



LIFE Project Number

LIFE10 NAT/LV/000159

Progress Report

Covering the project activities from 01/10/2013 to 30/09/2014

Reporting Date

31/10/2013

LIFE+ PROJECT NAME or Acronym

FOR-REST

Data Project

Project location	Gauja National Park, Latvia
Project start date:	01/09/2011
Project end date:	31/08/2015
Total budget	€ 823.243
EC contribution:	€ 493.946
(%) of eligible costs	60

Data Beneficiary

Name Beneficiary	Nature Conservation Agency
Contact person	Ms.Kristīne Kampuse
Postal address	Baznīcas iela 7, Sigulda, LV-2150, Latvia
Telephone	+371-67509545, direct n° +371-26497693
Fax:	+371-67509544
E-mail	kristine.kampuse@daba.gov.lv
Project Website	http://for-rest.daba.gov.lv

Table of Contents

1. Executive summary.....	3
1.1 General progress.....	3
1.2 Assessment as to whether the project objectives and work plan are still viable.....	3
1.3 Problems encountered.....	5
2. Administrative part.....	7
2.1 Description of project management.....	7
2.2 Organigramme of the project team and the project management structure.....	7
2.3 Delivered reports.....	7
2.4 Assessment if extension of project duration is envisioned.....	8
3. Technical part.....	8
3.1 Actions.....	8
3.1.1 Preparatory actions, elaboration of management plans.....	8
3.1.2 Concrete conservation actions.....	13
3.1.3 Public awareness and dissemination of results.....	15
3.1.4 Overall project operation and monitoring.....	23
3.2. Envisaged progress until final report (9 months).....	31
3.3 Impact.....	35
3.4 Outside LIFE.....	35
3.5 Publicity/presentation materials.....	35
4. Financial part.....	37
5. Annexes.....	41

List of abbreviations

NCA – Nature Conservation Agency
IES – Institute of Environmental Solutions
LFN – Latvian Fund for Nature
EM – ELM MEDIA
PMU – Project Management Unit
MidR – Mid-term report
GNP – Gauja national park
MEPRD – Ministry of Environmental Protection and Regional Development

1. Executive summary

1.1 General progress

The main objectives of the LIFE+ project FOR-REST is to establish a long-term forest habitat restoration and management programmes for priority species and habitat types. To test and demonstrate innovative habitat inventory methods and implement the best practice habitat restoration measures in GNP Natura 2000 sites.

During the reporting period work on all project actions planned within the report period has been carried out:

- A.1 Acquisition of data for forest habitat assessment – completed.
- A.2 Elaboration of long-term forest habitat restoration and management programmes – completed.
- A.3 Preparatory works for restoration of natural hydrological regime - completed
- C.1 Management of broad-leaved forests of slopes, screes and ravines
- C.2 Restoration of hydrology of bog woodland
- C.3 Management of Western taiga
- D.1 Creation and maintenance of project's website
- D.2: Preparation of information boards and signs – completed
- D.3: Organisation of seminars
- D.4: Production of audio-visual materials
- D.5: Production of printed materials
- E.1: Project management
- E.2: Steering Group
- E.3: Networking with other related projects
- E.6: Monitoring of restoration and management measures

Deadlines of the project milestones planned within the reporting period have been mainly all met in time. Actions A.2 and A.3 were completed later than proposed in project timetable. Action C.2 will be started later than proposed in the timetable because the technical project for hydrology restoration (Action A.3) was completed later than planned. Action D.5 will be completed till 28/11/2014. Details are given in the 3.1 section of this report.

1.2 Assessment as to whether the project objectives and work plan are still viable

Project objectives and work plan remain entirely viable. No significant changes for implementation of the project actions and achieving project objectives will be needed.

