Improving the Conservation Status of Species-rich Habitats "Species-rich LIFE"

LIFE10 NAT/FI/0048

FINAL REPORT

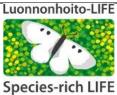
Covering the project activities from 01/09/2011 to 31/12/2016 Reporting Date 19/12/2017

Kati Salovaara, Project Manager

Data Project

Project location	Finland									
Project start date:	01/09/2011									
Project end date:	31/08/2016 Extension date: 31.12.2016									
Total budget	€ 3.654.510									
EC contribution:	€ 1.827.255									
(%) of eligible costs	50 %									
Data Beneficiary										
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List of key-words and abbreviations

- AB = Associated Beneficiary
- CB = Coordinating Beneficiary, Metsähallitus Parks & Wildlife Finland
- CL = Comission Letter
- EC = European Comission
- FEI = Finnish Environment Institute, Associated Beneficiary (Finnish acronym SYKE)
- FR = Final Report
- GA = Grant Agreement

PWF = Metsähallitus Parks & Wildlife Finland (in earlier reports referred to as Metsähallitus Natural Heritage Services / MH NHS, which is no longer in use)

MHF = Metsähallitus Forestry Ltd, Associated Beneficiary (before 14.5.2016 Metsähallitus Forestry Unit, which was a unit of the Coordinating Beneficiary)

- MoT = External Monitoring Team (NEEMO EEIG/)
- N2000 = Natura 2000
- PM = Project Manager
- PR = Progress Report
- WWF = World Wide Fund for Nature Finland, Associated Beneficiary

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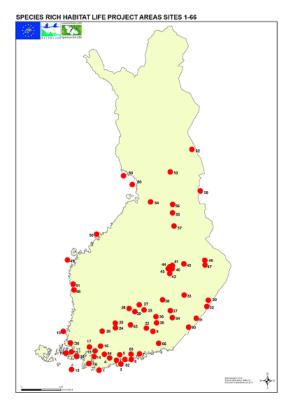
2. Executive summary

Herb-rich forests and traditional rural biotopes are among the most species-rich habitats in Finland and they are crucial for numerous endangered species. Herb-rich forests are the main habitat for over 20% of the nationally threatened species, and traditional rural biotopes for about 28% of the threatened species. The surface area of these habitats has decreased dramatically as result of expansion of intensive farming and forestry practices and other land use changes.

The overall objective of the project Species-rich LIFE ("Improving the Conservation Status of Species-rich Habitats") project was to improve the conservation status of 19 Habitats Directive Annex I habitats whose overall conservation status in the boreal biogeographic region of Finland was assessed as unfavourable-bad or unfavourable-inadequate in the Finnish country report on Habitats Directive Article 17 Reporting (period 2001–2006).

Furthermore, several Birds or Habitat Directive species found in these habitats were concurrently targeted by project actions, especially the Birds Directive Annex I species White-backed Woodpecker (Dendrocopos leucotos) and the Habitat Directive Annex IV Clouded Apollo species (Parnassius mnemosyne). Also, numerous other Birds and Habitat Directive annex species inhabiting the Natura 2000 areas benefitted directly or indirectly from the habitat restoration measures, Cucujus cinnaberinus, e.g. Euphydryas aurinia, Cypripedium calceolus and Artemisia campestris subsp. bottnica.. The target habitats also have great importance for conservation of numerous other threatened species.

The specific objectives of the project were to improve the representativeness and



conservation status of the 19 target Habitats Directive habitats by restoring structural features important for maintenance of the biological diversity, and to increase the extent of the target habitats by restoring severely degraded areas. The restoration measures also included removal of invasive alien species. Clouded Apollo reintroductions intended to improve the conservation status of the species in Finland by establishing new subpopulations.

The project targeted 62 Natura 2000 sites in Finland and the habitat restoration measures covered 1126 ha, whereas the original objective was to restore 936 ha in 59 N2000 sites.

Project sites were selected based on presence of the target habitats with urgent need for restoration. Habitats Directive Annex I habitats restored in the project (see Annex 1) included forest habitats *9010 Western taiga (14,7 ha restored), *9020 Fennoscandian hemiboreal natural old broad-leaved deciduous forests (12 ha), *9030 Natural forests of primary succession stages of land upheaval coast (16,7 ha), 9050 Fennoscandian herb-rich forests (359,6 ha) and 9180 Tilio-Acerion forests of slopes, screes and ravines (1,6 ha). Restored semi-natural habitats were *1630 Boreal Baltic coastal meadows (103,8 ha restored), 4030 European dry heaths (58,7 ha), *6210 Semi-natural dry grasslands on calcareous substrates (1,1 ha), *6230 Species-rich Nardus grasslands (1 ha), *6270 Fennoscandian lowland species-rich dry to mesic grasslands (57,1 ha) , *6280 Nordic alvar and precambrian calcareous flatrocks (6,0 ha), 6430 Hydrophilous tall herb fringe communities (13,2 ha), 6450 Northern boreal alluvial meadows (0,7 ha), 9070 Fennoscandian wooded pastures (124,7 ha) and 8210 Calcareous rocky slopes with chasmophytic vegetation (18,1 ha). Small areas of habitats 7230 Alkaline fens (1 ha) and *91D0 Bog woodland (2 ha) were also included.

The project was implemented by coordinating beneficiary Metsähallitus Parks and Wildlife Finland (PWF) together with the associated beneficiaries Finnish Environment Institute (FEI), World Wide Fund for Nature Finland (WWF) and Metsähallitus Forestry Ltd (MHF).

The Species-rich LIFE project focused on reducing the following threats:

- **Degradation of forest habitats due to forestry management**: Commercial forest management has radically changed the structural elements which are crucial for forest biodiversity, thus decreasing species richness in forested habitats in Finland. For example, in managed forests coniferous trees are strongly favoured.
- Degradation of semi-natural habitats due to abandonment of pastoral systems and the lack of managers: Intensification of agriculture has resulted in abandonment of non-intensive agricultural management techniques (e.g. pasturing, hay-making, traditional grazing) and traditional semi-natural habitats have been taken to other land uses. Without management the characteristic vegetation change over time and there is a gradual conversion of open or semi-open grasslands to forested habitats.
- **Habitat fragmentation**: Even in protected areas the most valuable habitats often cover small areas and are patchily distributed, and the resulting small size and isolation of habitat specialist species' populations makes them prone to local extinction.
- **Invasive alien species**: Aggressively spreading alien species (e.g. Himalayan balsam *Impatiens glandulifera*, Garden lupine *Lupinus polyphyllus*) threaten the valuable natural habitats, flora and fauna of the project sites. Their unchecked dispersal would result in gradual replacement of the native species.
- Lack of knowledge on natural values of the Natura 2000 sites: Several project sites lack complete up-to-date data on the species found on the site. Many of the threatened

species found on the Natura 2000 sites are elusive (e.g. saproxylic beetles) and their presence can only be confirmed by detailed inventories using appropriate methods.

- **Climate change**: Climate change is likely to be the most profound threat to global biodiversity, leading to new impacts and exacerbating existing pressures.
- **Increased human disturbance**: Growing pressure from human activities may cause disturbance and decrease the conservation value of Natura 2000 sites (e.g. disturbance to sensitive species during the breeding season or disturbance to the soil)
- Lack of environmental awareness and appreciation of the target habitats and the Natura 2000 network: Natural habitats are not valued as much as their high conservation value and significance as elements of rural landscapes would warrant, and habitat restoration is sometimes negatively perceived by local people due to lack of knowledge about the objectives. The Natura 2000 network and the value of Natura 2000 sites are still unclear to many citizens.

The main method for achieving the project's objectives was to improve the representativeness of the target habitats at 62 N2000 sites by restoring structural features important for maintenance of the biological diversity. Restoration of severely degraded areas also aimed at increasing the extent of the target habitats in the N2000 sites. Remaining herb-rich forests are fragmented and even in protected areas often suffer from gradual invasion of Spruce from the surrounding managed forests. Removal of Spruce (Picea abies) to open space for light demanding species and for broad-leaved tree species was the most important restoration method in forest habitats. In traditional rural biotopes the restoration methods were e.g. removal of trees, bushes and undergrowth, mowing, removal of reed (*Phragmites australis*) from coastal meadows, and construction of fences to enable continuous management by grazing animals. Herb-rich forests and HD Annex species habitats were restored in 594 ha on 35 Natura 2000 sites, White-backed Woodpecker habitat in 82 ha on 8 sites and semi-natural grasslands in 451 ha on 31 sites. Restoration actions were mainly carried out by Parks and Wildlife Finland (PWF, coordinating beneficiary). Associated beneficiary WWF Finland organized restoration camps for volunteers, and AB Metsähallitus Forestry Ltd (MHF) was responsible for majority of timber harvesting on the restoration sites.

To assure that the restoration actions were properly targeted and implemented, restoration plans for 47 restored sites were elaborated, including inventories of species and cultural heritage sites. In addition, three management plans covering over 10 000 ha were elaborated for four Natura 2000 sites to provide a framework for long-term adaptive management of the sites, and to harmonize nature conservation with other land uses. A monitoring plan was compiled by PWF to ascertain that the restoration actions had been conducted correctly and had accomplished the desired results. Monitoring plan includes a detailed long-term monitoring scheme for selected herb-rich forest and semi-natural grassland restoration sites, whereas general monitoring to verify technical success of restoration measures and to identify need for additional corrective actions was carried out in all restored sites. Moreover, a report summarizing the results of monitoring efforts was compiled. Plans for future conservation

efforts and long-term management of the project sites after the end of the project are summarized in an After-LIFE conservation plan.

Associated beneficiary Finnish Environment Institute (FEI) was responsible for preparing a plan for reintroduction of Clouded Apollo (*Parnassius mnemosyne*) and for reintroducing the butterfly species to three project sites in summer 2012. Due to extremely unfavourable weather conditions in the following years, the established populations almost disappeared. Reintroductions were repeated to two sites in 2016, and monitoring of the species' success will likely continue after the LIFE project. Monitoring data collected during the LIFE project in 2012-2016 was compiled to a Monitoring report of Clouded Apollo (*Parnassius mnemosyne*) reintroduction.

To raise awareness of the importance of the target habitats and species, habitat restoration and the Natura 2000 network, various types of dissemination materials were produced, e.g. 28 permanent notice boards, 2 nature trails and a Layman's report. Project website www.metsa.fi/luonnonhoitolife was created and updated in Finnish, English and Swedish, and includes a special section on semi-natural grasslands. The project worked actively to communicate about its activities and results, and the Species-rich LIFE was presented in different news media over 300 times, including printed and online articles and radio and TV reports and news.

Another important way to raise awareness about the project's objectives was involving different stakeholders in the project actions. These efforts were very successful and exceeded the original objectives set for the project. For senior citizens the project organized 17 Senior Ranger events in Natura 2000 sites, attracting ca 450 participants to take part in restoration and management efforts. WWF Finland organized 15 restoration camps, resulting in over 1100 volunteer working days devoted to habitat restoration, and there were also many other types of volunteering opportunities related to concrete conservation actions. Restoration training workshops were offered for professionals, and international networking with professional and academic organizations was active.

The project actions contributed towards the biodiversity targets of the EU Biodiversity Strategy to 2020, especially the target of restoring at least 15% of degraded ecosystems. As a result of project actions the extent of targeted habitats and habitats of targeted species were enlarged and/or the habitat quality and structure improved. Consequently, the project actions improved the connectivity and coherence of the Natura 2000 network and enhanced the resilience of targeted habitats and species to climate change. National value of the project is highlighted by the fact that the restored habitats are among the most species-rich and most severely threatened habitat types in Finland.

Summary of chapters of the Final Report:

Chapter 3. Introduction

The chapter summarizes the project's background, objectives and expected results.

Chapter 4. Administrative part

The chapter includes descriptions of the administrative project activities E1-E4, the duties of the four project beneficiaries, and the project management efforts carried out to implement the project actions in a coordinated manner. Project steering group and thematic project groups were formed and helped the project management personnel in the coordination. Networking was active both nationally and internationally.

Chapter 5. Technical part

Project's preparatory actions included preparation of e.g. restoration plans and management plans, which were essential for carrying out the other project actions. The key concrete conservation actions were restoration of various types of broad-leaved forests and semi-natural grasslands. Herb-rich forest restoration covered 594 ha, White-backed Woodpecker habitat restoration 82 ha and semi-natural grassland restoration 451 ha. In addition to that, Clouded Apollo was reintroduced to several project sites. Monitoring of concrete conservation actions was carried out in all project sites. Various dissemination actions were carried out, e.g. construction of restoration trails, and volunteer restoration camps and various types of training workshops were organized to involve professionals and general public. Compiled After-LIFE conservation plan will help to direct future conservation and monitoring efforts in the project sites. The project actions did not include land purchase, lease of land, Natura 2000 site designations or recurring biotope management. Technical implementation of the project was successful and the restoration measures greatly benefitted the target sites.

Chapter 6. Comments on the financial report

All budget categories were within the thresholds allowed by article 15 in Common Provision. Personnel and External assistance cost were slightly overspent. The main reason for this was that the original budget underestimated the expenses of external assistance, and there was some extra work related to concrete conservation actions, especially during the latter half of the project. Travel, Consumables and Other costs were underspent. The total project costs slightly exceeded the budget in the GA.

Chapter 7. List of annexes and deliverables

3. Introduction

One of the main threats to natural habitats in Finland are the drastic changes in forests induced by modern forestry management practices and changes in land use. According to the national assessment of threatened habitat types, especially the fertile herb-rich forest habitats are threatened, the situation being most critical for forests with different broad-leaved trees. The herb-rich forests are also the main habitat for over 20 % of the nationally threatened species, although their proportion of the forest area in Finland is only 1 %. Another main factor leading to species extinctions in Finland is the intensification of agriculture, which has led to the loss of traditional agricultural biotopes shaped by earlier farming practices. According to the national assessment, the proportion of threatened habitat types is by far greatest among traditional rural biotopes, 93%. About 28% of the threatened species typically live in traditional farmland habitats, and this proportion is rising. Without management the traditional semi-natural grasslands become overgrown, thus active management and habitat restoration to maintain and increase their coverage are required to improve their conservation status.

The overall objective of the Species-rich LIFE project was to improve the conservation status of 19 Habitat Directive Annex I habitats whose overall conservation status in Finland have been assessed as unfavourable. The target habitats, especially the most fertile herb-rich forests and managed semi-natural grasslands and pastures, are among the most species-rich habitats in Finland. Restored forest habitats included *9010 Western taiga, *9020 Fennoscandian hemiboreal natural old broad-leaved deciduous forests, *9030 Natural forests of primary succession stages of land upheaval coast, 9050 Fennoscandian herb-rich forests and 9180 Tilio-Acerion forests of slopes, screes and ravines. Semi-natural habitats were *1630 Boreal Baltic coastal meadows, 4030 European dry heaths, *6210 Semi-natural dry grasslands on calcareous substrates, *6230 Species-rich Nardus grasslands, *6270 Fennoscandian lowland species-rich dry to mesic grasslands, *6280 Nordic alvar and precambrian calcareous flatrocks, 6430 Hydrophilous tall herb fringe communities, 6450 Northern boreal alluvial meadows, 6510 Lowland hay meadows, *6530 Fennoscandian wooded meadows, 9070 Fennoscandian wooded pastures and 8210 Calcareous rocky slopes with chasmophytic vegetation. Small areas of habitats were 7230 Alkaline fens and *91D0 Bog woodland were also included. Furthermore, several Birds or Habitat Directive species found in these habitats were concurrently targeted by project actions, especially the Birds Directive Annex I species White-backed Woodpecker (Dendrocopos leucotos) and the Habitat Directive Annex IV species Clouded Apollo (Parnassius mnemosyne). The target habitat types also have great importance for conservation of numerous other threatened species.

The specific objectives of the project were to improve the representativeness and conservation status of the target habitats and sites by restoring structural features important for maintenance of the biological diversity, and to increase the extent of the target habitats by restoring severely degraded areas. The restoration measures also included removal of invasive alien species. The project targeted 62 Natura 2000 sites in Finland and the habitat restoration measures covered 1126 ha. Project sites were selected on the basis of presence of the target habitats with urgent need for restoration. As a result of project actions the extent of targeted habitats and habitats of targeted species will be enlarged and/or the habitat quality and structure improved.

4. Administrative part

This chapter of the Final Report includes description of administrative project activities E1-E4. Please note that the description of E-actions related to concrete conservation actions, i.e. Action E5 (After-LIFE Conservation Plan), E6 (General monitoring of restoration success) and E7 (Monitoring of Clouded Apollo reintroductions), are given in the technical part of the Final Report (Chapter 5).

4.1. Description of the management system

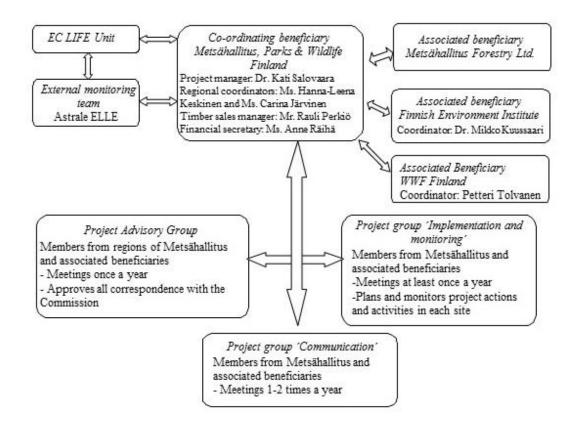
Project management structure and organigramme

The project was implemented by coordinating beneficiary Metsähallitus Parks and Wildlife Finland (PWF) together with the associated beneficiaries Finnish Environment Institute (FEI), World Wide Fund for Nature Finland (WWF) and Metsähallitus Forestry Ltd (MHF). PWF was responsible for majority of project actions. FEI was responsible for *Parnassius mnemosyne* reintroduction (actions A4, C4 and E7). WWF was responsible for organizing restoration camps for volunteers (C5) together with PWF. Associated beneficiaries also shared the responsibility for dissemination actions D1 and D3 together with the PWF, and FEI also participated in networking (E3).

New associated beneficiary MHF (before 14.5.2016 Metsähallitus Forestry Unit, which was a unit of the Coordinating Beneficiary), was incorporated to the project in Amendment Request accepted by the Commission on Nov 7, 2016. This change was caused by changes in the legal structure of Metsähallitus, but the new status as associated beneficiary did not change the role of Metsähallitus Forestry as the timber harvesting operator of actions C1 and C3 in the practical work carried out by the PWF. For this reason MHF did not have a representative in the project advisory group. Cooperation between PWF and MHF was coordinated through the project group, especially by the timber sales manager, as had been done since the beginning of the project.

