific information signs	4 525	0	0	0	0	6 858	8 240	19 623
E10	Nature exhibit Tysslingen	9 378	7	0	0	0	25	7376	16 786
E11	Species information guides	797	0	0	0	0	0	3870	4 666
E12	Audio guides	3 624	0	0	0	0	7	9 187	12 817
E13	Site specific information folder	638	0	0	0	0		1231	1 869
E14	Fact Sheets	984	0	0	0	0	0	0	984
E15	Facilities for visitors	53 470	250	31 107	88 673	0	159	2 248	175 907
E16	Theme-day	8748	49	493	0	0	25	253	9 567
E17	Final seminar	0	372	6580	0	0	1393	0	8 345
F1	Project management	238 738	3 097	18 849	0	38 725	227	16	299 652
F2	Networking	32 682	9 982	6 185	0	0	419	632	49 901
F3	Audit			4 017					4 017
ОН	Overheads								187 845
	TOTAL	705 940	24 337	897 917	593 957	391 158	21 875	44 294	2 871 339

7. Annexes

Following are relevant annexed material referred to in the main report. It includes maps, a vegetative report, and dissemination materials. The electronic version will also include previously annexed materials (also available as links in 5.2.3 List of deliverables), whereas the paper version of this report will not.

7.1 Administrative annexes

7.2 Technical annexes

- 7.2.1 A1 Management strategies (**deliverable**)
- 7.2.2 A3 Reed bed survey and management plan (**deliverable**)
- 7.2.3 D2 Monitoring documentation
- 7.2.4 Map 1: Project site No.1 Tysslingen
- 7.2.5 Map 2: Project site No.2 Venakärret
- 7.2.6 C6 Photographs equipment-use
- 7.2.7 F4 After-LIFE Conservation plan

7.3 Dissemination annexes

- 7.3.1 Layman' report (deliverable)
- 7.3.3 Other dissemination annexes
 - 7.3.3.1 Natura 2000 folder (**deliverable**)
 - 7.3.3.2 E8 Invitations information meetings
 - 7.3.3.3 E11 Species guides
 - 7.3.3.4 E13 Site folder (**deliverable**)

7.4 List of annexes included with the electronic version of the report

- 7.4.1 A5 Vegetative survey
- 7.4.2 E13 Site folder
- 7.4.3 D1 Socio-economic survey 2014
- 7.4.4 D2 Socio-economic survey 2018

8. Financial report and annexes

- 8.1 Standard Payment Request and Beneficiary's Certificate
- 8.2 Beneficiary's Certificate for Nature Projects
- 8.3 Financial Statement of the Individual Beneficiary
- 8.4 Issue letter
 - 8.4.1 Project costs and project codes
 - 8.4.2 Personnel costs Jesper Pietsch (electronic report only)
 - 8.4.3 Personnel costs Michael Andersson (electronic report only)
 - 8.4.4 Rental cars VAT
 - 8.4.5 Restoration transformation building (electronic report only)
- 8.5 Tenders 2012-2018
- 8.6 Auditors report

Supporting documents

A workbook with a complete financial report is also submitted with the electronic version of this report.