The LIFE+ project FOR-REST is continuing accordingly with the Grant Agreement. At present, all the planned project activities are viable and being implemented. A number of measurable results have been achieved, as described in the technical part of this report. All the planned project milestones have been started in time:

Milestones of the project

Name of the Milestone	Code of the associated action	Deadline	Actual date
Project manager contracted	E.1	30/09/2011	28/09/2011
Partner contracts signed	E.1	30/11/2011	29/11/2011
PMU established	E.1	30/11/2011	29/11/2011
Project website set up	D.1	28/02/2012	01/02/2012
Steering Group established	E.2	30/03/2012	29/03/2012
1 st experience exchange Study Tour done	E.3	30/09/2012	27/09/2012
Remote sensing data obtained	A.1	30/11/2012	01/10/2013
Introduction seminar organised	D.3	30/11/2012	28/02/2012
Field work for data gathering finished	A.1	30/03/2013 Revised deadline in the MidR: 30/11/2013	30/11/2013
Habitat management actions started	C.1	01/10/2013	19/08/2013
Management works of western taiga started	C.3	01/10/2013	19/08/2013
Land registration in the Land Register finalized	A.3	31/01/2014	Not needed
Long-term forest management programmes finalized	A.2	31/03/2014	15/05/2014
Technical project prepared	A.3	31/03/2014	17/09/2014
Restoration of hydrology started	C.2	01/04/2014	20/11/2014
Information boards and signs set up	D.2	31/06/2014	30/11/2014
Habitat management actions finalized	C.1	31/08/2015	Will be completed as planned
Restoration of hydrology finalized	C.2	31/08/2015	Will be completed as planned
Management works of western taiga finalized	C.3	31/08/2015	Will be completed as planned
Interactive informative materials set up	D.4	31/07/2015	Will be completed as planned
Final seminar organised	D.3	31/08/2015	Will be completed as planned
Monitoring finalised	E.6	31/08/2015	Will be completed as planned

Deliverable products of the project

Name of the Deliverable	Code of the associated action	Deadline	Actual date
Project leaflet printed	D.5	31/01/2012	February, 2012
Three restoration and management programmes elaborated - Hermit beetle habitat restoration programme for Gauja NP - Hydrology restoration programme for Bog woodland habitat - Restoration and management programme for priority habitat type Western Taiga	A.2	31/03/2014	15/05/2014
Forest habitat leaflet printed	D.5	30/09/2014	Will be accomplished by 30/11/2014
Report on forest habitat restoration and management printed	D.5	31/05/2015	Will be completed as planned
English summary of forest management programme on website	A.2	30/06/2015	Will be completed as planned
4 short films produced	D.4	31/07/2015	Will be completed as planned
Layman's report printed	D.6	31/08/2015	Will be completed as planned
After LIFE conservation plan prepared	E.4	31/08/2015	Will be completed as planned
Audit report prepared	E.5	31/08/2015	Will be completed as planned
Monitoring report prepared	E.6	31/08/2015	Will be completed as planned

1.3 Problems encountered

Completion of habitat management programmes took longer than anticipated (Action A.2)

First full draft version of the programmes were distributed in April 2014, but the final version incorporating corrections and inclusions based on comments received from external experts was received on May, 2014. It was crucial for field experts to acknowledge the management programmes for making them eligible. This change in timetable however will not affect the timely completion of the project.

Delay with approval of technical project (Action A.3)

The complete process for approving the technical project took longer than anticipated. On the 7th March, 2014 "Nāra" Ltd. submitted an application for obtaining technical conditions from State Environmental service (SES). On 26th March, 2014 an answer was given that in order to obtain the technical conditions from the (SES) the preliminary environmental impact

assessment (EIA) must be carried and answers to 19 questions have to be submitted to SES. On the 18th July, 2014 SES handed out the technical conditions and announced decision not to start the complete process of EIA. In order to obtain the construction permit from the Joint Construction Authority of Amata municipality approval from Pārgauja municipality and local land owners was needed that took additional 2 months. Staff of Nāra Ltd. visited all 10 households and explained the course of hydrology restoration in the Gulbju sala bog and got the approval. The technical project is approved by all necessary institutions and handed to NCA in 17/09/2014 and works within action C.2 can be started.

Announcement of new public procurement procedure (Actions A.3, D.5)

First procurement procedure for nominating independent company for preparing technical project (Action A.3) was announced in 27th September, 2013. Procedure ended with no results, no company entered offer. Additional work was done to talk to companies working in hydrology field, explaining the aims of project and works that must be done and second procurement procedure was opened on 5th November, 2013. Contract with “Nāra” Ltd. was signed on 29th November, 2013. This caused changes in timetable. It was foreseen that company will hand in the project in April, 2014, but because of the delays described in previous section, the approved technical project was handed in on 17th September, 2014 only. The delay in the timetable of printing forest management leaflet (Activity D.5) arose after the first public procurement procedure was incomplete and instead of announcing the winning company, new, more complete procedure was announced. The network of distribution of forest management leaflets is well thought out, so the delay will not affect it.