The organigramme was slightly modified from that in the GA. The project groups "Planning" and "Restoration" were merged into one group "Implementation and monitoring". This change was approved in the CL dated June 26, 2012. Project groups "Implementation and monitoring" and "Communication" did not necessarily have formal meetings 1-2 times a year, because these were not necessary for efficient functioning of the project. Instead, the members of these groups maintained constant contact and planning and coordination of project actions were incorporated to the mainstream working of PWF as much as possible. The objective was to minimize the effort used for administration and to maximize the effort used for implementing the concrete conservation actions.

Planning and coordination of project action C5 between PWF and WWF were partly incorporated to wider volunteer work coordination efforts that included also other activities than just the Species-rich LIFE project. FEI was mainly responsible for actions that did not directly involve other project beneficiaries, and the annual work program was planned by the FEI project coordinator and approved by the project manager and the advisory group. All project partners were experienced actors in their field and this way the project activities could be managed very efficiently.



Project coordination personnel

In PWF Dr. Esko Hyvärinen was employed as a part-time project manager (PM) during 9/2011-3/2013 and Dr. Kati Salovaara during 4/2013-12/2016. Before that Dr. Salovaara worked as part-time regional coordinator for Southern Finland (during 1/2012-3/2013), and the task was then filled by Ms Hanna-Leena Keskinen (during 11/2013-12/2016). The regional coordinator for Ostrobothnia was Ms Päivi Virnes during 1/2012-8/2014 and Ms Carina Järvinen during 9/2014-12/2016. Timber sales manager was Mr Rauli Perkiö during the whole project. Ms Anne Räihä was the financial secretary of the project during 1/2014-12/2016, she was employed as permanent staff of PWF. Before that Ms Tiina Lohiniva worked as the financial secretary at the Metsähallitus Service Centre.

In PWF the project coordination was very cost-effective throughout the project. All project coordination staff worked part-time for the project, and there was no need for more than two

part-time regional coordinators, because coordination tasks could be carried out more efficiently by dividing them between the project manager, regional coordinators, regional managers and/or staff working in regional teams. It should be noted that in addition to the project coordination tasks, the PM and all the regional coordinators worked in their respective regional teams as conservation biologists, and they actively participated in the planning and implementation of concrete conservation actions. This facilitated the coordination of the project actions to some degree, because this way the regional teams were constantly in close contact with project's management personnel. This was beneficial considering the wide geographical extend of the project and the large number of PWF personnel involved (>100 persons in total).

The PM also maintained regular contact with the associated beneficiaries to secure smooth coordination of the project activities and compliance with the LIFE reporting requirements. Associated beneficiaries also assigned coordinators and persons responsible for accounting and financial reporting of the project. In WWF Finland the project was coordinated by Mr Petteri Tolvanen assisted by financial secretary Ms Soili Mikkola. In FEI the project coordinator was Professor Mikko Kuussaari and the financial secretary Ms Lulu Hyvätti. Both WWF and FEI had long experience in participating in LIFE projects and the project administration involved, and the coordination ran smoothly between the coordinating and the associated beneficiaries.

In MHF there was no specifically nominated project coordination staff, because its associated beneficiary role in the project was established only during the last few months of the project. Moreover, the internal cooperation in Metsähallitus between the forestry unit and PWF was well organized already before the associated beneficiary role of MHF. The few administrative tasks of MHF related to the LIFE project were carried out by the Service Centre staff of Metsähallitus (at no cost to the project) with the help of the timber sales manager of PWF.

Financial administration

Project manager made a detailed guide for financial reporting and accounting in the project, which was delivered to the PWF project personnel in the spring 2012. The guidelines were continually updated, e.g. when travel cost software of PWF was renewed. Project manager was also responsible for communicating the financial management and reporting requirements to the AB's. The project manager, regional coordinators and the timber sales manager were also responsible for instructing the participating personnel of PWF in planning, implementation and financial accounting of the project activities. This was greatly facilitated by the online communication systems (Lync, LiveMeeting) that were used by all PWF personnel, making it possible to call, chat and instantly share resources using PC. These communication technologies significantly reduced the need for face-to-face meetings and long distance travel. AB's WWF and FEI had their own project coordinators and financial personnel responsible for carrying out the project actions and maintaining project accounting system. Annex 164 includes descriptions of the financial management systems of each of the project beneficiaries.

Timesheets

The MoT was provided with sample timesheets of the coordinating beneficiary and the associated beneficiaries on the project visit on February 2, 2013. For PWF and FEI it was concluded that the time registration systems correspond to the requirements of the Common Provisions and the Commission note on 8 December 2010 on timesheets (Commission letter May 8, 2013). On project visit December 5, 2013, additional information was provided to the MoT about the time registration systems used by associated beneficiary WWF and about the electronic time registration system TAIKA used by timberjacks working for the Forestry Unit of Metsähallitus. Both time registration systems were approved in the Commission letter on December 19, 2013.

On the timesheets of WWF the time unit for calculation of personnel costs is either day (temporary staff) or hour (permanent staff) as. The salaries of temporary camp staff (e.g. cooks, camp managers) are based on a daily rate in the employment contract, but daily working hours are not determined (however, appr. minimum is 7,5 hours/day). The permanent staff have contracts with 7,5 h daily working hours. The personnel costs have been recorded according to the time unit used for determining the salary in the respective work contracts. This was approved in the CL of 31.3.2014.

Reports submitted and Amendments to the Grant Agreement

The following reports have been submitted:

- Inception Report on May 25, 2012: reporting period 01.09.2011 30.04.2012
- Mid-term Report with interim payment request on December 23, 2013: reporting period 1.9.2011 31.8.2013.
- Progress Report No 1 on May 31, 2015: reporting period 1.9.2011 31.3.2015
- Progress Report No 2 on May 31, 2016: reporting period 1.9.2011 31.3.2016

Two RA's to the GA were submitted to and approved by the EC during the project. First RA included prolongation of the project by 4 months; new end date was 31.12.2016 instead of 31.8.2016. Subsequently it became necessary to produce additional Progress Report No 2 to ensure the reporting period did not exceed 18 months.

The first RA to the grant agreement was submitted to the Commission on January 15, 2016. The requested amendment came into force by Commission signature, which was announced to the CB by email on May 12, 2016. First RA included budget modifications, because the cost structure of the project deviated from the allowed flexibility margins in cost categories travel expenses and consumables. The total cost of consumables was increased and there was a matching decrease in the budget allocated to travel expenses. Five additional Natura 2000 sites were included in the project to make certain that all project objectives could be fulfilled.

The changes included in the RA are discussed in more detail for each action in the technical part of this report.

The second RA was submitted to the Commission on Sept 29th 2016, and it was signed on Jan 3rd, 2017. It included an administrative change necessary to adjust for altered legal status of a beneficiary. New AB MHF was incorporated to the project since April 15th 2016, when new Act on Metsähallitus came into force. The new Act changed the legal status of the Metsähallitus forestry business unit, which was transferred to a limited liability company (Metsähallitus Metsätalous Oy/Metsähallitus Forestry Ltd) under its own business ID. Due to the change in the legal status of the forestry unit of Metsähallitus, it could no longer act as part of the CB PWF, but needed to be incorporated as an AB. This technical change did not influence the practical implementation of the project actions, and the budgetary share of the new AB was taken from the budget of PWF.

Submission of Partnership agreements to the Commission

Partnership agreements between the CB and AB's FEI and WWF were submitted to the Commission in Inception Report on May 25, 2012. The 1st RA included some revisions to the project budget. The revised estimated total costs of the AB's were included in the revised financial forms FA and FC of the RA, but these minor changes did not require new partnership agreements to be signed.

Partnership agreement between PWF and MHF is submitted with this Final Report (Annex 2, also paper copy), because the associated beneficiary was incorporated to the project only few months before its conclusion.

4.1.1. Action E1. Project coordination

Foreseen in the GA:

A part-time project manager (PM) and six part-time regional coordinators will be employed by MNHS. The PM will be nominated by 1.9.2011. A timber sales manager will work parttime for the project taking responsibility for the timber sales required in actions C1–C3. The Service Centre for Metsähallitus will have a part-time project assistant to carry out administrative support services for the project. The project will progress according to the planned timetable and achieve its objectives.

Outcome: Action successfully completed. (Implementation start Sept 2011; end Dec 2016)

Project management proceeded according to the management structure and procedures described in the GA, the Mid-term Report and Progress Report No 1. Since the mid-term report of May 2015 there were no changes to the project management staff of CB or the ABs, nor to the project advisory group.

Deliverable (D) or Milestone (M)	Name	Foreseen deadline in the application	Extended deadline agreed with EC	Time of actual delivery	Location of the deliverable within reports
М	Nomination of the project manager	1.9.2011		1.9.2011	

4.1.2. Action E2. Advising and project group

Foreseen

An advisory group to guide and monitor the project, and a project group for project planning and another for concrete actions will be nominated by 30.9.2011. The advisory group will convene once a year and project groups about twice a year.

Outcome: Action successfully completed. (Implementation start Sept 2011; end Dec 2016)

The project advisory group was nominated in 9/2011. It consisted of nine representatives: four regional managers and the communications manager of PWF, the PM, representatives of ABs and Dr. Jussi Päivinen from the PWF as the chair. In general the advisory group had one meeting annually. However, in 2012 the meeting had to be cancelled and the agenda was handled by email. In 2016 the meeting scheduled for December had to be cancelled and it was finally held in March 2017. The dates of the advisory group meetings were:

- 11.11.2011
- 29.10.2013
- 16-6-2014
- 14.12.2015
- 30.3.2017

In addition to the advisory group meetings, the PM was in regular contact with the ABs and members of the advisory group to coordinate administrative issues as necessary.

Two project groups were established: one for project planning and implementation of project actions including monitoring, and another for communication and media co-operation. The project groups composed of regional coordinators of the project and other key persons responsible for different subject areas or tasks in their regions. Since the establishment of Lync web meeting software in the spring 2014 in the PWF the project group "Implementation and monitoring" was largely replaced by web meetings held directly with the regional teams responsible for implementation of the project actions. The "Communication" project group has had one or two major planning sessions annually.

The project groups (Communication and media co-operation, Implementation and monitoring) participated actively in the preparation of the RA during the autumn 2015. Project group activities were carried out as continuous communication and collaboration facilitated by online meetings. The advisory group approved the changes included in the 1st RA in the annual

meeting on December 14, 2015. The content of the 2nd RA did not require formal approval, since it included changes attributable to reform of the Act on Metsähallitus. This legislative change concerned all LIFE projects of PWF and was handled in a similar manner for all projects.

Deliverable (D) or Milestone (M)	Name	Foreseen deadline in the application	Extended deadline agreed with EC	Time of actual delivery	Location of the deliverable within reports
М	Nomination of the advisory and the project groups	30.9.2011		30.9.2011	

4.1.3. Action E3. Networking

Foreseen in the GA*:

The project will network with other LIFE and restoration projects inside and outside Europe. Oral presentations and posters of the project will be presented at least 5 times in international Conferences and once in Green Week.

* After the modifications approved by the EC in the CLs of 31 March 2014, 19 September 2014, 20 July 2015 and email from external monitor on 23 April 2015.

Outcome: Action successfully completed and target exceeded. (Implementation start Sept 2011; end Dec 2016)

The networking during the project was very active and the project attended many noteworthy national and international networking events each year. The events listed in the original GA were not considered to be most timely and interesting options, and numerous adjustments were necessary. List of the attended events is given in Annex 3. In total the number of presentations in international conferences was seven. In addition to that, several other international meetings were attended. Especially the LIFE Platform meetings (Finland 2011 and 2012, Denmark 2015) were useful for networking with other LIFE projects.

The EC requested in the CL of 9.9.2014 for explanation of the added benefit of several representatives per project attending the same networking event. Several participants were in the Society for Ecological Restoration European Conference in Oulu, Finland 2014 (2 persons), Heath Management Centre in Bergen, Norway 2015 (3 persons) and LIFE Platform meetings in Finland 2012 and Allborg, Denmark 2015 (2 persons).

SER Conference was organized in Finland and offered an exceptional opportunity for networking with European restoration experts, and it was considered important that two key persons from the project could take advantage of the information shared in the conference. The objective of the Heath management centre visit to Norway was to acquire know-how on best practice restoration methods for a very specific habitat type that had not been restored in large scale in Finland. The three PWF representatives were from different parts of Finland, and they brought the acquired knowledge to their respective regional teams. Restoration by prescribed burning is a method that cannot be carried out without very knowledgeable personnel, and it is important to have them available in different parts of the wide geographic scope of the Species-rich LIFE. LIFE Platform Meeting in Denmark was important for networking with other LIFE projects and for hearing the information shared by EC representatives. The objective in Species-rich LIFE was to divide the project management responsibility between the PM and the REC's, and it was thus natural that both the PM and one of the REC's participated in the meetings.

Deliverable (D) o Milestone (M)	r Name	Foreseen deadline in the application	Extended deadline agreed with EC	Location of the deliverable within reports
None				 •

4.1.4. Action E4. Auditing

Foreseen in the GA:

The statements provided for the Commission will be verified by an independent auditor. An independent auditor will also be used whenever the Commission finds it necessary to receive intermediate information about the project accounting. The final auditing report will be completed by 31.3.2017.

Outcome: Action successfully completed. (Implementation after the project's end date)

Independent auditor from KPMG Public Sector Services Ltd audited the project and verified the financial statements of all project beneficiaries. The audit report is enclosed in electronic format (Annex 4, also paper copy).

Deliverable (D)	Name	Foreseen	Extended	Time of	Location of the
or Milestone (M)		deadline in the	deadline agreed	actual	deliverable within
		application	with EC	delivery	reports
D	Auditing	31.3.2017		Final Report	Annex 4 of the FR
	report				

4.2. Evaluation of the management system

Fruitful partnerships with the right beneficiaries were essential for successful project implementation and management. All project partners had long experience in LIFE projects, and LIFE administration was well incorporated into the financial and administrative routines and information systems of the organizations. All partners also had experienced administrative

personnel, which greatly facilitated coordination between the CB and ABs and helped meeting the objectives and budget of the project. The roles and obligations of each beneficiary had been set clearly in the partnership agreements and each beneficiary excelled in their respective field of expertise. Steering group meetings and other regular contacts between beneficiaries and in each beneficiary organization worked well.

Some challenges for project management were caused by the changes in the PWF project management personnel during the first two years of the project. Moreover, the fact that the coordinating beneficiary had no fulltime project management personnel was not always ideal for meeting the administrative requirements and deadlines. However, this was partly compensated by the highly motivated and talented project staff (in total over 150 persons in the beneficiary organizations), that could carry out the practical work and administrative duties with little supervision.

Smooth running of the project was further facilitated by the fact that the objectives and budget of the project were realistic and supported the functions and objectives of the beneficiary organizations, thereby ensuring that motivation for reaching the targets of the project was high. All beneficiaries had clear responsibilities that supported the overall goals of the project.

In Metsähallitus a major legislative change occurred in 2016, when in March the Finnish Parliament approved a new Act on Metsähallitus. Fortunately, the new Act did not change the governmental role of PWF, which continues to be responsible for nature conservation and management of protected areas, production of nature, hiking and camping services and control of fishing and hunting on State owned lands.

Communication with the Monitoring Team (MoT) was very fruitful throughout the project. The MoT Ms. Milka Parviainen and Ms. Sonja Jaari were always very quick to reply to any contacts by the project regarding a multitude of matters, from general issues to specific details related to budget modification requests and reporting. Moreover, the MoT was an essential link between the project and the Commission, and implementing the project would have been very difficult without the support and help of MoT. Also, with the Commission all matters that needed solving, for example several requests to the Commission in the earlier reports or by email, have been solved in due time. The monitoring mission and LIFE Platform meetings with the Commission representatives were extremely helpful and greatly benefitted the project coordination.

5. Technical part

The project dealt with restoration of the most species-rich habitats in Finland and raising awareness of the natural values of these biotopes and the Natura 2000 network. The project actions included preparation of restoration plans and management plans. The key action of the project was restoration of various types of broad-leaved forests and semi-natural grasslands. Various dissemination actions were carried out and volunteer work and training workshops were organized. The project actions did not include land purchase, lease of land, Natura 2000 site designations or recurring biotope management.

Foreseen timetable of the project and the actual timetable of project implementation are shown below in a Gant Chart.

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Action	2011			20	012			20	13			20	014			20)15			20	016	
Number/	September	IV	I	П	III	IV	I	П	Ш	IV	I	П	III	IV	I	П	III	IV	I	Ш	1111	IV
name																						
A. Preparat	tory actions, e	elabora	tion o	of man	agemo	ent pla	ins and	d/or a	ction p	olans:												
A.1.	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х								
A.2.	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		
A.3	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		
A.4	Х	Х	Х	Х																		
A.5			Х	Х	Х	Х																
C. Concrete	e conservatior	n actior	ıs:																			
C.1	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
C.2	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
C.3	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
C.4				Х	Х															Х	Х	
C.5				Х	Х			Х	Х			Х	Х			Х	Х			Х	Х	Х
D. Public a	wareness and	dissen	ninati	ion of I	results	:																
D.1	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
D.2			Х	Х	Х	Х																
D.3	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
D.4	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
D.5							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
D.6																				Х	Х	Х
E. Overall p	project operat	ion and	d moi	nitorin	g:																	
E.1			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
E.2		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
E.3	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
E.4																						Х
E.5																					Х	Х
E.6		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
E.7	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х

X = Foreseen timetable in the GA; = actual implementation of the project actions

5.1. Technical progress per task

Chapter 5.1. includes a task-by-task description of all preparatory actions (A1-A5), concrete conservation actions (C1-C5) and actions related to monitoring of concrete conservation actions (E6-E7). Actions related to project management (E1-E4) are described in the administrative part (Chapter 4) of this report, and dissemination actions D1-D6 in Chapter 5.2. Table 1 below summarizes the concrete conservation actions in each of the 62 N2000 sites and the related preparatory and monitoring actions.

Table 1. Natura 2000 sites included in the Species-rich LIFE and concrete conservation actions and related preparatory and monitoring actions carried out on each site.