Difficulties with local inhabitants of Pārgauja municipality (Action C.3)

Following a negative, populist publication in national newspaper “Neatkarīgā rīta avīze” in the beginning of July, 2014 a public letter with 800 signatures of local inhabitants against the project’s intentions to use prescribed burning action in Western taiga habitat was sent to NCA, MEPRD and State Environmental Service (SES). In July another letter against the prescribed burning activity was sent to NCA, MEPRD, and SES and published in media. This time the letter was signed by 40 forestry and biology field experts. In response 3 letters from different biology field experts, 2 biology professors of Latvia University and non-governmental nature organisations was received. In August based on all received letters and in the pre-election atmosphere (national elections took place in autumn, 2014) MEPRD ordered NCA to postpone on prescribed burning activity in nature reserve zone Lenčupe. Two meetings were organised for local inhabitants of Pārgauja municipality in order to explain the planned activities and reach a mutual understanding. It was decided by NCA to carry on the explanatory work during the final reporting period. The goal of activity C.3 will be reached by cutting undergrowth, making openings in forest stand and increasing dead wood amounts in the territory. The prescribed burning will be considered as additional method if we will reach some level of understanding with local society.

Implementation of Action C.2

The management works could not be started sooner than after receiving approved technical project. The delays for approving technical project are described within Action A.3. After the project was received on 17/09/2014 the public procurement procedure was initiated to nominate independent company that will carry out the restoration works.

Implementation of Actions C.1., C.3

Management works are restricted by state regulations that forbid forest exploitation in nature reserve zones from 15th March to 31st July, but all planned works will be done till the end of project.

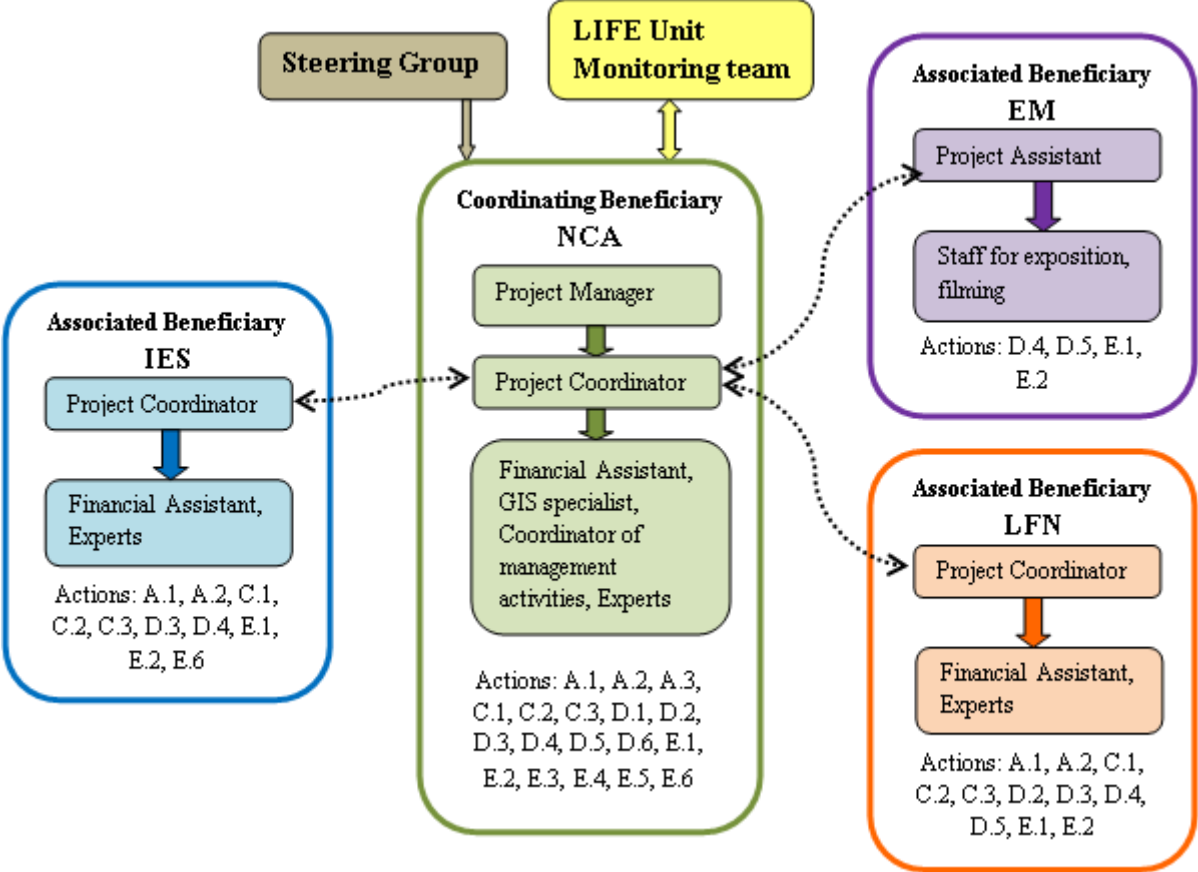
Encountered problems are not considered as a threat to the overall implementation of the project and no changes to the baseline implementation programme are needed.