SITE NUMBER	SITE CODE	Natura 2000 SITE NAME	Action A1, Restoration planning	Action A2, Management planning	Action C1, Herb-rich forests (ha)	Action C2, White-backed Woodpecker habitat (ha)	Action C3, Semi-natural grasslands (ha)	Action C4, Clouded Apollo reintroduction	Action C5, Restoration camps	Action E6, Monitoring of restored sites	Action E7, Monitoring of Clouded Apollo
1	FI0100005	Tammisaaren ja Hangon saariston	4		28,0		30,4		6	Х	
2	FI0100021	Meiko-Lappträsk					8,3		1	Х	
3	FI0100024	Medvästö-Stormossen	2				82,5			Х	
4	FI0100036	Lohjanjärven alueet	1		7,5		9,1			Х	
5	FI0100040	Nuuksio			15,9	15,0	11,6			Х	
6	FI0100065	No project actio	ns in s	ite 6 l	Mustavu	oren leł	ito				
7	FI0100074	Porvoonjoen suisto			10,4		9,8			Х	Х
		There was no site num	ber 8 i	n the	project.						
9	FI0404001	Hiidensaari	1			10,1				Х	
10	FI0200046	Houtskarin lehdot	1		5,6		1,6			Х	
11	FI0200052	Åvensorin lehto	1		4,6					Х	
12	FI0200064	Seilin saaristo			9,1		16,3			Х	
13	FI0200072	Uudenkaupungin saaristo	1		0,4	9,7				Х	
14	FI0200086	Teijon ylänkö			8,9					Х	
15	FI0200090	Saaristomeri	1		19,9		43,9		3	Х	
16	FI0200102	Rekijokilaakso	2				15,9	Х		Х	Х
17	FI0200103	Paimionjokilaakso			-			Х			Х
18	FI0200113	Kemiönsaaren kalliot	1		1,0		17,1			Х	
19	FI0200125	Vaisakko	1		26,6					Х	
20	FI0200040	Kolkanaukko	1		5,9					Х	
21	FI0361001	Mielas					9,3			Х	
22	FI0500057	Läpiän koivikkolehdot			8,0	2.2				X	
23	FI0500105	Uuhiniemi	1		6.0	3,2				X	
24	FI0303006	Vanajaveden alue			6,0	Γ 4				X	
25	FI0303017	Vanajaveden lintualueet	1		10.4	5,4				X	
26	FI0348002	Kaakkosuo-Kivijärvi Vahervuori	T		16,4					X	
27	FI0900080		1		7,1 36,5					X X	
28	FI0900101	Isojärvi-Arvajan reitti									

SITE NUMBER	SITE CODE	Natura 2000 SITE NAME	Action A1, Restoration planning	Action A2, Management planning	Action C1, Herb-rich forests (ha)	Action C2, White-backed Woodpecker habitat (ha)	Action C3, Semi-natural grasslands (ha)	Action C4, Clouded Apollo reintroduction	Action C5, Restoration camps	Action E6, Monitoring of restored sites	Action E7, Monitoring of Clouded Apollo
29	FI0900126	Kärppäjärven alue	1	1	143,3					Х	
30	FI0407012	Västäräkinmäen niityt	1				6,7			Х	
31	FI0417009	No project ac	1	in site		inkanga	IS		1		
32	FI0423003	Niukkala	1		16,6					Х	
33	FI0500002	Linnansaari			43,5		6,3		2	Х	L
34	FI0500036	Suurlahden lampialue			1,9					Х	
35	FI0500081	Haapasaari-Luhtanen-Majaluhta	1			14,4				Х	L
36	FI0500108	Pyhäniemi	1			18,1	0,1			Х	
37	FI0500133	Anttilan tila	1				10,7			Х	
38	FI0500017	Kyyvesi		1		5,6				Х	
39	FI0700091	Pyhäjärven alueen luontokokonaisuus	1		24,9					Х	
40	FI0600001	Puijo	1		29,4					Х	
41	FI0600007	Halmejoki-Karhonsaari-Potkunsaari	1		3,2					Х	
42	FI0600059	Korsumäki-Keinälänniemi	1		2,7					Х	
43	FI0600062	Kolmisoppi-Neulamäki	1		2,1					Х	
44	FI0600063	Laivonsaari	1		13,1					Х	
45	FI0600089	Telkkämäki	1				9,4			Х	
46	FI0700010	Kolin kansallispuisto		1	24,2		9,4		3	Х	
47	FI0700021	Huurunlampi-Sammakkolampi-Huurunrinne		1	25,5					Х	
48	FI0800112	Lapväärtin kosteikot	1				24,2			Х	
49	FI0800130	Merenkurkun saaristo	1				21,7			Х	
50	FI0800132	Luodon saaristo	1				11,4			Х	
51	FI0800140	Tegelbruksbacken (Tiilitehtaanmäki)					5,5			Х	
52	FI1101645	Oulanka	2				10,0			Х	
53	FI1103828	Syöte	1				1,2			Х	
54	FI1106602	Räkäsuo	1				0,9			Х	
55	FI1200451	Ison Kaitasen lehto	1		1,4					Х	
56	FI1200457	Pihlajavaaran lehto	1		2,5					Х	
57	FI1200600	Lauttolahden - Soidinvaaran kohteet			1,5					Х	
58	FI1200719	Martinselkonen	1				3,0			Х	
59	FI1300301	Perämeren kansallispuisto					18,2			Х	
60	FI1300302	Perämeren saaret	1				41,8			Х	
		There was no site numb	er 61	in the	project.						
62	FI0100028	Laajalahden lintuvesi					4,2			Х	\mid
63	FI0100066	Sipoonkorpi						Х			Х
64	FI0200117	Laukkallio	1		0,1		3,4			Х	\square
65	FI0325001	Evon alue			40,6					Х	\mid
66	FI0401012	Rainionmäki ja Sammalsuonpelto					6,4			Х	
Total	number of N20	000 sites, hectares or restoration camps	47	4	594	82	451	3	15	60	4

5.1.1. Action A1. Restoration action plans

Foreseen in the GA*:

A total of 39 (or more, if necessary) detailed restoration action plans covering 683 ha will be prepared for 39 project sites. Supplementary species inventories will be carried out in 29 project sites and cultural heritage inventories in 32 sites.

* After the modifications approved by the EC in the CLs of 31 March 2014, 19 September 2014, 20 July 2015 and 31 October 2016, and the Supplementary Agreement No 1 to Grant Agreement approved by the EC in CL of 12 May 2016.

Outcome: Action successfully completed and target exceeded. (Implementation start Sept 2011; end Dec 2016)

Restoration plans

Total of 41 Natura 2000 sites were included in action A1, requiring 47 restoration plans that cover 915 ha. All restoration plans were compiled by coordinating beneficiary PWF. Annex 5 lists all the project sites and subsites where restoration planning was carried out. For the rest of the sites there was an existing restoration plan compiled before the start of the project. All 47 restoration plans were necessary for carrying out the restoration work planned for the project sites: The restoration plans are annexed to this report in electronic format (Annex 6-52), and 53 official approval documents are in Annexes 53-105. Only the approval documents are attached in paper, as was suggested in CL 10 September 2014. The approvals were acquired from the competent authorities (PWF, Regional Environment Centre and/or private landowner). In many cases approval was required from several authorities, depending on the protected area status of the project site.

The restoration planning sites, and for some project sites also the detailed restoration objectives, were slightly modified from those in the original GA. For example, for several project sites it was necessary to produce separate restoration plans for individual sub-sites. These changes were approved in the CLs of 31 March 2014 and 20 July 2015. On the other hand, some plans include several adjacent project sites, where similar restoration measures were necessary. Even though for some of the sites the restoration plans were delayed, the restoration work could be completed on time for all sites. In many cases the implementation of restoration measures in an ecologically meaningful way requires several years, and in some cases part of the planned restoration measures will be carried out after the project by PWF.

Species inventories

Species inventories were completed for all foreseen 29 sites (summary in Annex 106, A1 species inventories, which also includes the species inventories of Action A2). The species inventories were either outsourced to taxon specialists or were compiled by PWF's own personnel. All 18 species inventory reports are annexed to this Final Report in paper and electronic format (Annexes 107-124). Most of them were submitted with earlier reports, but in electronic format only.

It should be noted that the species inventories did not necessarily cover exactly the same areas as the final restoration plans, because the inventories targeted areas prioritized during the preparatory phase of the planning process, and afterwards the inventory results were used for directing the restoration planning to the most suitable areas.

Minor modifications to the original inventory programme of the GA were necessary and these were explained in the Mid-term report in 2013 and in the Progress reports of 2015 and 2016. The changes are summarized in Annex 106, A1 Species inventories, and they were approved in the CL of 31 October 2016. However, in the EC approval letter there was one minor mistake; in site 15 Saaristomeri the taxon excluded from the inventories was birds (Aves) and not vascular plants, which was never on the original list of the taxa to be inventoried in site 25.

Cultural heritage inventories

Cultural heritage values were inspected for 31 Action A1 sites, but the intensity of the inventorying varied site by site. A summary of the work is included in Annex 125. Cultural heritage inventory was carried out in the field in 15 sites; in 6 sites there were no findings, thus a written report was produced only for 9 sites. In addition to this, cultural heritage inventory was compiled and reported for the project site 38 Kyyvesi, where Action A2 Management planning necessarily required information on cultural heritage. All reports for the 10 sites are in Annexes 126-133 and are also submitted as hard copies with this Final Report. For another 16 sites a review of earlier cultural heritage data and a cartographic inspection were completed, but in these sites there was no need for detailed field inventory or reporting. For two project sites there were existing cultural heritage inventories foreseen in the GA for these sites were unnecessary. The changes to the original GA were accepted in the CLs of 31 March 2014 and 19 September 2014.

Deliverable (D) or Milestone (M)	Name	Foreseen deadline in the application	Extended deadline agreed with EC	Time of actual delivery	Location of the deliverable within reports
D	47 restoration action plans	31.12.2014	31.8.2016	Final Report	Annex 4 of inception report (2012), Annexes 1-16 of mid- term report (2013), Annexes 3- 22 of progress report No 1 (2015), Annexes 2-11 of progress report No 2 (2016), Annexes 6-52 of final report
	18 species inventory reports	not specified, same as above	31.8.2016	Final Report	Annexes 27-41 of mid-term report (2013), Annex 25 of progress report No 1 (2015), Annex 13 of progress report no 2 (2016), Annexes 107-124 of final report
	9 cultural heritage inventory reports	not specified, same as above	31.8.2016	Final Report	Annexes 18-25 of mid-term report (2013), Annexes 126-133 of final report

5.1.2. Action A2. Management plans

Foreseen in the GA*:

Three management plans, covering four project sites and a total of 10 995 hectares (Kärppäjärvi 809 ha, Kyyvesi 7212 ha and Koli and Huurunlampi-Sammakkolampi-Huurunrinne 2974 ha) will be completed and legally approved before the end of the project. Species inventories will be carried out in two project sites as part of the Action A2.

* After the modifications approved by the EC in the CL of 31 October 2016.

Outcome: Action successfully completed. (Implementation start Sept 2011; end July 2016)

Three management plans covering four project sites were compiled by the coordinating beneficiary PWF. The management plans were officially approved by the Ministry of Environment in June 2016. The plans are attached to this Final Report in electronic and paper format (Annex 134-136) and the official approval documents are also attached to the plans.

In fact the objectives of the Action A2 were exceeded, because two of the three management plans cover several extra Natura 2000 -sites and much larger surface areas than was foreseen in the GA. However, not all the N2000 -sites were included in the original GA, and thus were not previously approved for LIFE+ funding. This issue was treated preliminarily in the Progress Report No2 in 2016, and below is a more detailed treatment of the management plans and the incurred costs for each project site. It should be noted that the total cost of the action A2 was well below the foreseen budget even though there were additional sites included in the planning process.

In a similar manner as for A1 Restoration planning, it was also necessary to carry out species inventories and cultural heritage inventories as a part of the Action A2. The inventories and resulting reports are listed together with Action A1 inventories in Annexes 106, 107-124, 125 and 126-133, and are submitted in electronic and paper format with the Final Report.

Supplementary species inventories in the action A2 sites included some species inventories for taxa not foreseen in the GA, but these inventories were considered essential for securing high quality of the management plans. For the site 38 Kyyvesi a cultural heritage inventory was also carried out. Although this inventory was not part of the original GA, it resulted in crucial information for the management planning and thus was carried out as an additional national work, not incurring costs to the project. For Action A2 site 29 Kärppäjärven alue, a cultural heritage inventory was carried out as part of the Action A1.

Site 29 Kärppäjärven alue

The management plan for site 29 covers surface area of 809 ha, which is equal to the area foreseen in the GA. The plan also mentions the areal coverage of the property managed by PWF (814ha), but the actual planning area is 809 ha.

Site 38 Kyyvesi

Kyyvesi management plan is actually a joint management plan covering 6 Natura 2000 areas. Five N2000 sites adjacent to the Kyyvesi site (Puulavesi FI0500025, Vänkkäänsuo FI0500156, Kakrialansuo FI0500166, Taloahon metsä FI0500201, Viljakkalan metsät FI0500203) are part of the same management plan, because large scale planning is the most cost-effective way of carrying out the management planning process. However, only the costs incurred from the Kyyvesi project area were foreseen to be financed by LIFE+ funding.

Sites 46 Kolin kansallispuisto and 47 Huurunlampi-Sammakkolampi-Huurunrinne

For sake of cost-efficiency also the sites 46 Kolin kansallispuisto and 47 Huurunlampi-Sammakkolampi-Huurunrinne are part of a joint management plan, and this was foreseen in the GA. However, this joint management plan also includes three additional N2000 sites mentioned in the GA (Huuhkajanvaara FI0700035, Iso-Veteläinen FI0700073, and Verkkovaara FI0700074), and one additional N2000 site not mentioned in the GA (Savijärven suo FI0700014). In total the plan covers 6 Natura 2000 sites.

In contrast to what was mentioned in the Progress Report No 2, the GA actually states that the planning costs of the other three Natura2000 sites (Huuhkajanvaara SCI FI0700035, Iso Veteläinen SCI FI0700073 and Verkkovaara SCI FI0700074) will be covered by national funding of Metsähallitus. Thus, the working time and other costs <u>directly related to any of the additional four N2000 sites</u> were not registered to the LIFE project. This was done by excluding LIFE financial coding in the working time registry and travel expense claims when visiting the additional four sites. Additionally, part of the working time was not registered to the LIFE project, but this division was somewhat arbitrary. In any case the costs in table 2 underestimate the total cost of the two management plans that cover several N2000 sites.

Division of costs between LIFE+ funding and national funding

All project costs of action A2 were directly related to making the management plans for Natura 2000 sites, and the costs did not exceed the original budget for the action, although additional sites were covered by the action. Actually, the inclusion of additional sites contributed towards meeting (and exceeding) the project objectives.

In case the Commission deems necessary to cut part of the costs of Action A2 due to the additional Natura 2000 areas covered by the action, the total cost of each management plan is calculated in Table 2. The costs related to species inventories have been deducted, because all inventories were carried out strictly within the boundaries of the principal N2000 project sites Kärppäjärvi, Kyyvesi and Koli.

Project site	Personnel	Travel and subsistence	External assistance	Consumables	Other costs	TOTAL
29 Kärppäjärven alue	30915	898	243	0	0	32056
38 Kyyvesi + 6 other						
N2000 sites	26022	2015	1318	155	0	29510
46 Kolin kansallispuisto						
and 47 Huurunlampi +						
4 other N2000 sites	30751	1674	1088	131	0	33644
Action A2 TOTAL	87688	4587	2649	286	0	95210

TABLE 2. Total costs per project site and per cost category for Action A2 Management planning

Our suggestion as to how the planning costs can be separated between the LIFE+ eligible costs (costs incurred from the planning work targeting specifically the 4 project N2000 sites approved in the GA) and the costs to be covered by PWF (planning costs of the additional 9 N2000 sites not included in the LIFE project) is to use the surface area of the N2000 sites as an estimate for the costs incurred from management planning. Thus, the LIFE funding would cover costs proportional to the surface area of the 4 project sites out of the total surface area covered by the management plans, including the 9 non-LIFE sites. The surface area of the four LIFE-eligible N2000 sites, area covered by respective management plans and the share of the LIFE+ funded planning costs are summarized in the table 3 below.

We believe that the size of N2000 site is a good approximation of the work load required for management planning. If anything, the estimated proportion of costs to be covered by LIFE funding are underestimates, because all four project sites are quite large N2000 sites compared to the other areas included in the management plans. In the larger N2000 sites there are typically more complications in the management planning than in the smaller areas, where commonly there are fewer conflicting land-use interests. Thus, the proposed method for separating the LIFE funding from other funding sources may somewhat underestimate the share of the costs incurred from the four project sites.

Project site	Official surface area of the N2000 site (ha)	Total area covered by the management plan (ha)	Share of the project sites area of the total management planning area (%)
Site 29 Kärppäjärven alue	809	809	100
Site 38 Kyyvesi	7212	24165	29,8
Sites 46 Kolin kansallispuisto and 47 Huurunlampi-Sammakkolampi- Huurunrinne	2974	3646	81,6
TOTAL	10995 ha	28625 ha	

TABLE 3. Surface area (ha) covered by A2 Management plans for the project sites.

Consequently, the financial contribution of LIFE+ programme would equal 100% of the total cost of the management plan of site 29 Kärppäjärven alue, 29,8% of total cost of the plan covering site 38 Kyyvesi, and 81,6% of total cost of the plan covering sites 46 Koli and 47 Huurunlampi. This would equal 8 794€ eligible for LIFE-funding and 20 716€ ineligible costs for Kyyvesi, and 27453€ eligible for LIFE-funding and 6190€ ineligible costs for Koli and Huurunlampi.

Deliverable (D) or	Name	Foreseen	Extended	Time of actual	Location of the
Milestone (M)		deadline in the	deadline	delivery	deliverable
		application	agreed with EC		within reports
D	management	31.8.2016		Final Report	Annexes 134-
	plans for 4				136 of the final
	N2000 sites				report

5.1.3. Action A3. Monitoring and communication plans

Foreseen in the GA:

A general monitoring plan summarising monitoring actions and guidance for monitoring methods will be compiled and delivered electronically to all personnel involved in monitoring actions. A communication plan will be prepared at the early stages of the project and the plan will be updated regularly. A project logo and 100 project t-shirts will be prepared.

Outcome: Action successfully completed. (Implementation start Sept 2011; end June 2016)

The monitoring plan and the first version of the communication plan were compiled by the coordinating beneficiary PWF and submitted with the Inception Report in 2012. Updated versions were submitted with the Mid-term Report in 2013. The monitoring plan was accepted as complete in the CL of 31 March 2014. However, it was noted during the preparation of the Final Report that the submitted version included some errors, and a revised final monitoring plan is submitted with this report (Annex 137, also in paper format).

The Mid-term report also included photos of the project logo (finalized 4/2012) and the project t-shirts (finalized 9/2012). The deliverable product communication plan (final version, in Finnish) was delivered with the Progress Report No 2, but the plan is attached also to this report as Annex 138, also in paper format.

Deliverable (D) or Milestone (M)	Name	Foreseen deadline in the application	Extended deadline agreed with EC	Time of actual delivery	Location of the deliverable within reports
D	Communication plan (first stage)	31.12.2011		25.05.2012	Annex 6 of inception report (2012), further updated with mid-term report

D	Monitoring plan	29.2.2012		25.05.2012	Annex 5 of inception report (2012), further updated in final report (Annex 137)
D	Communication plan (final)	31.5.2016	15.7.2016	15.7.2016	Annex 14 of progress report No 2 (2016), Annex 138 of the FR

5.1.4. Action A4. Parnassius mnemosyne reintroduction plan

Foreseen in the GA:

A detailed reintroduction plan including a monitoring scheme of the Clouded apollo (see Action E.7, Monitoring of *Parnassius mnemosyne* reintroduction) will be compiled, and all the necessary permits for the reintroductions will be acquired.

Outcome: Action successfully completed. (Implementation start Sept 2011; end April 2016)

Associated beneficiary FEI prepared a plan for reintroduction of Clouded Apollo and required the necessary permits for the reintroduction in May 2012. These were delivered with the Inception Report in 2012.

Because all Clouded Apollo reintroductions made in 2012 went extinct during the next four years, the reintroductions (Action C4) had to be repeated in summer 2016 (as accepted in Supplementary Agreement No 1 to Grant Agreement approved by the EC in CL of 12 May 2016). This required updating of the plan and acquiring a new permit from the environmental authority (the Centre for Economic Development, Transport and Environment) and the landowner (Metsähallitus PWF). The permits were granted 2 May 2016. The updated plan and the permits are attached in Annex 139, also in paper format.

Deliverable (D) or Milestone (M)	Name	Foreseen deadline in the application	Extended deadline agreed with EC	Time of actual delivery	Location of the deliverable within reports
D	Parnassius mnemosyne reintroduction plan	30.4.2012		25.5.2012	Annex 7 of inception report (2012), further updated in final report (Annex 139)

5.1.5. Action A5. Preparatory training

Foreseen in the GA*:

Four workshops will be arranged as preparatory training for the restoration staff and external contractors. In total 80 participants are expected.

* After the modifications approved by the EC in the CLs of 26 June 2012 and 8 May 2013.

Outcome: Action successfully completed and target exceeded. (Implementation start Jan 2012; end May 2014)

Coordinating beneficiary PWF organized four workshops in 2012-2014 with a total of 93 participants:

- Luhanka 9.-10.5.2012; herb-rich forest and White-backed Woodpecker habitat restoration (26 participants from PWF and other environmental organizations)
- Oulanka 12.-14.6.2012; semi-natural grassland restoration (12 participants from PWF)
- Koli and Telkkämäki 19.-20.8.2013 (26 participants from PWF and other environmental organizations)
- Nuuksio, Lohjansaari and Medvastö-Stormossen 27.-28.5.2014 (29 participants from PWF, other environmental organizations and SMEs)

Although the original time table was somewhat delayed, the training workshops were very successful. The workshops in 2012 targeted primarily the restoration staff of PWF, whereas in the in the 2013 and 2014 workshops there were participants also from various other organizations. All workshops included discussions based on presentations on restoration methods and other relevant issues, and field visits to project sites. These field visits were considered highly beneficial by the participants, because it gave them a rare opportunity to exchange ideas on practical restoration methods in the field conditions. Fruitful discussions also helped to gain wider perspective about semi-natural grassland restoration, e.g. the ecological differences between regions and the different restoration methods used for various types of habitats.

In addition to the workshops foreseen in the GA, one additional short online training session (2 hours) was organized for PWF staff (ca 15 participants) on 11 October 2016. It was based on the experiences gained by the Conservation Biologist Maija Mussaari during her trip to International Association for Landscape Ecology Conference in Oregon, USA, and associated field visits to protected areas in Northern USA and Canada. The focus was on natural disturbance dynamics of hemiboreal grasslands and on bison grazing in natural ecosystems. The PowerPoint presentation presented in the training session is included as Annex 140 (in electronic format only).

Deliverable (D)	Name	Foreseen	Extended	Time of	Location of the
or Milestone		deadline in the	deadline	actual	deliverable within
(M)		application	agreed with EC	delivery	reports
М	Preparatory	31.12.2012	summer 2014	28.5.2014	
	training				
	completed				

5.1.6. Action C1. Restoration of herb-rich forests

Foreseen in the GA*:

A total of 495 ha of herb-rich forests in 35 sites will be restored by the end of the project.

*After the modifications approved by the EC in the CLs of 31 March 2014 and 20 July 2015, and the Supplementary Agreement No 1 to Grant Agreement, approved by the EC in CL of 12 May 2016.

Outcome: Action successfully completed and target exceeded. (Implementation start Sept 2011; end Dec 2016)

Herb-rich forest restoration was carried out in 594 ha in 35 project sites (see Annex 141 for details). Coordinating beneficiary PWF was responsible for implementing the action. Restoration measures typically included clearing of undergrowth, removal or Spruce (often including timber harvesting and selling) and burning of logging residues, but also removal of invasive alien species and other restoration methods were used.

The objective of all C-actions was to get best value for money and to do the habitat restoration as cost-efficiently and extensively as possible and to the highest quality standards. In several project sites the resulting restored area was somewhat smaller or larger than was foreseen in the original GA, where it was already noted that the exact areas and hectares to be restored will be determined when detailed planning of restoration (Action A1) proceeds. Even after the restoration planning there were some changes in the restored hectares, because in many cases practical reasons prevented restoration in some parts of the subsites (e.g. site conditions were not suitable for completing all of the restoration work cost-efficiently due to weather conditions, pest outbreaks or other natural conditions).

This caused some uncertainty during the implementation of the project, because it was not totally clear whether the total quantitative target in hectares could be reached for Action C1. Due to this, some complementary subsites were included in order to make sure the target could be reached. One additional Natura 2000 site, project site 65 Evon alue, was approved to the project in 2016. This site was habitat management site for the Directive species *Cucujus cinnaberinus*, which was part of Action C1. After many adjustments the objectives of herb-rich forest restoration were actually exceeded. Maps of the restored sites where Action C1 has taken place are enclosed as Annex 142. Timber sales income for the C1 restoration sites where timber was harvested and sold are presented in Annex 143.

Deliverable (D) or Milestone (M)	Name	Foreseen deadline in the application	Extended deadline agreed with EC	Time of actual delivery	Location of the deliverable within reports
М	120 ha of herb- rich forests restored	31.10.2013		23.12.2013	
М	451 ha of herb- rich forests restored	31.12.2016		31.12.2016	

5.1.7. Action C2. White-backed Woodpecker habitat restoration

Foreseen in the GA:

A total of 77 ha of White-backed Woodpecker habitats in 8 sites will be restored by the end of the project.

Outcome: Action successfully completed. (Implementation start Sept 2011; end Sept 2016)

White-backed Woodpecker habitat restoration was carried out in 82 ha in 8 project sites (see Annex 144 for details). Coordinating beneficiary PWF was responsible for implementing the action. As in Action C1, restoration measures typically included clearing of undergrowth, removal or Spruce (in some cases including timber harvesting and selling), burning of logging residues and removal of invasive alien species. In addition to this, in one project site a fence was built to permit continuous management by sheep grazing. Grazing prevents undergrowth and will help to retain the results of habitat restoration.

The area restored in each project site varied somewhat from the area foreseen in the GA, for the same reasons as in case of Action C1. Site 25 Vanajaveden lintualueet will be managed by grazing after the project to maintain the restoration results. Maps of the restored sites where Action C2 has taken place are enclosed as Annex 142. Timber sales income for the C2 restoration site where timber was harvested and sold is presented in Annex 143.

Deliverable (D) or Milestone (M)	Name	Foreseen deadline in the application	Extended deadline agreed with EC	Time of actual delivery	Location of the deliverable within reports
М	40 ha of White- backed Woodpecker habitats restored	31.10.2013		23.12.2013	
М	77 ha of White- backed Woodpecker habitats restored	31.8.2016		31.5.2015	

5.1.8. Action C3. Restoration of semi-natural grasslands

Foreseen in the GA*:

In total 422 ha of semi-natural grasslands in 31 sites will be restored by the end of the project.

* After the modifications approved by the EC in the CLs of 19 September 2014 and 20 July 2015, and the Supplementary Agreement No 1 to Grant Agreement, approved by the EC in CL of 12 May 2016.

Outcome: Action successfully completed and target exceeded. (Implementation start Sept 2011; end Dec 2016)

Semi-natural grassland habitats were restored in 451 ha in 31 project sites. Restoration methods included removal of undergrowth and trees, building of fences and other infrastructure to enable continuous management by grazing, and removal of invasive alien species. In most cases grazing was started in the restored sites to secure the long-term management of the sites. More detailed information on restoration of semi-natural grasslands in each project site can be found in Annex 145. Action C3 was mainly implemented by coordinating beneficiary PWF, but associated beneficiary WWF participated by organizing volunteer camps. PWF also organized shorter volunteer events and also the Senior Ranger events (Action D5) contributed to restoration of semi-natural grasslands. Volunteer work was essential for completing this action, because in most sites restoration required large amount of manual work, e.g. in collection and burning of logging residues.

Of the original 29 sites in the GA, the site 6 Mustavuoren lehto could not be restored due to unfavorable natural conditions. In many other sites restoration could be done in smaller than expected area. However, compensatory areas were restored in several project sites and in three additional N2000 sites (site 62 Laajalahden lintuvesi, site 64 Laukkallio and site 66 Rainionmäki ja Sammalsuonpelto).

Maps of the restored sites where Action C3 has taken place are enclosed as Annex 142. Timber sales income for the C3 restoration sites where timber was harvested and sold are presented in Annex 143.

Deliverable (D) or Milestone (M)	Name	Foreseen deadline in the application	Extended deadline agreed with EC	Time of actual delivery	Location of the deliverable within reports
М	120 ha semi- natural grasslands restored	31.10.2013		31.10.2013	
м	409 ha semi- natural grasslands restored	31.12.2016		31.12.2016	

5.1.9. Action C4. Parnassius mnemosyne reintroduction

Foreseen in the GA*:

The objective of action C4 was rephrased to include two instead of three Natura 2000 sites where Clouded Apollo reintroduction will be carried out. The reason was that the reintroductions realized in three project sites in 2012 resulted in failure by summer 2015, and reintroduction was repeated in summer 2016 in two Natura 2000 sites.

* After the modifications approved by the EC in the CLs of 19 September 2014 and 20 July 2015, and the Supplementary Agreement No 1 to Grant Agreement, approved by the EC in CL of 12 May 2016.

Outcome: Action completed. (Implementation start June 2012; end June 2016)

The action was completed in June 2012 in two N2000 sites (two subsites in project site 16 Rekijokilaakso, one subsite in project site 17 Paimionjokilaakso) and repeated in June 2016 in two N2000 sites (16 Rekijokilaakso and 63 Sipoonkorpi). The details of the year 2012 reintroductions were reported in the Mid-term Report in 2013, and in the PR No 1 2015 it was noted that in the Paimionjokilaakso site the reintroduction probably had not succeeded. Monitoring action E7 proved that in summer 2015 there were only very few Clouded Apollos left in one of the subsites in Rekijokilaakso, whereas in the other two reintroduction sites the butterflies were absent. For these reasons we suggested that the reintroduction should be repeated in one subsite in site 16 Rekijokilaakso and also in new N2000 site 63 Sipoonkorpi. This change was approved in the Supplementary Agreement No 1 to the GA. In June 2016 Clouded Apollos (20 fertile females/site) were reintroduced to Haali subsite in Rekijokilaakso and to Hindsby subsite in Sipoonkorpi. By the end of the project it was still too early to assess how successful these new reintroductions will be, but at least the first monitoring visits in 2016 and 2017 gave positive signals. Detailed description of the actions C4 and E7 is in Annex 146.

Deliverable (D) or Milestone (M)	Name	Foreseen deadline in the application	Extended deadline agreed with EC	Time of actual delivery	Location of the deliverable within reports
М	Parnassius mnemosyne reintroduction completed	31.7.2016		31.7.2016	

5.1.10. Action C5. Restoration camps for volunteers

Foreseen in the GA*:

In total 14 restoration camps will be organized in 5 Natura 2000 sites. Number of camp days will be 86 and the habitat restoration will cover 35 ha.

* After the modifications approved by the EC in the CLs of 26 June 2012, 31 March 2014 and the Supplementary Agreement No 1 to Grant Agreement, approved by the EC in CL of 12 May 2016.

Outcome: Action successfully completed and target exceeded. (Implementation start June 2012; end July 2016)

Restoration camps for volunteers were organized by the associate beneficiary WWF Finland in collaboration with PWF. In total 15 camps equalling 107 camp days were organized in 5 Natura 2000 sites, and the restoration activities covered 39 ha. These hectares are included in the totals

reported for actions C1 and C3. The sites, dates as well as the number of camp days, participants and man-days are listed in the Annex 147. WWF and PWF personnel participated in all camps as camp leaders and supervisors, and also took part in the restoration work. Longer camps were 8 days long, which included 5 full days working on habitat restoration, 2 days for logistics and 1 day for rest and recreation. Shorter camps were 3-4 days and included at least 2-3 working days. In total the volunteers contributed well over 1100 working days to the restoration actions C1 and C3, which was a truly remarkable input to the project.

Another important objective of the volunteer camps was environmental education, which was integrated to the camp programme. To achieve this objective and to offer well deserved break from heavy physical work, the longer camps included a day trip to a nearby site of natural and cultural interest. These day trips are an integral part of WWF volunteer camp experience, regardless of whether the camps are organized as part of a LIFE+ project or not. One notable result of the volunteer camps was also the extensive media coverage they got throughout the project.

The number of camps and the targeted project sites partly changed from what was foreseen in the GA; volunteer camps were organized in project sites where there was a pressing need for manual workforce and volunteer work was the most cost-effective way of carrying out the restoration in the targeted sites. Volunteers carried out restoration work that required lot of manual labour, e.g. removal of undergrowth, burning of branches and debris and building of fences for grazing animals. It should be noted that by mistake no formal approval was requested for the 15^{th} volunteer camp, although the Progress Report No 2 mentioned that Action C5 will include 15 restoration camps instead of the 12 camps in the GA, and the last camp will be organized in summer 2016 in Långholmen subsite in project site 1. However, exceeding the action objectives did not result in significant overspending, since the cost of the action (204 074€) was only slightly higher than foreseen (202 276€).

Deliverable (D)	Name	Foreseen	Extended	Time of	Location of the
or Milestone		deadline in the	deadline	actual	deliverable within
(M)		application	agreed with EC	delivery	reports
М	5 restoration	31.10.2013		31.10.2013	
	camps				
	completed				
М	12 restoration	31.8.2016		31.8.2016	
	camps				
	completed				

5.1.11. Action E5. After-LIFE conservation plan

Foreseen in the GA:

An After-Life conservation plan will be produced to ensure that the results of the project will have a long-standing influence on the conservation of the target habitats and species.

Outcome: Action successfully completed. (Implementation Dec 2016)

After-LIFE conservation plan is enclosed as Annex 148.

Deliverable (D) or	Name	Foreseen	Extended	Time of actual	Location of the
Milestone (M)		deadline in the	deadline	delivery	deliverable
		application	agreed with EC		within reports
D	After-LIFE	31.3.2017		Final Report	Annex 148 of
	conservation				the FR
	plan				

5.1.12. Action E6. General monitoring of restoration success

Foreseen in the GA*:

General monitoring of restoration success will be conducted in all project sites where actions C1–C3 will be carried out. In addition, in 5-7 herb-rich forest sites (action C1) a more detailed long-term monitoring of vascular plants will be done. In 8 White-backed Woodpecker habitats (action C2) the presence and nesting success of the woodpeckers will be monitored by camera-trapping. In 10 semi-natural grassland sites (action C3) a more detailed long-term monitoring will be done including data gathering of tree stand structure, vascular plants and butterflies. The results will be available by the end of the project.

* After the modifications approved by the EC in the CLs of 20 July 2015 and 31 October 2016, and Commission email on 3 February 2016.

Outcome: Action successfully completed. (Implementation start Oct 2011; end Dec 2016)

The final report on general monitoring is enclosed as annex 149 and as a hard copy. Monitoring was carried out according to the Monitoring plan (action A3). General monitoring of the restoration success was conducted at all habitat restoration sites to get an overall picture of the development of the site following the restoration and to facilitate adaptive management based on the monitoring results. Restoration success was assessed by evaluating the direct technical changes on habitat structure, such as canopy layer coverage and tree species composition of the site. The monitoring visit was either part of the final inspection when the restoration work was completed, or a separate visit was done 1-4 years after the restoration work. In selected sites more detailed monitoring was carried out.

In most cases the detailed monitoring data set collected so far includes one sampling before restoration and a second sampling 1-3 years after the restoration measures. These data are not yet sufficient for statistical analyses, but they will be completed in the future in order to collect long-term data on the restored sites. Since similar monitoring methods are used by PWF also in restoration sites apart from the LIFE project, the data can also be combined with larger monitoring data sets. In this respect the monitoring data collected from the LIFE project sites will be useful in the long term for improving the restoration work conducted by PWF. For the

immediate purposes of the LIFE project, the data sets were sufficient for making conclusions about the general state of the restored sites, and whether the restoration measures had clear positive or negative effects on the species and habitats. Clear negative impacts were not detected during the monitoring in any of the monitored sites. In general the monitoring results indicated that restoration measures were very successful and even in the most sensitive sites the results were very encouraging.

Herb-rich forests (C1)

Detailed monitoring of herb-rich forest restoration focused on impacts of Spruce removal on understory and ground vegetation. The PWF developed the sampling methodology for detailed monitoring as a part of the Species-rich LIFE, since there was no earlier protocol for specifically monitoring the effects of Spruce removal. Sampling included collection of quantitative data on vegetation, but also basic soil data was collected. Monitoring was carried out in five herb-rich forest sites and in one project site (26 Kaakkosuo-Kivijärvi) data collection was carried out only prior to restoration. Monitoring will be continued after the LIFE project according to the monitoring plan

White-backed Woodpecker habitat (C2)

Monitoring of White-backed Woodpecker habitat was done in all 8 action C2 sites. It included general monitoring of restoration measures using the same methodology as in the herb-rich forest sites. In addition to this, the presence and nesting success of White-backed Woodpeckers was monitored. Monitoring utilized high-definition wildlife monitoring cameras. In the early spring the birds were attracted to feeding sites which had monitoring cameras with a motion sensor installed nearby. Presence of a couple in the early spring is a strong indication that they will attempt nesting in the territory the following summer. The cameras recorded the feeding sites continually for several weeks. In addition to cameras, the birds were also monitored by direct observations during visits to the sites.

The camera trapping methods proved to be highly useful for monitoring the White-backed Woodpecker presence at the restored sites. Only one site was found to be unoccupied by the species during breeding period, but this is most likely misleading information, because the camera was misplaced during the monitoring period. On three sites the territory was inhabited at least by a male or a female and on 4 territories a pair was found. On two sites breeding was verified by a nest found in dead deciduous tree or adults feeding young in field.

Semi-natural grasslands (C3), vegetation

Sites were monitored before management actions and 1-3 years after. The standard protocol for monitoring traditional rural biotopes by PWF was used to allow comparability with previous inventories. Measured variables dealt with vascular plant species of field and ground layer, e.g. the species composition, the proportion of eaten vegetation on the plot, the average height of the vegetation and the proportion of bare soil on the plot.

Detailed monitoring of semi-natural grassland restoration was conducted on 9 project sites. On other 7 project sites monitoring plots were established and sampled before restoration measures,

but the first actual monitoring visit after restoration was not yet done before the end of the project. However, the monitoring will be/has been continued on 5 of these 7 sites even after the LIFE project. In remaining two project sites (sites 1 and 6) no restoration measures could be carried out, precluding monitoring of these sites. Consequently, in total there are 14 semi-natural grassland sites where detailed monitoring is being conducted.