2. Administrative part

2.1 Description of project management

Project’s PMU hold regular contacts via e-mail, Skype, phone and meetings to discuss the progress of work and potential threats and problems that may occur, and also for planning the future activities. Accordingly to the partnership agreements, associated beneficiaries regularly submit financial and activity reports and partner meetings are organized. Day-to-day work within NCA, IES, LFN and EM is ensured through regular meetings and indirect communication (via Skype, e-mails, phone) of involved employees.

2.2 Organigramme of the project team and the project management structure



2.3 Delivered reports

Inception report, covering project activities from 01/09/2011 to 30/04/2012 was delivered on 30/04/2012.

Mid-term report, covering project activities from 01/09/2011 to 30/09/2013 was delivered on 31/10/2013.

2.4 Assessment if extension of project duration is envisioned

At present, it is not expected that it will be necessary to extend the duration of the project.

3. Technical part

3.1 Actions

3.1.1 Preparatory actions, elaboration of management plans

Action A.1: Acquisition of data for forest habitat assessment

Timetable: 1st quarter of 2012 – 3rd quarter of 2013 action extended till 30/11/2013

Status: Completed

In the previous reporting period remote sensing data acquisition was completed. As stated in MidR remote sensing data were collected during August 2012. LiDAR data set and hyperspectral imagery covering ~ 60'000 hectares of the Gauja National Park were collected (Provided in MidR Annex 6.1.1). Although Remote Sensing data acquisition tender and invoice from data supplier foreseen delivery of Remote Sensing data covering 27'500 hectares, total area of data collection coverage was more than 60'000 hectares (due to data collection specifics it is not possible to collect small patches, instead data are collected as overlapping lines covering whole area). Remote Sensing data purchase costs didn't exceed amounts of allocated budget foreseen for this activity. Data analysis for elaboration of long-term forest habitat restoration and management programmes are done and presented in long term management programmes.

In the previous reporting period ground surveys for drainage systems in Gulbju sala bog was completed. As stated in MidR inventory of drainage systems of GNP nature reserve zone "Gulbju sala bog" was carried out in May – August 2013. Firstly all drainage systems were mapped using high accuracy Digital Terrain Model (DTM) prepared from LiDAR data. Secondly drainage systems were surveyed on site. Data on current conditions of every ditch or stream within area (functionality, obstacles etc.) as well as impact on surrounding territories (ground vegetation, forest structure etc.) were collected. Additional ditches overlooked on DTM were added on maps and in Gulbju sala bog drainage system database (Provided in MidR Annex 6.1.2)

In total 3 possible hydrology restoration sites were evaluated after initial data collection on distribution and status evaluation of habitat type Bog woodland (91D0*) within the Gauja NP. Gulbju sala bog was selected as most suitable site for hydrology restoration taking into account several aspects:

- whole area of the site is located within Nature reserve functional zone of the Gauja NP (forestry is prohibited in state owned forest areas);
- forest land within the site is owned by the State and managed by NCA with one main goal – biodiversity conservation;
- few privately owned forest areas are adjacent to the restoration site thus it is realistic to carry out hydrology restoration without influencing hydrology condition of privately owned forest areas;
- selected area enclose approximately 150-200 hectares of habitat type Bog woodland (91D0*) that are substantially affected by drainage and further degradation of habitat is foreseen if restoration measures are not implemented;
- selected area enclose other habitat types of EU importance e.g. Active raised bogs (7110*) and Degraded raised bogs (7210) still capable of natural regeneration that will also benefit from hydrology restoration activities.