Based on general examination of the monitoring data, restoration measures were successful, but the most important monitoring results will be gained in the long term, when the continuous management of the restored sites has continued for some time and habitat recovery has proceeded further. Changes in species composition will become more evident and indicate whether the restoration and management measures are benefiting the habitat specialist species that indicate good state of the Directive habitat in question.

Semi-natural grasslands (C3), butterflies

Monitoring of day-active butterflies was carried out in 4 N2000 sites (5 sub-sites in total). Detailed monitoring report was produced for sites 16 Rekijokilaakso (subsites Riihipuostaankoski and Kokkapää) 45 Telkkämäki and 46 Kolin kansallispuisto, whereas the monitoring data from sites 7 Porvoonjoen suisto and 51 Tiilitehtaanmäki is maintained by PWF according to the procedure explained in the monitoring plan (Annex 137). The reports for sites 16, 45 and 46 are attached to the monitoring report (Annex 149).

Butterflies were selected for monitoring because they are good indicators of environmental change. Their number of species is high, their biology and distribution are well known, and they react very sensitively to changes in vegetation and other environmental variables. Unfortunately, the number of butterfly monitoring sites was lower than expected, because in some of the sites it was not possible to find taxon experts to carry out the laborious monitoring work, because each site had to be visited 4-7 times during the summer to observe the temporal variation in species composition. Since there are few butterfly specialists in Finland, it was impossible to recruit monitoring experts to some of the more peripheral sites, for example in the archipelago. Moreover, in some parts of Finland there were no experienced experts available to carry out the work.

In any case the butterfly monitoring gave very valuable information, and in the same way as with vegetation monitoring, the value of the data will increase as long-term data is collected from these sites. In all the monitored N2000 sites there were some areas of semi-natural grassland habitats under management already before the Species-rich LIFE project started, and there were also previous monitoring data on butterflies. Furthermore, since 1999 a national butterfly monitoring scheme for agricultural landscapes has been developed by FEI for southern Finland, and it gives background for analyzing the site-specific temporal variation in butterfly abundance.

By combining these data sets it is possible to draw conclusions on the current state of the habitat (e.g. whether there are rare/endangered/habitat specialist butterfly species present), and to record trends in their abundance as the habitat management continues to the future.

Furthermore, since the monitoring is done as transect counts that cover restored, previously managed and not managed areas, monitoring gives a general picture of the influence of different management schemes on butterfly abundances. Already based on the first monitoring results it was possible to give some recommendations for habitat management based on butterfly species assemblages. For example, in the Rekijoki sites it was noted that some of the butterfly species would benefit if parts of the grazed areas would have either less intense grazing, or mowing instead of grazing as the main management method. These considerations will be taken into account in the future management of the sites, and their influence can be assessed at a later stage once more monitoring data is collected.

Deliverable (D) or	Name	Foreseen	Extended	Time of actual	Location of the
Milestone (M)		deadline in the	deadline	delivery	deliverable
		application	agreed with EC		within reports
D	Monitoring	31.12.2016		Final Report	Annex 149 of
	report of				the FR
	restoration				
	success				

5.1.13. Action E7. Monitoring of Parnassius mnemosyne reintroduction

Foreseen in the GA:

Monitoring of *Parnassius mnemosyne* reintroduction will provide quantitative information on the growth of the new populations. It will also provide information for making conclusions about the success of the reintroductions and potential need for repeating the actions if unsuccessful in the first year. Population monitoring in Stensböle, Porvoo will produce valuable information on short term effects of habitat restoration on Clouded Apollo populations.

* After the modifications approved to action C4 by the EC in the CLs of 19 September 2014 and 20 July 2015, and the Supplementary Agreement No 1 to Grant Agreement, approved by the EC in CL of 12 May 2016.

Outcome: Action successfully completed. (Implementation start March 2012; end Sept 2016)

Monitoring of Clouded Apollo was carried out by associated beneficiary FEI in 2012-2016. Monitoring of the success of Clouded Apollo reintroductions was carried out in all three reintroduction sites in project sites 16 and 17 since summer 2012. It focused on habitat monitoring (occurrence of larval host plant *Corydalis solida*) in the spring and on the occurrence of the adult butterflies in the summer. In addition to this, Clouded Apollo was monitored in project site 7, where it had been reintroduced already before this LIFE project. Habitat restoration was carried out in site 7 (see Action C3), and monitoring focused on detecting the influence of habitat restoration on the population size. Details of the monitoring methods and results are summarized in Annex 146.

Monitoring data was essential for detecting the failure of the reintroductions carried out in summer 2012, and for identifying the reasons for the failure. This allowed us to assess the feasibility of repeating the reintroductions, and Clouded Apollos were reintroduced to two sites in summer 2016. The newly reintroduced populations in project sites 16 Rekijoki and 63 Sipoonkorpi were monitored for a short period after the reintroductions. The monitoring of the reintroductions will be continued by FEI even after the LIFE project, depending on availability of funding.

Deliverable (D) or	Name	Foreseen	Extended	Time of actual	Location of the
Milestone (M)		deadline in the	deadline	delivery	deliverable
		application	agreed with EC		within reports
D	Monitoring	31.12.2016		Final Report	Annex 146 of
	report of				the FR
	Parnassius				
	mnemosyne				
	reintroduction				

5.2.Dissemination actions

5.2.1. Objectives of dissemination actions

Main objectives of the dissemination plan were:

- Communicating the importance of the target habitat types and their species-richness for maintaining biological diversity
- Importance of the work carried out by project beneficiaries for maintaining Finnish nature
- Activating people and communities to participate in the management of the target habitats and species
- Producing pleasurable experiences to people
- Sharing knowledge and experiences about biotope restoration and management

5.2.2. Action D1. Media cooperation

Foreseen in the GA:

Media will be actively contacted during the project. The project has been presented in different media at least 160 times by the end of the project.

Outcome: Action successfully completed and target exceeded. (Implementation start Sept 2011; end Dec 2016)

The project was presented in different media 323 times, including all online articles. Online articles included 21 publications that were not published in print media. All publication objectives were met or exceeded except for the radio news/reports (table 4). All project beneficiaries participated in Action D1 and in total published 53 press releases and organized 17 media excursions. List of media coverage and list of press releases are included in Annexes 150 and 151, respectively. These annexes also include some clips of published articles and samples of press releases. Press releases were mainly published nationally using the Cision publishing platform, but in some cases the press releases were targeted directly to selected local smaller newspapers. In addition to the articles published in newspapers and other popular media, there were also several publications in scientific journals and other professional media.

Type of media	Objective in GA	Outcome
Press releases	20	53
General public articles in regional and national press	30	45
General public articles in local press	50	57
Specialized press article	10	12
Internet articles (including 21 articles published only online)	60	121
Media excursion or educational events	15-20	17
TV news/reportage	5	10
Radio news/reportage	10	8

Table 4. Media objectives of the project and summary of the results.

Media coverage was screened by media monitoring system of Metsähallitus (M-Brain media observation for Metsähallitus until 31.12.2012 and Merilkon Oy/Meedius International Oy media observation for Metsähallitus since 1.1.2013) and other search engines such as Google. It is probable that many articles in local newspapers were missed in the media monitoring and the real number of media appearances is likely much higher than 323. Also, many articles that did not mention the LIFE project were published in different media. The press releases were well picked up by the media and almost all of them resulted in publications.

Majority of the articles on the project were either neutral or positive in nature and dealt very broadly with many different aspects of the project. Some negative articles were published on prescribed burning of heath vegetation on Jurmo Island, but in these cases the LIFE project was not mentioned in the articles. The media excursions were successful and resulted in numerous excellent articles.

Deliverable (D) or Milestone (M)	Name	Foreseen deadline in the application	Extended deadline agreed with EC	Time of actual delivery	Location of the deliverable within reports
M	The project has been presented in the different media at least 80 times.	31.10.2013		23.12.2013	
М	The project has been presented in the different media at least 160 times.	31.8.2016		15.7.2016	

5.2.3. Action D2. Restoration trails

Foreseen in the GA*:

Two restoration trails will be completed; one will be established in Nuuksio (site 5) and another in Teijon ylänkö (site 14). A small parking area will be constructed in Sahajärvi sub-site of Teijon ylänkö.

* After the modifications approved by the EC in the CLs of June 26, 2012 and March 31st 2014.

Outcome: Action successfully completed. (Implementation start Jan 2012; end June 2016)

The restoration trails in projects sites 5 Nuuksio and 14 Teijon ylänkö were completed and the parking area was constructed in Sahajärvi. PWF was responsible for the action. In Nuuksio the content of the information boards is available online for download to mobile devices using QR-codes found along the trail. In Teijo there are traditional framed information boards erected along the restoration trail. The deadline of the action needed to be extended twice (agreed with EC in the above mentioned CLs), but except for the delayed time table the action was very successful.

A preliminary description, photos and layout of the restoration trail information boards were delivered with the Progress Report No 1. Some additional information was requested in the CL 31 October 2016 (photos of LIFE and Natura 2000 logos in Nuuksio trail). A complete report documenting the trails is in Annex 152. Project logos have been added also to the Nuuksio restoration trail website (www.luontoon.fi/nuuksio/ennallistajanjaljet).

Deliverable (D)	Name	Foreseen	Extended	Time of	Location of the
or Milestone		deadline in the	deadline agreed	actual	deliverable within
(M)		application	with EC	delivery	reports
М	Two restoration	31.12.2012	31.12.2014	Final	Annex 152 of the
	trails complete			Report	FR

5.2.4. Action D3. Project communication

Foreseen in the GA*:

Project communication includes project web pages (in Finnish, English and Swedish), with a special website on semi-natural grasslands, and image preparation and maintenance. The project web pages will be established in 2012 and the section on semi-natural grasslands in 2013.

* After the modifications approved by the EC in the CLs of 31 March 2014, 20 July 2015 and 31 October 2016.

Outcome: Action successfully completed. (Implementation start Sept 2011; end Dec 2016)

Project website in Finnish was opened 5 April 2012 and English and Swedish sections were added on the website in May 2012: http://www.metsa.fi/luonnonhoitolife. The special section on semi-natural grasslands was launched in October 2013: http://www.metsa.fi/perinneymparistokohteita. Project website includes a link to the LIFE webpage, as requested in CL June 26, 2012. Information on the project progress and the most important project deliverables were updated on the website. The action was mainly carried out by PWF, although the associated beneficiaries also contributed content to the website.

Only ca 15 still photos from professional photographer were acquired, e.g. photos of endangered species targeted by project actions. In terms of photos of the project actions and the targeted habitats there was little need for additional photos, because large amounts of good quality photos were available at no cost from the project staff of PWF and FEI. These were used for the website and for other communication purposes, and still photos were made available to the press with some of the press releases. The CL on 20 July 2015 accepted that the milestone for the action D3 "40 photographs of high quality purchased" can be removed.

In addition to the photos, we acquired high quality video material (with full copyright) shot in a Senior Ranger event (Action D5) in Korteniemi traditional farm in August 2013. In 2014 another video was produced at project site 15 (Saaristomeri) on Jurmo Island, where semiprofessional videographer shot material with a drone-transported camera to capture the breathtaking scenery of the island and the restoration work in action (Action C3). Both videos are linked to the project website and are also available in youtube.com. The video from Jurmo won the first prize in the 2015 M3M Competition of the Association of Finnish Nature Photographers

(https://www.luontokuva.org/index.php/ajankohtaista/297-jaakko-ruolan-talvipaivilla-palkittu-viedeo-nyt-utubessa).

Invasive alien species was one of the targets of project's concrete conservation actions, and there was need for simple and effective pictures on the topic. For communication purposes we acquired the right to use three drawings of invasive alien species from illustrator Seppo Leinonen. Moreover, an illustration of the restoration process in semi-natural grasslands through cooperation of various actors was acquired from illustrator Ika Österblad for use in the Layman's report.

Annex 153 includes the video and photos of Jurmo Island restoration, photos acquired from photographers and other photos taken by project personnel, and the illustrations by Seppo Leinonen and Ika Österblad.

Deliverable (D) or Milestone (M)	Name	Foreseen deadline in the application	Extended deadline agreed with EC	Time of actual delivery	Location of the deliverable within reports
М	Project web pages in use	29.2.2012		5.4.2012	

М	Section on semi- natural grasslands in use on the project	31.10.2013		22.10.2013	
	web pages				
М	c. 40 high quality	31.10.2013	Milestone		
	photos are achieved		removed (CL		
			20.7.2015)		

5.2.5. Action D4. Information tables

Foreseen in the GA*:

Information tables containing information about the project and restoration measures will be established in the project sites. There will be 100 temporary information tables, and a minimum of 25 permanent information tables in at least 18 project sites.

* After the modifications approved by the EC in the CLs of 31 March 2014 and 31 October 2016.

Outcome: Action successfully completed. (Implementation start Sept 2011; end Dec 2016)

Temporary information tables were set up in all restoration subsites where habitat restoration was carried out and where there were potentially visitors to the restoration areas. These sites include areas where there is recreational use (e.g. restoration work is done close to hiking trails or other recreational structures) and areas near roads or settlements. Samples of these temporary notice boards were included in the Mid-term report in 2013 and additional ones in Annex 154. PWF was responsible for the action.

Permanent information tables were set up on 19 Natura 2000 sites where there are many visitors (table 5). Sites and the number of permanent information tables (in total 28) in each site are listed in the table below. Annex 155 includes photos of the permanent information tables in the field, as requested in the CL of 31 October 2016. We were not able to acquire photos from the field from sites 51 and 52, but the print layouts are included for these info tables in Annex 155. The exact locations of the permanent information tables in the 18 project sites are included on the maps of Annex 142, as requested in the CL of 31 October 2016.

Site number	Site name	Permanent info tables
2	Meiko-Lappträsk	1
3	Medvästö-Stormossen	3
4	Lohjanjärven alueet	2
5	Nuuksio	3
7	Porvoonjoen suisto	1

Table 5. List of project sites where permanent information tables were installed.

Site number	Site name	Permanent info tables
14	Teijon ylänkö	1
15	Saaristomeri	4
18	Kemiönsaaren kalliot	1
29	Kärppäjärven alue	1
32	Niukkala	1
33	Linnansaari	1
37	Anttilan tila	1
43	Kolmisoppi-Neulamäki	1
45	Telkkämäki	1
46	Kolin kansallispuisto	2
51	Tegelbruksbacken	1
52	Oulanka	1
53	Syöte	1
58	Martinselkonen	1
	TOTAL	28

Deliverable (D) or Milestone (M)	Name	Foreseen deadline in the application	Extended deadline agreed with EC	Time of actual delivery	Location of the deliverable within reports
М	59 information tables have been established in the sites	31.8.2016		Final Report	Annex 155 of the FR

5.2.6. Action D5. Senior Ranger Events in Natura 2000 – areas

Foreseen in the GA:*

A total of 16 Senior Ranger Events involving altogether approximately 200–400 participants will be organized by the end of the project.

* After the modifications approved by the EC in the CLs of 26 June 2012, 31 March 2014 and 19 September 2014.

Outcome: Action successfully completed and target exceeded. (Implementation start July 2012; end August 2014)

The action was completed by PWF. In total 17 Senior Ranger events were organized in 8 different N2000 sites. The duration of the events was 0,5-1 days, in total 16 days. The number of participants was ca 450 (see table 6 below).

Project site	Date	Duration (days)	Number of participants
5 Nuuksio National Park	12.9.2013	0,5	36
Seitseminen National Park, Kovero	28.7.2012	1	17
Seitseminen National Park, Kovero	6.6.2013	1	70
Seitseminen National Park, Kovero	18.9.2013	1	46
Seitseminen National Park, Kovero	19.8.2014	1	30
Liesjärvi National Park, Korteniemi	22.8.2012	1	20
Liesjärvi National Park, Korteniemi	22.8.2013	1	42
28 Isojärvi National Park, Huhtala	27.7.2013	1	24
33 Linnansaari National Park	6.7.2013	1	ca 10
45 Telkkämäki	5.9.2012	0,5	25
45 Telkkämäki	5.9.2013	1	12
45 Telkkämäki	5.9.2014	1	15
46 Koli National Park	14.9.2012	1	10
46 Koli National Park	24.5.2013	1	19
46 Koli National Park	12.6.2014	1	20
52 Oulanka National Park.	20.7.2013	1	36
52 Oulanka National Park.	19.7.2014	1	18
Number of SR events in total: 17			447 participants

Table 6.	Senior	ranger	events	organized	in	Natura	2000 s	sites

The programme of the events varied based on the facilities and the group of participants. In all cases the participants were offered lunch or snacks, and if necessary also transportation to the field site was provided. In traditional farms (Seitseminen National Park, Liesjärvi NP, Isojärven NP, Linnansaari NP and Telkkämäki) the activities were mainly related to old farming traditions, such as cultivation and harvesting of slash-and-burn sites and haymaking. In Oulanka National Park the events were organized in semi-natural grassland restoration sites along the Oulanka River. After practical restoration work the participants enjoyed live music and dancing on the beach along the river bank. In the beginning of the project it was a bit challenging to find ways to publicize the SR events in order to recruit participants for them (PWF has organized very few specialized events for elderly people before SR events), but finally the events were a huge success in almost all the project sites, and will be continued in the future in some of the sites.

Deliverable (D) or	. ,		Extended		
Milestone (M)		deadline in the	deadline	delivery	deliverable
		application	agreed with EC		within reports
М	Restoration	31.12.2013	Milestone was		
	exhibition		removed (CL		
	stands		19.9.2014)		
	completed				

5.2.7. Action D6. Layman's report

Foreseen in the GA:

A layman's report will be produced in paper (500 copies) and electronic format at the end of the project.

Outcome: Action successfully completed. (Implementation after the project's end date)

Layman's report was produced in Finnish and English and is available at the project website in electronic format. Since earlier LIFE projects have shown that the need for paper copies is limited, the report was produced as 100 copies of each language version, and additional prints will be produced as necessary. An illustration on the restoration process in semi-natural grasslands through cooperation of various actors was acquired from illustrator Ika Österblad for use in the Layman's report. Since the report was produced after the end of the project, the action did not incur other costs to the project. Electronic versions and 5 printed copies of each language version are attached to this report (Annexes 156 and 157).

Deliverable (D) or Milestone (M)	Name	Foreseen deadline in the application	Extended deadline agreed with EC	Time of actual delivery	Location of the deliverable within reports	
D	A Layman's report	31.12.2016		Final Report	Annexes 156 and 157 of the FR	

5.3.Evaluation of project implementation

Species-rich LIFE met or exceeded all the project objectives, as can be seen from the table below.