Progress:

Ground surveys of habitats of EU importance

As stated in MidR, the amount of ground surveys identified in the approved project proposal were done on time, but in order to improve the quality of the management programmes, inventory of approximately 360 hectares of forest habitats of GNP were continued until the end of November 2013. Survey cost didn't exceeded amounts of allocated budget foreseen for this activity.

395 hectares large area of GNP were inspected during continued ground surveys in October and November 2013 and additional 94 hectares of old pine forests on dry and sandy soils that fits or that has potential to fit to the EU importance habitat Western Taiga (9010*) and 9 hectares of Tilio-Acerion forests of slopes, screes and ravines (9180*) were identified.

In total 8502 hectares large area of GNP has been inspected during ground surveys within the project. 444 hectares of old pine forests on dry and sandy soils that fit or that has potential to fit to the EU importance habitat Western Taiga (9010*), 399 hectares of wet coniferous forests that fits or that has potential to fit to the EU importance habitat Bog Woodland (91D0*), 170 hectares of Degraded raised bogs still capable of natural regeneration (7120), 648 ha of Tilio-Acerion forests of slopes, screes and ravines (9180*), 5 hectares of Fennoscandian old broad-leaved deciduous forests (9020*), 6 hectares of Sub-Atlantic and medio-European oak forests (9160) and 8 hectares of Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* were identified (see attached complete map in Annex A.1-1). Besides all, previously known *Osmoderma eremita* sites in GNP have been inspected and sustainability of each site has been evaluated.

The findings of the ground survey forms the backbone of the forest management programmes elaborated within activity A.2.

Problems/delays/changes – Action was implemented according to deadlines stated in MidR. No new changes or delays emerged in timetable.

Milestones of the project

Name of the Milestone	Code of the associated action	Deadline	Revised deadline in the MidR	Actual date
Remote sensing data obtained	A.1	30/11/2012	N/A	01/10/2013
Field work for data gathering finished	A.1	31/03/2013 Revised deadline in the IncR 30/09/2013	30/11/2013	30/11/2013

Additional information

Annex A.1-1 Renewed map of EU importance habitats identified during ground survey.

Action A.2: Elaboration of long-term forest habitat restoration and management programmes

Timetable: 3rd quarter of 2012 – 1st quarter of 2014

Status: Completed

In the previous reporting period scientific basis for long-term management programmes were prepared. Field inventory results were analysed and the most appropriate management methods as well as priority sites for habitats restoration activities were selected.

Progress:

1. *Hermit beetle habitat restoration programme for Gauja NP*

Restoration and management programme for *Tilio-Acerion* forests on slopes, screes and ravines (9180*) and other habitats crucial for the Hermit Beetle *Osmoderma eremita* in GNP contains information on overall conservation status of 9180* and population of *Osmoderma eremita* in Latvia as well as on actual situation with the habitat and Hermit beetle population in GNP. It outlines priority sites for habitats restoration and measures that should be done within the project (action C.1). As well as indicates sites that should be managed and measures what should be done in future years. It also gives description of necessary management activities, and sets the measures that should be done to evaluate the effectiveness of habitat's restoration. The method used for planning of oak habitat management (management site selection criteria, a tool to assess sustainability for the hermit beetle habitat, to set the management priorities and to assess the amount of necessary management works etc.) within the project is also included in the programme as it could help to carry out similar works outside GNP in future (Annex A.2-1).

2. *Restoration and management programme for priority habitat type Western Taiga*

The Long-term habitat restoration and management programme for Western Taiga (9010*) habitat contains information on conservation status of the habitat in the state and actual situation with the habitat in GNP. Describes the main objectives for habitat management, outlines priority sites for management activities and sites that should be managed in future. Describes the actions that should be done to improve conservation status on short and medium-term scale, outlines the measures for long-term scale and sets the measures for evaluation of the effectiveness of management and restoration activities (Annex A.2-2).