Task	Task Foreseen in the revised proposal		Evaluation
A1 Restoration planning	39 plans for 683 ha, inventories of species (29 sites) and cultural heritage (32 sites)	39 plan for 915 ha, inventories of species (29 sites) and cultural heritage (31 sites) completed	Objectives exceeded. All necessary inventories were carried out and restoration plans of varying detail were prepared to enable cost- efficient and ecologically effective restoration (Actions C1, C2 and C3).
A2 Management planning	3 plans covering 4 N2000 sites	3 plans covering 13 N2000 sites	Objectives exceeded. Additional N2000 sites were included in the management plans, but the costs incurred for these sites

Task	Foreseen in the	Achieved	Evaluation
	revised proposal		were only partly registered to
A3 Monitoring and communication plans	Monitoring and communication plans prepared and updated	Plans prepared and updated, attached to the FR	the project. Objectives met. The plans were utilized throughout the project for implementing Actions D1, D2, D3 and E6.
A4 Clouded Apollo reintroduction plan	Detailed plan prepared, necessary permits acquired	Plan prepared in 2012, updated in 2016	Objectives met. Plan and permits were updated in 2016 to allow for a renewal of reintroductions.
A5 Preparatory training	4 training workshops, 80 participants	4 workshops, 93 participants, 1 online training	Objectives exceeded. Participants included PWF restoration staff and professionals from various other organizations.
C1 Herb-rich forest restoration	495 ha restored in 35 N2000 sites	594 ha in 35 sites	Objectives exceeded. The efficient and economical use of best practises enabled the restoration of a considerably larger area than was anticipated.
C2 White-backed Woodpecker habitat restoration	77 ha restored in 8 sites	82 ha restored in 8 sites	Objectives exceeded. Based on monitoring results the restorations actions were successful.
C3 Semi-natural grassland restoration	422 ha restored in 31 sites	451 ha restored in 31 sites	Objectives exceeded. Restoration was successful and most sites will be managed by grazing to maintain the project results in the future.
C4 Clouded Apollo reintroduction	Clouded Apollo reintroduced to 2 sites	Reintroduction to 2 sites	Objective met. Reintroductions to three sites in 2012, repetition in 2016 in two sites to compensate for failed reintroductions. Monitoring continues to secure the results.
C5 Restoration camps	14 restoration camps, 86 camp days	15 camps, 107 camp days	Objectives exceeded. Restoration camps were great success and enjoyment for the participants, while also make important contribution to habitat restoration.
D1 Media cooperation	160 media hits	323 media hits	Objectives exceeded. Numerous press, TV and radio appearances locally and nationally throughout the project's duration.
D2 Restoration trails	2 trails	2 trails	Objective met. Trails introducing habitat restoration to visitors in two national parks.
D3 Project communication	Project website in Finnish, English and Swedish	Website operational and updated regularly	Website and other produced material/services effectively

Task	Foreseen in the revised proposal	Achieved	Evaluation
			disseminated information on the projects progress and results during the project.
D4 Information tables	100 temporary info tables, 25 permanent	>100 temporary, 27 permanent	The temporary boards highlighted the project, LIFE and N2000 network during the project and the permanent boards will continue to do so in the future.
D5 Senior Ranger events	16 events, 200-400 participants	17 events, 450 participants	The events brought social connections and happiness for the elderly participants, at the same time highlighted the LIFE project and the values of the N2000 network.
D6 Layman's report	1 report	Layman's report produced and attached to the FR.	Objectives met. Layman's report will be valuable communication tool for years to come, and will be used for highlighting the importance of the target habitats and their restoration.
E1 Project coordination	Necessary administrative staff recruited, fluent coordination of the project	PM, Regional Coordinators and financial staff recruited, fluent coordination of the project	Objectives met. Frequent contact between the PM, Coordinators and project staff ensured the timely progress of the project.
E2 Advising and project group	Advising group and two project groups formed, meetings annually	Project advising group and two project groups formed, meetings annually	Advising group meetings including all beneficiaries were needed for efficient coordination of the project, flexible working of the project groups was essential for timely progress of project actions in practice.
E3 Networking	Networking with LIFE and other projects	Numerous international and national meetings attended	Objectives exceeded. The project, LIFE and N2000 network were highlighted and the lessons learned during the project disseminated widely throughout the project.
E4 Auditing	Audit report	Audit report attached to the FR.	Objectives met.
E5 After-LIFE Conservation Plan	After-LIFE plan	After-LIFE plan attached to the FR.	Objectives met.
E6 General monitoring of restoration success	General monitoring on all restored sites and detailed monitoring on 5-7 action C1, 8 action C2 and ca 15 action C3 sites	General monitoring on all restored sites, detailed monitoring on 5 action C1, 8 action C2 and 14 action C3 sites	Objectives met. Information collected during the monitoring visits will be used as background information in case problems in the recovery of the habitats is noticed in years after the project. Monitoring will be

Task	Foreseen in the revised proposal	Achieved	Evaluation
			continued after the LIFE project.
E7 Monitoring of Clouded Apollo reintroductions	Quantitative information on population growth	Quantitative information collected and utilized for assessing the success of reintroductions	Objective met. Monitoring was essential for detecting the failure of the first reintroductions and identifying the reasons for the failure. It also allowed assessment of the feasibility of repeating the reintroductions. Monitoring will be continued after the LIFE project.

The project could achieve or exceed the objectives above all because of the dedicated experts in the project staff and the long experience all the project beneficiaries have in working for nature conservation. There were cost-efficient ways and best practices already in place at the start of the project, and whenever problems were encountered, they were tackled by professionals in a timely manner.

PWF had been working on habitat restoration for several decades before the present LIFE project, and the experience was necessary for cost-efficient implementation of restoration planning (Action A1) and concrete conservation actions (C1-C3, C5). It was also very useful for finding flexible ways to resolve the practical challenges encountered in many of the restoration sites. PWF has project staff spread throughout Finland with great knowledge of the local conditions and Natura 2000 sites. This was beneficial for finding compensatory sites in cases where restoration could not be completed in the sites originally planned. Restoration methods were already well tested before the project and the project did not encounter any major technical problems. Despite some delays caused by difficult weather conditions (timber harvesting by machines was difficult with little or no frost and snow in the winter), the majority of project actions progressed as anticipated.

In some of the Species-rich LIFE project sites restoration targeted highly sensitive habitats where few or no restoration measures had been carried out before the project. These include e.g. the habitat type 6280 *Nordic alvar and precambrian calcareous flatrocks* and 4030 *European dry heaths*. The promising experiences gained through the project will be valuable for future restoration efforts in these habitats, and have been already replicated by PWF. Monitoring of restoration sites (Action E6) will continue after the project and will direct the future management of the sites. In most cases the Natura 2000 habitat characteristic will develop in the years to come, but especially in some of the semi-natural grassland sites excellent results were evident already during the project's duration.

WWF could manage the restoration camps (Action C5) efficiently and target them flexibly to the sites where most restoration volunteer work was needed. There was great interest in for the

restoration camps and there were always many more volunteers willing to participate than could be accommodated to the camps. Volunteer camps were also a success in spreading the message of the LIFE+ Nature project in an enjoyable manner.

FEI was responsible for Clouded Apollo reintroductions (Action C4) and related planning and monitoring work, and the problems encountered while implementing the reintroductions could be overcome by rapid and well-informed compensatory actions. The problems were related to unfavourable weather conditions that persisted throughout the project cycle, but it was clearly seen from the monitoring results that the reintroduction methodology was correct and working well. Repeating the reintroductions was well founded on the monitoring results and overall consideration of the status of Clouded Apollo's population status in general.

The dissemination work in the project was successful and effective and there were no major drawbacks. The project, LIFE and N2000 network were present in all major/relevant medias – TV, radio, national, regional and local newspapers and internet – over 300 times during the project. Participatory actions targeting the general public (volunteer camps C5, Senior Ranger events D5) were great successful and highly appreciated by the attending people. This will ensure that good words of the project, LIFE and N2000 network will be spread widely not only during the project but also long after the project has ended. The information in dissemination materials produced by the project, e.g. the permanent information boards set to the project sites, will also spread of information for many years to come.

The first Request for an Amendment was necessary for achieving the project objectives of the following actions

- C4 Clouded Apollo reintroduction: The RA included repetition of the action C5 in one of the three target sites and in one additional N2000 site. Without this change the action C4 would not have achieved its objectives.
- In the RA three additional Natura 2000 sites were proposed to the project to find sufficient compensatory areas to fulfill the objective of action C3 Semi-natural grassland restoration. Action C3 could finally exceed the restoration objectives, because when the detailed maps of the restored areas were produced for the FR, it became evident that in some of the project sites the restored areas were somewhat larger than previously thought.
- One new N2000 site was proposed in order to strengthen the conservation measures of action C1 Herb-rich forest restoration. As a consequence, action C1 is expected to have much stronger positive impact on the target species *Cucujus cinnaberinus* than would have been otherwise possible.

In the second RA a new associated beneficiary Metsähallitus Metsätalous Oy was incorporated to the project. This was necessary for including the restoration costs incurred by the new beneficiary during the period April-December 2016.

5.4 Analysis of long-term benefits

5.4.1. Environmental benefits

5.4.1.1. Direct /quantitative environmental benefits

The project restored herb-rich forests on 594 ha, White-backed Woodpecker habitat on 82 ha and semi-natural grasslands on 451 ha. All restored areas are either classified as HD Annex I habitats or are habitats of Birds Directive Annex I species (i.e. White-backed Woodpecker, *Dendrocopos leucotos*) or Habitat Directive species (e.g. *Parnassius mnemosyne, Cucujus cinnaberinus, Euphydryas aurinia, Cypripedium calceolus* and *Artemisia campestris subsp. bottnica*). A striking improvement of target habitats could be seen in many restored sites already during the project, especially in some of the semi-natural grassland sites. In herb-rich forests the recovery of the target habitats is generally slower, but we expect that within few years the monitoring of vegetation and fauna in the restored sites will reveal significant changes in these sites also. In the coming years the restored areas will continue to increase in their natural value and become both structurally (habitats and species) and functionally (e.g. soil properties, nutrient circulation, lighting conditions) closer to natural state.

Furthermore, the restoration actions targeting specific habitats and species were complementary. In many cases White-backed Woodpecker habitat restoration also benefits semi-natural grassland species and *vice versa*. For example, in the project site 37 Anttilan tila the White-backed Woodpecker was sighted for the first time in the spring 2015. The species was observed in semi-natural grassland restoration area were dead wood had been produced as part of the restoration. Also in the project site 3 Medvastö-Stormossen there is possibly a nesting White-backed Woodpecker couple in one of the restored semi-natural grassland sites.

The sites included in the project were selected based on high potential for positive response to restoration, and an urgent need for restoration to maintain characteristic species and to prevent further habitat degradation. In case of semi-natural grasslands, most of the restored sites necessarily required LIFE funding for initial restoration measures, because there would not have been sufficient funding available by other means. After restoration measures majority of the sites are now managed by grazing, which in most project sites is financed by Agri-Environment Scheme (see Annex 145 for details). Thus, the LIFE funding for initial restoration, whose results will be maintained in the future by funding from the Agri-Environment Scheme.

Long-term management of several Natura 2000 sites over the area of over 10 000 ha was assured by management planning, and restoration plans were compiled for 915 ha. The planning process included extensive inventories of habitats, species and cultural heritage sites in the Natura 2000 areas. At the end of the project we know much more about the conservation values of the sites and how to ensure their successful conservation and management in the future.

The attitude of general public towards habitat restoration, the targeted habitats and the Natura 2000 sites, and their importance for nature conservation, were positively impacted by project's dissemination actions. Especially influential throughout the project was the hands-on involvement of hundreds of volunteers, senior citizens, farmers and other partners in habitat restoration and management.

The project actions contributed towards the biodiversity targets of the EU Biodiversity Strategy to 2020, especially the target of restoring at least 15% of degraded ecosystems. As a result of project actions, the extent of targeted habitats and habitats of targeted species will be enlarged and/or the habitat quality and structure improved. Consequently, the project actions will improve the connectivity and coherence of the Natura 2000 network and enhance the resilience of targeted habitats and species to climate change. National value of the project is highlighted by the fact that the restored habitats are among the most species-rich and most severely threatened habitat types in Finland.

Final table of indicators for Species-rich LIFE is included in Annex 165.

5.4.1.2. Relevance for environmentally significant issues or policy areas

The project concentrated on implementing the Habitat Directive. The project areas were situated across Finland and formed a small but representative sample of unique Finnish ecosystems. The project areas covered sites chosen from entire Finnish N2000 network that most urgently needed active restoration and other project actions to prevent the impacts of degradation. On these N2000 sites restoration actions were undertaken on over 1 000 ha of HD Annex I habitats (see above). In the coming decades this will increase the representativeness of the habitats significantly and help to reach a favourable conservation status of the habitats, thus increasing the coherence and quality of the N2000 network significantly. HD Annex II, IV and V and Birds Directive Annex I species were also positively affected as the breeding and living conditions of the species are improved in the restored sites, thereby helping to reach the favourable conservation status of the species are also evaluated to be endangered in the national assessments of threat status and restoration actions are necessary for improving their national status as well.

The project actions are important for reaching the biodiversity targets of the EU Biodiversity Strategy to 2020, especially the target of restoring at least 15% of degraded ecosystems. The dissemination work carried out during the project is also highly important for understanding why and how the conservation actions taken in the EU are important for not only conservation of nature itself, but also for securing the ecosystem services and human well-being. The contacts made with laymen and local stakeholders during the project also help to reinforce cooperation and building valuable partnerships for future work on reaching the biodiversity targets of the EU Biodiversity Strategy to 2020. The substantial monitoring effort by the project enhances our understanding on the expected effects restoration measures when aiming at the 15% target in EU countries and globally.

Positive experiences gained in the project were also beneficial when PWF in 2017 compiled a strategy for managing traditional rural biotopes in protected areas in Finland. The strategy is targeting to increase the surface area of managed semi-natural grasslands by 4 000 ha before year 2025, in which case the managed area would total 15 000 ha.

5.4.2. Long-term benefits and sustainability

5.4.2.1. Long-term environmental benefits and continuation of the project actions by the beneficiary or by other stakeholders

Coordinating beneficiary Parks & Wildlife Finland is responsible for managing the protected area network in Finland, and the project sites and restored habitats will be target to regular monitoring and After-LIFE conservation activities even after the LIFE project. For more details, please see After-LIFE conservation plan submitted as Annex 148 of this final report. An adaptive management approach will be implemented after the end of the project to secure the long-term sustainability of concrete conservation actions implemented by the project, and to promote the implementation of similar actions within habitats. Moreover, PWF will continue habitat restoration in the target habitats in Finnish Natura 2000 sites even after the project, thus reinforcing the conservation efforts achieved by the project. These efforts will be financed by government funding to PWF. Collaboration between PWF and WWF Finland and other volunteer organizations will continue to be an important resource for practical habitat management actions also in the future.

Restored herb-rich forest sites will likely not require further restoration measures during the next decade, whereas for semi-natural grasslands recurring management is prerequisite for maintaining and further improving the project's results. Majority of restored semi-natural sites and one of the White-backed Woodpecker habitat sites will be managed by farmers, who will provide grazing animals to take care of the recurring long-term management of the sites (see details in Annexes 144 and 145). Grazing will be the management method in 21 semi-natural grassland sites, whereas the other 10 sites will be managed by mowing or other methods by PWF. In most cases the farmers will receive compensation for grazing through the Agri-Environment Scheme. In the other sites PWF will be responsible for assuring the longer term management of the sites.

Clouded Apollo reintroductions will be monitored by Finnish Environment Institute annually. How extensive the monitoring will be is dependent on whether funding can be acquired from national sources, e.g. research grants from foundations. The experiences gained during the project will be useful for planning and implementing reintroductions of Clouded Apollo and also other invertebrate species in the future. In many of the project sites PWF and/or other organizations are carrying out actions complementary to the projects' objectives, e.g. habitat restoration, environmental education and establishment of visitor facilities. These will support the project actions in various ways. There are also organizations and entities not clearly related to protected areas, such as the farmers who collaborate with management of semi-natural grasslands. Also, many NGOs have been involved in volunteering in the project actions and they will continue to make an important contribution also in the future. In the sites where invasive alien species were removed there were often local people involved in the actions on volunteer basis. They became familiar with the project and the restoration actions, and will hopefully take advantage of the experience and continue similar actions also in the future.

5.4.2.2. Long-term / qualitative economic and social benefits

The project created direct employment opportunities to contractors who carried out various restoration measures, e.g. timber harvesting, building fences and other practical restoration work. The experience that the contractors gained during the project will assure ecologically high quality and cost-efficient execution of restoration actions in future restoration projects. Also, many other types of services were acquired for the project, and the total number of suppliers was ca 200. In 22 project sites recurring management of restored areas after the project involves partnerships with farmers, who provide grazing animals for the pastures. Almost all of them receive funding from the Agri-Environment Scheme for managing the sites. In all these cases protected areas generated direct income for local economies.

There are also indirect economic benefits resulting from the project actions. Well managed and accessible protected areas greatly benefit local economies by bringing in visitors who spend money on services provided by local enterprises. PWF has estimated that per each euro invested in visitor facilities in Finnish national parks, the visitors bring in 10 euros to the local economy. Species-rich LIFE improved the conservation status of habitats and species, and in the process also created new attractive opportunities for visitors to experience beautiful natural landscapes. For example, while restoring the semi-natural grassland sites, the fences encircling pastures were in many cases equipped with safe passages, so that visitors can enter and enjoy the beautiful restored landscapes. In some sites information tables and restoration trails also provided new services for visitors.

Hundreds of citizens participated in project actions as volunteers, Senior Ranger event participants, private landowners or in other roles. The project brought people together to work for nature conservation in various ways, hence creating social interaction and benefitting the well-being of the participants. It is very likely that the participants will spread the positive message further, creating a strong channel of communication. Furthermore, it has been scientifically proven that being in nature improves health and well-being in at least three different ways:

- Physical activity increases outdoors: Nature makes you move. Without even noticing it, we tend to move more briskly outdoors than indoors even though the exercise feels lighter.
- Nature revives and helps recover from stress: It improves our concentration, and can also reduce our pulse rate and blood pressure.
- Outdoor activities promote our social well-being and sense of community: We look at others in a more positive way, and our mood is quickly improved.

Since the project actions had a significant positive effect on people's attitudes towards protected areas and habitat restoration, these social and health benefits will likely continue to accrue even after the Species-rich LIFE.

5.4.3. Replicability, demonstration, transferability, cooperation

Project actions, implementation principles and the methodologies for habitat restoration, stakeholder involvement and awareness raising are replicable and transferable to other regions in Finland and internationally. PWF is continuing the work carried out by the project and will be utilizing the experiences to further improve the restoration methodologies. For example, methods for monitoring herb-rich forest restoration sites after removal of Spruce were developed during the project. PWF will use the same monitoring methodology also in other restoration sites after the project, and once a larger data set is collected, the monitoring data will give valuable information for validating the restoration methodologies and for developing them further.

5.4.4. Best Practice lessons

Majority of restoration methods used in the project sites were best practices that had already been used by PWF before the LIFE project. In some cases, e.g. in habitats on calcareous rock and heaths, the project did pioneering work in developing and testing suitable restoration methods. These methods are now applied in other restoration sites in Finland, for example in the ongoing Light&Fire LIFE project coordinated by PWF. Similar restoration activities are likely to continue for many years to come, because the amount of degraded and not yet restored habitats is substantial in Finland. The best practices of Species-rich LIFE are also applicable in other areas in northern Europe.

One of the lessons learned was that restoration planning is a very laborious task in these supremely species-rich habitats, but it is definitively worth the investment. In some cases detailed restoration planning revealed factors that altogether prevented restoration measures in the preliminarily selected sites, and compensatory sites needed to be looked for. This happened despite the fact that PWF has very detailed GIS data on the target sites. Careful field work during the planning process proved to be a prerequisite for successful restoration actions.

Many creative ways to involve citizens in hands-on management of protected areas were utilized in the project, and these positive experiences will be build upon in the future. Volunteers are an incredible resource for habitat restoration measures, although their participation requires lot of advance planning and coordinating.

5.4.5. Innovation and demonstration value

Many of the restored sites will serve as demonstration sites for habitat restoration. Two restoration trails were established in national parks to demonstrate the importance and methodologies of restoration. But in a similar manner also the other restored sites will be excellent demonstration sites. One of the major achievements of the project were several extensive (tens of hectares) semi-natural grassland sites that were badly overgrown, but by the end of the project had transformed to semi-open pastures where sheep and/or cattle graze. These sites are exceptionally large and have gone through an exceptionally rapid habitat recovery, and they serve as excellent examples of the results that can be achieved by combination of careful planning, successful professional restoration and well-functioning partnerships. Project website includes description of some of these sites. During the project training workshops were organized for restoration professionals, and these sites will be used for similar purposes even after the project.

5.4.6. Long term indicators of the project success

Proposed quantifiable indicators to be used in future assessments of the project success:

- The conservation status of the habitats and species
- Viable Clouded Apollo populations in the reintroduction sites
- Positive long-term trends in monitored biotic and abiotic variables
- Management plans put into operation effectively

6. Comments on the financial report

6.1. Summary of costs incurred

Table 7 includes breakdown of the revised budget officially approved as budget modifications in the RAs No 1 and No 2 in 2016. The RA No 1 included a budget modification to increase the total cost of consumables from 181 070€ to 229 070€, with a matching decrease of 48 000€ in the budget allocated to travel expenses of Actions E1 and E2. Consumables for action C3 were needed for fencing materials, whereas project management actions E1 and E2 have not required as much travelling as was anticipated. The increase in the cost of consumables was above the flexibility allowed in the Common Provisions. The RA No 2 included allocation of small part (13 797€) of the CB PWF budget to the AB MHF, but the budget modification did not change the total costs in any category.

All original signed financial forms are provided in paper form and as electronic copy with the FR, as listed below. However, the individual transactions listed by cost category on the financial statements are submitted on electronic media (USB stick) only.

Metsähallitus Parks & Wildlife Finland, Annex 158:

- Standard Payment Request and Beneficiary's Certificate
- Beneficiary's Certificate for Nature Projects
- Consolidated Cost Statement for the Project
- Financial Statement of the Individual Beneficiary

Finnish Environment Institute, Annex 159:

• Financial Statement of the Individual Beneficiary

World Wide Fund for Nature Finland, Annex 160:

• Financial Statement of the Individual Beneficiary

Metsähallitus Forestry Ltd, Annex 161:

• Financial Statement of the Individual Beneficiary

	Cost category	Revised budget*	Costs incurred within	%
1.	Personnel	1 941 888	the project duration	106.4
			2 066 921,26	106,4
2.	Travel	408 991	325 725,73	79,6
3.	External assistance	821 128	830 132,14	101,1
4.	Durables: total non-			
	depreciated cost	0	0,00	n/a
	- Infrastructure sub-tot.	0	0,00	n/a
	- Equipment sub-tot.	0	0,00	n/a
	- Prototypes sub-tot.	0	0,00	n/a
5.	Consumables	229 070	207 317,46	90,5
6.	Other costs	14 353	11 537,60	80,4
7.	Overheads	239 080	239 797,41	100,3
	TOTAL	3 654 510	3 681 431,60	100,7

Table 7. Standard statement of expenditure for Species-rich LIFE PROJECT COSTS INCURRED

*) Revised budget according to the Request for Amendment No 2, which was signed by Commission representative on Januray 3^{rd} 2017. The RA No1 included a budget modification to increase the total cost of consumables from 181 070 \in to 229 070 \in , with a matching decrease of 48 000 \in in the budget allocated to travel expenses. The RA No 2 did not influence the total budgeted costs per cost category. Costs of external audit report (7 936,00 \in), which were paid after the auditing, are included in the table, although they have not been registered in the audit report.

There are some deviations between the budgeted and the incurred costs, especially in the cost category Personnel, but in a versatile project such as Species-rich LIFE, this sort of deviations are to be expected. However, in none of the cost categories did the incurred costs exceed the flexibility of $30,000 \in$ and 10% allowed by the Article 15.2 of the Common Provisions. Overall the total eligible project costs were approximately 27 000 \in higher than foreseen.

Below are general comments on the incurred costs <u>per cost category</u>. The discrepancies between the incurred costs <u>per action</u> and the costs set out in the grant agreement are discussed in Chapter 6.5.

Personnel costs

Incurred personnel costs are 125 000€ higher than foreseen in the budget (106,4% of the foreseen). Total personnel costs of non-additional (= permanent) staff of public bodies (Metsähallitus and SYKE) is €942 006. Personnel costs respect the 2% rule in the grant agreement, and there is no substantial change in the sense of the Common Provisions article 15, since the costs foreseen for this cost category are not exceeded by more than 10%. All personnel costs were foreseen in the budget of the GA.

The hours worked for the project were in total ca 80 000 h, which equals approximately 10 500 days of work. Thus, it can be deduced that the average daily rate in this LIFE project was ca $193 \notin$ /day. In comparison, the budgeted personnel costs were based on 7757 working days and the average daily rate of $250 \notin$ /day. The overspending in personnel costs was entirely due to extra working time allocated to the project, rather than higher than expected salary costs *per se*. This is in line with the technical implementation of the project, since most of the actions exceeded the objectives set in the grant proposal. The project allocated some resources from project management to concrete conservation actions, which made it possible to exceed the project targets for all concrete conservation actions (see Chapter 5.1 for details).

Salary costs per working time unit are not significantly different from the costs of personnel performing similar tasks under an employment contract with the beneficiaries. As can be expected, there are some discrepancies between the daily rates foreseen in the GA and the actual daily rates. The cases where the actual daily salaries are particularly high are treated in more detail in Annex 162, and are summarized in general terms here.

In PWF the cases where the actual realized salary costs are considerably high compared to foreseen daily rate, the discrepancy is often explained by paid or unpaid leave (maternity leave, job alternation leave) or other legitimate reason that results in the number of annual time units worked to be low compared to gross salary. Even in cases of unpaid leave the employee is usually entitled to annual leave payments, which may cause the daily rate to be higher than normally.

In addition to this, in PWF the pay system includes a personal increment based on seniority in the position served, and consequently the gross annual salary for a particular position varies considerably. For some of the senior employees this resulted in salary rates that exceed the rates foreseen in the GA for a particular job title/position. In Metsähallitus the gross annual salary consists of two parts (plus obligatory social charges and other statutory costs):

- the base salary that depends on the precise work tasks that the employee is contracted to do and which may vary by 10% or more within many positions (e.g. a conservation biologist with national coordination responsibilities has a significantly higher base salary than a biologist with only local work tasks) and
- the personal increment which is based on the experience, expertise and productivity of the employee and which is calculated as a percentage of the base salary.

For these reasons the annual gross salary of a given job title varies and consequently in some cases the foreseen daily rate is exceeded quite considerably (see Annex 162 for specific cases).

In case of associated beneficiary WWF the pay system was revised during the project and for many employees the revision resulted in pay rise. This is reflected in daily rates generally exceeding the foreseen rates, because the grant proposal was prepared without prior knowledge of the upcoming changes in the salary rates. The personnel costs of WWF in the project are in line with the current salary policy of the beneficiary, and all LIFE project employees did receive equal pay as the other personnel working on similar tasks.

Based on the explanations given above, we argue that the deviations in daily rates between the original GA and the final financial reports were unavoidable and due to factors beyond the control of project management.

The employees J. Heliölä and J. Pöyry of the associated beneficiary FEI were assigned to the project as temporary staff. They both did have a continuous contract with FEI previous to the project, but the contracts were renewed when they were assigned to work for the Species-rich LIFE.

The forest workers of Metsähallitus forestry unit (AB MHF after 15.4.2016) use electronic time registration system Taika, and the monthly acceptance of timesheets is done electronically. This procedure was accepted in the CL 19.12.2013.

<u>Travel</u>

Travel costs were 83 000€ lower than foreseen, which is mostly due to the fact that after the start of the project online communication applications have improved greatly, and consequently project administration did not require much travelling.

The savings in travel expenses are at least partly due to effective planning of field work. The routes of individual trips deviate from the ones listed on the GA, and this is due to the fact that

field work was always assigned to a qualified employee that was located closest to a particular project site. Metsähallitus has offices and personnel spread throughout the country, which is a great advantage for minimising long-distance travel.

On the other hand, a considerable proportion of the field work conducted by Metsähallitus employees in the project sites was probably carried out as part of trips that also included other field sites. In such cases the costs of the portion of the trip that would have been eligible for LIFE funding were not always allocated to the LIFE project, because claiming the travel expenses for an individual leg of a trip requires excessive paperwork.

WWF Finland has a policy that field work and other professional travel is generally done by cars owned by WWF. Fuel is paid by WWF and the cars are routinely refuelled when the tank is almost empty. Fuel expenses of filling the tank were registered to the LIFE project whenever a car needed refuelling during a field trip of the project, no matter what the actual consumption caused by the LIFE project travel was. Thus the fuel expenses are not allocated to the project by actual consumption, as is noted in the Audit report.

The project was active in networking with other LIFE projects throughout Europe and with collaborators and colleagues in Finland and abroad. International travel was directed to LIFE Platform meetings and to several scientific conferences. The number and destinations of international trips deviated from the programme sketched in the GA, but the flexibility approved by the EC (Commission letters of 31 March 2014, 19 September 2014, 20 July 2015 and email from external monitor on 23 April 2015) proved to be highly beneficial. All the international trips were great opportunities for disseminating the results of the project and for gaining important insights to restoration work in other parts of the world.

External assistance

When considering the total costs of external assistance, the costs accrued according to the budgeted. The difference between incurred and foreseen costs is only $1.068 \in (0,1\%)$. However, the allocation of external assistance costs per project actions deviates considerably from the foreseen budget, which is discussed in more detail in Chapter 6.5.

There is one discrepancy between the external assistance costs and consequently the total project costs registered between the audit report and the financial forms. It is caused by the costs of the external audit report (7 936,00 \in), which were paid after the auditing and thus the exact cost was not known to the auditor. EC email on 21 September 2017 confirmed that the sum can be included in the financial forms, although it has not been registered in the audit report.

Consumables

Total cost of consumables was ca 22 000€ lower than foreseen. Despite of this, various items unforeseen in the GA have been included in consumables. All the unforeseen purchases were crucial tools or machinery necessary for the implementation of the project and did not cause overspending in this category. In case of more expensive purchases they were preliminarily accepted by Commission representatives by email correspondence during the project.

There are no costs in the cost category equipment. The criteria used by PWF for differentiating consumables and equipment is made case by case for externally funded projects. For LIFE projects the division is generally made already when the budget for the project proposal is prepared, and only more expensive machines (> 2000) are considered under category equipment. In the Grant Agreement of Species-rich LIFE there were no costs in the category equipment, and all the purchased machines etc. are thus reported in the costs category consumables.

Other direct costs

Incurred **other direct costs** to the project totalled 80% of the foreseen budget, and were ca $3\ 000 \in$ less than foreseen. These costs include small expenses that were crucial for implementing the project, e.g. compensation payments for forest workers for use of chain saws and the freights of information boards. In many cases these costs were unexpected, but they were always necessary and directly related to implementation of project actions. For example, the use of private roads for timber harvesting needed to be compensated to the land owner, or a boat used in the archipelago required a rented storage place sufficiently close to the field sites.

6.2. Other financial issues

Timber sales income and invoicing between PWF and Metsähallitus Forestry Unit

Timber sales income of PWF totalled \in 372 197,99 (see Annex 143 for details), and was considerably lower than the budgeted (\notin 469 140). This was due to overly generous estimates of timber volume to be harvested for some of the project sites. Also, the project sites where timber was harvested changed somewhat after the start of the project. Ecological evaluation during the restoration planning was decisive for determining whether timber harvesting was required. Harvesting was done only in cases where it was necessary for ecologically successful habitat restoration.

Timber sales income was used as CB's own contribution for the external assistance costs of timber harvesting, primarily in the project sites where the income was generated. If the income exceeded the harvesting costs, the excess was used for the external assistance costs of restoration in the other project sites. Please note that the timber income is less than the CB's own contribution and less than the total own contribution of the project beneficiaries, indicating that the timber income did not result in any net profit for the project.

In the CL dated 9.9.2014 the Commission asked us to submit further documentation on all the invoices that had no. 101609 (28 rows, total sum 19 171,85€) in the PWF's financial statement of the Mid- term report. These invoices referred to external assistance costs incurring from timber harvesting in project sites 3, 29 and 46 done by the Forestry Unit of Metsähallitus. Explanation of the invoicing between PWF and Metsähallitus Forestry Unit is given in the Annex 164. The copies of invoice 101609 covering the 28 entries are attached as annex 166 to the FR, and a description of the complex process of invoicing is given in Finnish in annex 167 of the Final Report. The explanation in annex 167 intends to answer the question why the same invoice is used by different suppliers in the financial report of PWF.

It should be noted that the process of invoicing between Metsähallitus Forestry Unit and its contractors, and consequently invoicing between Metsähallitus Forestry Unit and PWF, was identical for all LIFE projects coordinated by Metsähallitus. The same issue was explained also in the final report of the Boreal Peatland LIFE project (LIFE08NAT/FIN/000596).

Non-recoverable VAT

The VAT certificates for all project beneficiaries were submitted with the Mid-term Report in 2013. A renewed VAT certificate of PWF was submitted with the PR No 1 2015. These documents are also annexed to this report (Annex 163). Since the new associated beneficiary Metsähallitus Forestry Ltd does not claim VAT, VAT certificate is not necessary and thus not provided for the beneficiary.

PWF is entitled to recover VAT for expenses that arise from actions directly related to generating timber sales income. In practice, the costs where VAT is recoverable include external assistance costs related to timber harvesting, such as subcontractors doing manual or mechanical harvesting or timber transportation.

In the financial statement of PWF there is an additional column "VAT not included /recoverable" on the sheet External assistance, where some of the rows are coded:

• **MH internal**: These rows include timber harvesting and transportation costs of Metsähallitus forestry unit (before the new law 15.4.2016), whose VAT expenses are recoverable when they pertain to timber harvesting costs carried out by contractors of the forestry unit. When timber harvesting was done through the forestry unit, VAT was not included on the PWF invoices, because the forestry unit reclaimed the VAT.

- **Remuneration**: These are payments made to contracted specialists who carried out species inventories or other short-term project actions, and were not actual employees of Metsähallitus. They were paid a remuneration through the Metsähallitus salary payment system, and in these cases there was no VAT involved, because taxes were paid according to the specialist's personal taxation certificate.
- VAT recoverable: PWF recovered VAT for external assistance costs of timber harvesting and transportation, when these were carried out by contractors contracted by PWF and not by the Metsähallitus forestry unit. These rows include costs where contractors have billed the expenses and recoverable VAT was included on the invoice, but is not reported on the LIFE financial statement.

All other expenses except the ones coded with the above mentioned specifiers in the "VAT not included /recoverable" column include non-recoverable VAT in the expenses reported on the financial statements.

Summary of additional financial information requested by EC

In the <u>CL of 31.3.2014</u> we were requested to provide additional information on several external assistance cost items that were unclear:

- Detailed information on the tree removal costs of where VAT costs can be/are recovered:
 - o This is explained in more detail above under "Non-recoverable VAT", but in principle PWF is entitled to recover VAT only for expenses that arise from <u>actions</u> <u>directly related to generating timber sales income</u>. These expenses are identified on the PWF financial sheets "External assistance" in an additional column Q "VAT not included /recoverable" either by code **MH internal** or **VAT recoverable**. In cases where tree removal was done but did not generate income (e.g. removal of small undergrowth trees), VAT costs are included and there is no entry in the column Q.
- An explanation for the fact that invoices issued by T. Korvenpää (lines 29-32, 37, 66-69, 82 on the PWF financial forms sheet "External assistance") do not include VAT costs:
 - Payments were remunerations paid using the personal tax certificate of T. Korvenpää, see explanation above under "Non-recoverable VAT".
- Why part of the invoices numbered 101609 (lines 134-152) on the PWF financial forms sheet "External assistance" include the VAT costs and part of them do not?
 - Part of the rows had VAT costs included due to an error in data entry. These rows are now corrected and no VAT is included. In addition, there is an entry **MH internal** in the column Q.
- *Give further clarification on the description of the invoice 100970 dated 2 July 2013 "Seilin hevosmetsurilaskujen 1205, 1214, 1226, 126 alv:t" for 7308,96€.*
 - This invoice is by Åfeltin työhevoset, a forest worker company which was subcontracted by PWF to carry out restoration work in project site 12 Seilin saaristo.

Restoration work in site 15 resulted in timber sales income and VAT was thus recoverable.

- Unfortunately, recoverable VAT was treated erroneously on some of the invoices submitted to PWF by the contractor, i.e. no VAT costs were included on all the invoices. This error was not immediately noticed and corrected by PWF, and since the erroneous invoices had been already accepted and paid, a correction invoice 100970 was submitted by the contractor. It included only the VAT costs that were missing from previous invoices.
- All invoices by the company Åfeltin työhevoset (rows 45, 53, 63, 77, 80, 84, 90, 115 and 179 in the PWF financial forms sheet "External assistance") have been checked to make sure recoverable VAT is correctly treated and not reported on the LIFE financial forms. Thus, the invoice 100970 with VAT costs has been removed from the external assistance costs, and the remaining rows by Åfeltin työhevoset do not include VAT costs. They are furthermore marked with VAT recoverable in the column Q. These corrections were checked and found acceptable by the external auditor.
- Clarify cases where expenses of persons working for FEI under consultancy contract are reported in external assistance costs (e.g. S. Ryttäri):
 - Susu Ryttäri and Reijo Myyrä had consultancy contracts with FEI. The remunerations and travel expenses paid to them are reported as external assistance costs on FEI financial forms.
 - Similar cases on PWF's financial sheets "External assistance costs" are marked with **Remuneration** in the column Q, as explained above in case of T. Korvenpää.