3. *Hydrological restoration programme for Bog woodland habitat (91D0*)*

Hydrological restoration programme for Bog woodland habitat (91D0*) area around Gulbju sala bog contains information on conservation status of the habitat and particular restoration suggestions. Programme indicates current habitat state as well as drainage situation in the area (Annex A.2-3). In addition to data and information collected within the Project additional information on hydrology, geology and flora, fauna of the Gulbjusala bog and surroundings was collected from various resources. During information collection a serious lack of published information about the project area, especially about flora and fauna of the site was identified.

Basic information of flora and fauna was acquired from biologists and habitat experts who previously conducted studies within the Gulbjusala bog and surrounding areas: entomologist Mārtiņš Kalņiņš, freshwater and lake botanists Lelde Eņģele, Ilze Čakare and Uvis Suško. Almost no information from previous studies was found on resident bird species in the project area neither in Latvian Ornithological Society nor from most experienced ornithologists. Significant contribution regarding information from previous studies of flora and fauna of the project site was received from biologist Valdis Pilāts currently working in Nature Conservation Agency. Historical melioration plans were acquired from Priekuļi local administration of VSIA "Real Estate of The Ministry of Agriculture".

However main information including maps on habitat distribution and conservation status of protected forest and bog habitats within the Gulbjusala bog as well as specific habitat restoration requirements was provided by the FOR-REST Project habitat expert – Viesturs Lārmanis. Necessary maps and data layers e.g. topography of the site, tree height and canopy structure of forest stands, configuration and conditions of drainage systems were created by IES using remote sensing data acquired within the Action A.1 and other collected data e.g.

ground surveys of drainage systems (Action E.6). Additional assessment of the situation as well as particular restoration suggestions ensuring achievement of the restoration goals was discussed and agreed during meetings and information exchange with hydro-engineering company SIA “Nāra” contracted by NCA and included in the technical project for restoration of natural hydrological regime. The recommendations given by programme was included in the technical project developed within Action A.3.

Public discussions with local society about hydrology restoration measures foreseen in the Programme were carried out on February 20, 2014 in meeting held in town Stalbe where the Programme was presented by Rūta Abaja from IES. The discussion was organized by the FOR-REST Project Coordinator Kristīne Kampuse (NCA).

Problems/delays/changes

In MidR it was stated to finish all management programmes by 31/03/2014, however elaboration of the programmes required more time and action was fully completed by May, 2014. First full draft version of the programmes were distributed in April 2014 and the final version incorporating corrections and inclusions based on comments received from external expert was submitted to Coordinating Beneficiary on 15th May, 2014.

Milestones and Deliverables of the project proposal:

Name of the Milestone	Code of the associated action	Deadline	Actual date
Long-term forest management programme finalized	A.2	31/03/2014	15/05/2014
Name of the Deliverable	Code of the associated action	Deadline	Actual date
Three restoration and management programmes elaborated: - Hermit beetle habitat restoration programme for Gauja NP - Hydrology restoration programme for Bog woodland habitat - Restoration and management programme for priority habitat type Western Taiga	A.2	31/03/2014	15/05/2014
English summary of forest management programme on website	A.2	30/06/2015	In progress

Additional information –

Annex A.2-1 Hermit beetle habitat restoration programme for GNP in Latvian

Annex A.2-2 Restoration and management programme for priority habitat type Western Taiga in Latvian

Annex A.2-3 Hydrology restoration programme for Bog woodland habitat in Latvian

Action A.3: Preparatory works for restoration of natural hydrological regime

Timetable: 1st quarter of 2013 – 2nd quarter of 2014

Status: *Completed*

During the previous reporting period concrete site in the Gauja National park were chosen for hydrological regime restoration. Architectural-planning assignment from Joint Construction Authority of Amata municipality was obtained and first public procurement procedure announced.