In the <u>CL of 19.9.2014</u> the following financial issues were raised:

- Submit FEI time sheet 8/2014 for Mikko Kuussaari printed out from time registration system "Tauno".
 - Included in the Annex 168
- Send a copy of Mr. T. Korvenpää's contract for verification.
 - Included in the Annex 168
- Submit further documentation on all the invoices that have number 101609 in the financial statement of PWF.
 - Included in the Annex 166

In the <u>CL of 20.7.2015</u> the following issue was raised (summary of the text in the EC letter):

During the MoT mission on May 19, 2015 the funding for After-LIFE management of seminatural grassland restoration sites (Action C3) and White-backed Woodpecker habitat restoration sites (Action C2) was discussed. Provide detailed justification and all the supporting documents necessary to confirm that no overlapping activities exist for which double Union support by EU agricultural aid and LIFE compensation is given simultaneously to identical actions in the same area.

In the following 22 subsites in 19 N2000 areas the restoration actions carried out by Speciesrich LIFE were followed by continuous management by grazing, for which the farmer owning the grazing animals received funding from EU Agri-environment scheme.

SITE NUMBER	SITE CODE	N2000 SITE NAME, subsite
1	FI0100005	Tammisaaren ja Hangon, subsite Nothamn
1	FI0100005	Tammisaaren ja Hangon, subsite Långholmen
2	FI0100021	Meiko-Lappträsk, subsite Vrångnäsudden
3	FI0100024	Medvästö-Stormossen, subsite Dåvits
3	FI0100024	Medvästö-Stormossen, subsite Medvastundet
5	FI0100040	Nuuksio
7	FI0100074	Porvoonjoen suisto, subsite Stensböle
12	FI0200064	Seilin saaristo
15	FI0200090	Saaristomeri, subsite Jurmo
16	FI0200102	Rekijokilaakso, subsite Riihipuostaankoski
16	FI0200102	Rekijokilaakso, subsite Kokkapää
18	FI0200113	Kemiönsaaren kalliot, subsite Svinberget
21	FI0361001	Mielas
25	FI0303017	Vanajaveden lintualueet, subsite Ikkala (Action C2)
33	FI0500002	Linnansaari
36	FI0500108	Pyhäniemi
37	FI0500133	Anttilan tila
45	FI0600089	Telkkämäki
48	FI0800112	Lapväärtin kosteikot, subsite Härkmerifjärden
50	FI0800132	Luodon saaristo, Rönnskäret
51	FI0800140	Tegelbruksbacken
60	FI1300302	Perämeren saaret

Table 8. Sites managed by farmers who receive funding from Agri-Environment scheme	
by the end of the LIFE project.	

In all these sites the farmers use the Agri-environment Scheme funding to cover the costs of continuous management by grazing animals. The funding decisions are made by regional environmental centres. The funding agreements include a detailed management plan and require a lease contract between the landowner (either PWF or private) and the farmer, and these documents determine which actions are required/allowed to be carried out by the recipient during the 5-year funding contract. In the LIFE project sites the farmers are required to take care of annual grazing and to maintain the fences. The compensation they are paid is based on the area (hectares) managed, not based on which specific management methods they will be carrying out in the area.

LIFE funding was used by PWF for restoration planning and initial restoration of the sites, especially removal of trees and bushes, building of fences and other infrastructure necessary

for grazing the sites, and in some cases removal of reed from coastal meadows (see annexes 144 and 145 for details). Part of the work was also to contact potential farmers who could continue the management of the sites after the restoration actions, and to negotiate the future recurring management scheme. Consequently, there was generally no temporal overlap of LIFE compensation and Agri-environment Scheme funding, although in some cases the finishing of the restoration actions was delayed and e.g. burning of logging debris was done by PWF after the grazing had already started. Moreover, the management plans accepted by the Regional Environment Centres and the land lease contracts made with the farmers exclude actions that would overlap with restoration actions already carried out by the LIFE project, thus there is never double compensation for identical actions.

PWF purchased several <u>consumables not listed in the GA, which were preliminarily</u> <u>approved by the EC</u>. These include the following items listed on the PWF's financial sheet "Consumables":

- Trailer (row 39, invoice 123904) to be used for transporting equipment necessary in implementation of action C3, approved by CL 1.2.2012
- Outboard motor (row 234, invoice 131060) necessary for accessing action C3 restoration subsites in project site 52, approved by email 23.4.2015 (MoT)
 - The action C3 restoration sites along the Oulanka River at project site 52 are readily accessible only by boat, but the situation was not anticipated in the GA budget.
- Rock drilling machine (row 303, invoice 125112) for building fences to rocky habitats in project action C3, approved by email 31.8.2015 (MoT)
 - Rock drilling machine was necessary for the project action C3, restoration of seminatural grasslands, in the project site 18 Kemiönsaaren kalliot, where the restoration action included fencing of a 17 ha area to permit long-term management by grazing. Wooden fence posts needed to be anchored to the bedrock using small drilled holes and metal fasteners. This method was the most cost-efficient way of constructing a fence in rocky areas.
- 8 wildlife cameras with motion sensors to be used in monitoring action E6 of White-backed Woodpeckers in restored sites (rows 357-358, invoices 1900001798 and 100001408), approved by email 3.2.2016 (MoT)
 - Monitoring of White-backed Woodpeckers was done for all eight Action C2 sites in 2016. Camera trapping was used as an additional method to improve the reliability of the monitoring. The birds were attracted to feeding sites which had wildlife monitoring cameras with a motion sensor installed nearby (one in each C2 project site). The cameras recorded the birds continually and the method gave much more reliable results than just direct observations.
- Two lightweight mowers and one brush saw (row 400 invoice 1900009320 and row 402 invoice 1900009361) for restoration action C3 in project sites 49, 50, 52 and 60, approved by email 27.5.2016 (MoT)
 - We had been able to use machinery which was owned by PWF already before the project started, but the old machinery broke down so badly that they could no longer

be prepared. Additional machinery was needed to complete the restoration work in these project sites, and it will be used for continuous management of the sites after the LIFE project.

6.3. Accounting system

Details of the financial codes used for identifying the LIFE project costs and description of the accounting systems used by each of the beneficiaries are included in Appendix 164. The financial management system of the PWF was explained in detail in PR No 1 2015. Since December 2015 after SAP accounting system was introduced, the code identifying the expenses related to the Species-rich LIFE project in the accounting systems of Metsähallitus is 4007003. The coding of the project invoices in the accounting system included also a specific code for each project action and project site.

In PWF all costs are electronically approved by the Regional Directors, or by the closest superior of the employee in case of working time registration (accounting system AKS) and travel expenses (M2). For all the other costs the accounting information including the correct project codes were inserted by the project's financial secretary to the analytical accounting system IP Thin Client and the project coding is then checked by the PM. Each cost was further checked by the person responsible for the purchase or project action in question. Only after these steps were the costs forwarded for approval.

6.4. Partnership arrangements

The first payments of the associated beneficiaries' share of the EC contribution were transferred to them shortly after the first pre-payment was received by the coordinating beneficiary. After the second pre-payment from the Commission EC contribution was transferred to FEI, but with WWF it has been agreed that the transfer will be included with the final payment in 2017 after the approval of the final report.

The financial information reported was entered in the financial tables by the associated beneficiaries themselves and the data was delivered to the coordinating beneficiary together with detailed accounting information and documents. If any corrections to the financial forms were required, the coordinating beneficiary discussed them with the associated beneficiary before changes were made to the financial forms and secured that signed forms included the corrected information.

Before April 15th 2016 the implementation of concrete conservation actions in Species-rich LIFE included timber harvesting by the Forestry Unit of Metsähallitus in numerous project sites. The process of invoicing between the Forestry Unit and its contractors, and consequently

invoicing between Forestry and PWF were explained in detail in the PR No. 1. All such invoicing in Species-rich LIFE was related only to project actions taken before the new Act on Metsähallitus (prior to April 15, 2016) and have been done according to the old procedures explained in the PR No 1 in 2015. After April 15 2016 the Forestry Unit became the associated beneficiary MHF (RA No 2), and there was no longer invoicing with the PWF. In practice the partnership of MHF allowed for the technical implementation of the project to continue as originally planned. There were no changes in the project costs, because the budgetary share of the new associated beneficiary was taken from the budget of PWF.

6.5.Auditor's report

The contact information of the external auditor was included in the Mid-term report in 2013. After that Metsähallitus has changed the external auditor, which is now KPMG. Unfortunately, the auditor information was not updated in the reports submitted to the Commission after the Mid-term Report.

Auditing of Species-rich LIFE project was carried out by KPMG Public Sector Services Ltd and included also the associated beneficiaries of the project. The auditing report is included in Annex 4.

Name and address of the external auditor: Jorma Nurkkala Authorized Public Accountant, KHT, JHT KPMG Public Sector Services Ltd PO Box 1037 00101 Helsinki, Finland

Visiting address: Töölönlahdenkatu 3 A Direct +358 20 760 3331 Switch +358 (0)20 760 3000 Jorma.nurkkala@kpmg.fi www.kpmg.fi

In the audit report the total cost of the project is $3\ 673\ 496$, excluding the auditing costs (7 936), which were not yet known at the time of the audit. However, the auditing costs have been incorporated to the total cost of the project in the financial forms of the CB, the consolidated cost statement, and the Chapter 6 of this FR, which all report the total costs of $3\ 681\ 432$.

6.6. Summary of costs per action

Action	Short name of	1. Personnel	2. Travel and subsistence	3. External assistance	4.a Infra- structu	4.b Equip- ment	4.c Protot ype	5. Purchase or lease	6. Consumable s	7. Other costs	TOTAL	Foreseen in the GA
no.	action				re			of land				(% of budgeted spent)
A1	Restoration Action Plans	432 607	46 927	50 329	0	0	0	0	9 665	128	539 656	414 593 (130%)
A2	Management Plans	110 889	9 776	2 649	0	0	0	0	287	0	123 601	155 609 (79%)
A3	Monitoring & Communication plans	4 753	115	2 460	0	0	0	0	2 300	0	9 628	19 818 (49%)
A4	Clouded Apollo reintroduction plan	5 250	599	0	0	0	0	0	0	0	5 848	2 400 (244%)
A5	Preparatory training	32 855	11 225	4 131	0	0	0	0	40	0	48 251	37 020 (130%)
C1	Restoration of herb-rich forests	153 756	27 651	241 729	0	0	0	0	18 437	4 395	445 969	422 897 (105%)
C2	White-backed woodpecker habitat restoration	37 156	8 836	28 187	0	0	0	0	3 149	1 449	78 778	98 303 (80%)
C3	Restoration of semi-natural grasslands	652 978	146 485	421 804	0	0	0	0	128 569	2 159	1 351 994	1 012 580 (134%)
C4	Clouded Apollo reintroduction	7 266	1 632	0	0	0	0	0	209	0	9 106	9 062 (100%)
C5	Restoration camps	142 723	20 671	9 766	0	0	0	0	30 914	0	204 074	202 276 (101%)
D1	Media cooperation	19 071	946	774	0	0	0	0	0	0	20 791	96 150 (22%)
D2	Restoration trails	2 443	108	9 520	0	0	0	0	3 247	0	15 319	12 521 (122%)
D3	Project communication	21 268	16	9 426	0	0	0	0	0	0	30 710	45 428 (68%)
D4	Information tables	11 965	70	6 155	0	0	0	0	1 602	307	20 099	26 700 (75%)
D5	Senior ranger events	9 319	860	11 134	0	0	0	0	852	365	22 531	94 931 (24%)
D6	Layman's report	837	0	0	0	0	0	0	0	0	837	7 270 (12%)
E1	Project coordination	286 086	7 088	4 434	0	0	0	0	2 256	37	299 901	388 461 (77%)
E2	Advising and project group	8 393	639	139	0	0	0	0	0	0	9 171	40 975 (22%)
E3	Networking	24 075	19 339	0	0	0	0	0	0	2 103	45 516	40 221 (113%)
E4	Auditing	0	0	7 936	0	0	0	0	0	0	7 936	16 962 (47%)
E5	After-LIFE conservation plan	0	0	0	0	0	0	0	0	0	0	0
E6	General monitoring of restoration success	58 819	14 899	8 975	0	0	0	0	5 791	0	88 483	219 619 (40%)
E7	Clouded Apollo monitoring	44 414	7 845	10 583	0	0	0	0	0	594	63 435	51 634 (123%)
Over- heads											239 797	239 080
	TOTAL	2 066 921	325 726	830 132	0	0	0	0	207 317	11 538	3 681 432	3 654 510 (101%)

The table above summarizes the allocation of costs incurred per project action during the period 1.9.2011-31.12.2016. The actual total costs of individual project actions exceeded the foreseen budget significantly for actions A1 Restoration planning and Action C3 Restoration of seminatural grasslands. For A1 the actual costs were 130% of the foreseen budget, and for C3 133% of the foreseen budget. Also for action C1 Restoration of herb-rich forests the foreseen budget was exceeded, but to a lesser degree (105%). It should be noted that the actions A1, C3 and C1 also exceeded the objectives set for the technical implementation of these project actions. The results of Actions C1 and C3 were 119% and 107% of the targeted (quantified as hectares restored), respectively. Also action A1 resulted in 134% higher surface area that was foreseen in the GA. It can be concluded that the overspending was mainly due to additional work implemented in these actions.

Also the actions A4 (Clouded Apollo reintroduction plan) and E7 (Clouded Apollo monitoring) exceeded the budgeted costs (spending 244% and 123%, respectively). It was due to the fact that the reintroductions needed to be repeated in 2016, as explained in the technical part of the FR. Action E3 Networking spent 113% of the budgeted, which was due to some additional international networking events attended by the project personnel. In case of actions A5 Preparatory training and D2 Restoration trails the higher than foreseen expenditure was due to underestimation of the foreseen costs in the GA. For all the other actions the actual total costs were either in line with the foreseen budget or below it.

One illustration was acquired on semi-natural grassland management process and was used in the Layman's report, Action D6. The action did not incur any other costs to the project, because the Layman's report was compiled after the end date of the project. In general the costs of the dissemination actions were much lower than foreseen, although their technical implementation reached the objectives in the GA. This is probably mainly due to overestimation of the foreseen costs in the GA, but it is also possible that some of the costs have been registered incorrectly without a reference to the LIFE project and were thus covered by national funding outside the project.

7. Annexes and list of deliverables

List of Annexes of the Final Report of Species-rich LIFE (LIFE10 NAT/FI/048). Deliverable products of the project in **bold**.

Annex No.	Project action	Annex title	Type of annex	Submitted earlier	Final report, electronic	Final report, paper copy
1	C1-C3	Habitats Directive Annex I habitats restored in the project	Technical		х	х
2		Partnership agreement between PWF and Metsähallitus Forestry Ltd	Administrative		x	х
n/a		Partnership agreement between PWF and Finnish Environment Institute	Administrative	Inception report		
n/a		Partnership agreement between PWF and WWF Finland	Administrative	Inception report		
3	E3	List of networking events	Technical		х	х
4	E4	Auditor's report	Financial		х	х
5	A1	List of restoration plans	Technical		х	х
6-52	A1	47 restoration plans	Technical	All previous reports	x	
53-105	A1	53 restoration plan approval documents	Technical		х	х
106	A1	List of species inventories	Technical		х	х
107-124	A1	18 species inventory reports	Technical		х	х
125	A1	List of cultural heritage inventories	Technical		х	х
126-133	A1	8 cultural heritage inventory reports for 10 project sites	Technical		х	х
134-136	A2	3 management plans including approval documents	Technical		х	х
137	A3	Revised, final monitoring plan (in Finnish)	Technical		х	х
138	A3	Final communication plan	Technical	Progress Report No. 2	x	x
139	A4	Revised Clouded Apollo reintroduction plan	Technical	110. 2	×	× ×
135	A4 A5	Preparatory training, online training presentation	Technical		×	~
140	C1	Technical report on herb-rich forest restoration	Technical		x	x
142	C1-C4	Detailed maps of restoration sites	Technical		x	x
143	C1-C3	Summary of timber sales income	Financial		x	X
144	C2	Technical report on White-backed Woodpecker habitat restoration	Technical		x	x
145	C3	Technical report on semi-natural grassland restoration	Technical		х	х

Annex No.	Project action	Annex title	Type of annex	Submitted earlier	Final report, electronic	Final report, paper copy
146	C4, E7	Report on Clouded Apollo reintroductions	Technical		x	х
147	C5	Summary of restoration camps for volunteers	Technical		х	х
148	E5	After-LIFE conservation plan	Technical		x	х
149	E6	Report on monitoring of restoration success	Technical		х	х
150	D1	List of media coverage	Dissemination		х	х
151	D1	List of press releases	Dissemination		x	х
152	D2	Documentation on restoration trails in Nuuksio and Teijo	Dissemination		x	х
153	D3	Videos, photos and illustrations acquired for dissemination purposes	Dissemination		x	
154	D4	Sample of temporary information tables	Dissemination		х	х
155	D4	Photos of permanent information tables in the field	Dissemination		х	х
156	D6	Layman's report in Finnish (electronic and 3 printed copies)	Dissemination		х	х
157	D6	Layman's report in English (electronic and 3 printed copies)	Dissemination		х	х
158		Coordinating Beneficiary Parks and Wildlife Finland Financial forms: Standard Payment Request and Beneficiary's Certificate, Beneficiary's Certificate for Nature Projects, Consolidated Cost Statement for the Project and Financial Statement of the Individual Beneficiary	Financial		x	x ¹⁾
159		Associated Beneficiary Finnish Environment Institute financial forms: Financial Statement of the Individual Beneficiary	Financial		x	x ¹⁾
160		Associated Beneficiary WWF Finland financial forms: Financial Statement of the Individual Beneficiary	Financial		x	x ¹⁾
161		Associated Beneficiary Metsähallitus Forestry Ltd financial forms: Financial Statement of the Individual Beneficiary	Financial		x	x ¹⁾
162		Comments on exceptionally high daily rates paid to PWF personnel	Financial		х	х
163		VAT certificates of project beneficiaries: PWF 2015 (& auditor's statement 2013), FEI 2013, WWF 2012	Financial	Mid-term Report 2013, Progress Report No. 1	x	x
164		Description of the accounting systems used by each of the beneficiaries	Financial		х	х
165		Final table of indicators	Technical		х	х

Annex No.	Project action	Annex title	Type of annex	Submitted earlier	Final report, electronic	Final report, paper copy
		Timber harvesting invoice between PWF and Metsähallitus Forestry		Progress Report		
166		Unit	Financial	No. 1	х	
		Excel file with explanation on invoicing between PWF and		Progress Report		
167		Metsähallitus Forestry Unit	Financial	No. 1	х	
168		Additional financial information requested by EC	Financial		х	х

1) Individual transactions listed by cost category on the financial statements are submitted only on electronic media (USB stick).