Progress: The technical project provides the plan for hydrological regime restoration in the Bog woodland habitat (91D0*), reducing the impact of installed drainage systems on the habitat. According to technical project 138 ha of the territory will be affected by building wooden and peat dams and filling ditches with peat. Overall 37 ditches with a total length of 13,954 m will be reconstructed. It is planned to build four peat dams on 3 (three) ditches. On 5 (five) ditches 29 wooden sheet pilings will be built. Also 29 (twenty nine) ditch sections will be fully filled with peat (Annex A.3-1). The technical project is developed with aim not to negatively affect the properties of private landowners that live nearby nature reserve.

Engineering research works in the "Gulbju sala bog" was done in December, 2013 and in March, 2014 by Ltd "Nāra" employees. Required surveys were made according to Latvian coordinate system (LKS-92) and the 1977 Baltic height system. For design and construction work purpose 17 temporary rappers were installed. Altitude grounds were installed with a GPS receiver, engaging them into LAT POS base station network. Rappers heights and locations can be found in the list of rappers in the technical project.

IES provided SIA "Nāra" with LIDAR data and digital terrain model data layers (developed from remote sensing data acquired within Action A.1), maps of drainage systems, maps of current habitat distribution and future habitat distribution after hydrology restoration of the site. Consultations about hydrology restoration happened with Jouni Penttinen, coordinator for Boreal Peatland Life project - Restoring the Natura 2000 network of Boreal Peatland Ecosystems, LIFE08 NAT/FIN/000596.

Problems/delays/changes

Approval of technical project for restoring the hydrological regime of bog woodland habitat (Action C.2) and obtaining of construction work permits took longer than planned in projects timetable. First procurement procedure for nominating independent company for preparing technical project was announced on 27th September, 2013. Procedure ended with no results. Second procurement procedure was opened on 5th November, 2013. Contract with Ltd. "Nāra" was signed on 29th November, 2013. First sketch of technical project was handed in on 10th February, 2014. The draft version of technical project was handed in on 30th April, 2014. It took more time than predicted to approve the technical project in the responsible institutions – SES, Environment State Bureau (ESB). On the 7th March, 2014 "Nāra" Ltd. submitted an application for obtaining technical conditions from State Environmental service (SES). On 26th March, 2014 an answer was given that in order to obtain the technical conditions from the (SES) the preliminary environmental impact assessment (EIA) must be carried and answers to 19 questions have to be submitted to SES (Annex A.3-2). On the 18th July, 2014 SES handed out the technical conditions and announced decision not to start the complete process of EIA (Annex A.3-3). Coordination with Joint Construction Authority of Amata municipality, Pārgauja municipality and local land owners took additional 2 months. In order to introduce the locals with technical project, staff of "Nāra" Ltd. visited them in August and September and explained the influence of planned works on their properties. So the approved technical project was handed to Project on September 17th, 2014. The technical project has been approved by all necessary institutions and handed to NCA in 17/09/2014 and works within action C.2 can be started.

Regardless of the delay it is unlikely to affect the implementation of Action C.2 until 3rd quarter of 2015.

Milestones of the project proposal:

Name of the Milestone	Code of the associated action	Deadline	Actual date
Land registration in the Land Register finalized	A.3	31/01/2014	Not needed

Technical project prepared	A.3	31/03/2014	17/09/2014
----------------------------	-----	------------	------------

Additional information –

Annex A.3-1 Technical project in Latvian (Electronic version only)

Annex A.3-2 26th March, 2014 letter from SES (in Latvian)

Annex A.3-3 18th July, 2014 letter from SES (in Latvian)

3.1.2 Concrete conservation actions

Action C.1: Management of broad-leaved forests of slopes, screes and ravines

Timetable: 4th quarter of 2013 – end of the project

Status: On-going

In the previous reporting period sites for management activities were chosen. The site was surveyed by the Project Coordinator of management activities and Forest Habitat expert to understand the best methodology for implementing management activities. Experience from other related projects in Sweden was obtained.

Progress – As stated in MidR two places are chosen for management works. One place is situated in Pārgauja municipality, Raiskuma parish, Ungurmuiža (Provided in MidR Annex 6.1.9) where the largest colony of Hermit beetle in GNP is situated. The landowner of Ungurmuiža is Pārgauja municipality therefore an official agreement was signed between NCA and municipality for organising management activities in this territory (copy of agreement Annex C.1-1). The rest of chosen sites are situated in the territory of Sigulda municipality on lands administrated by NCA (Provided in MidR Annex 6.1.10)

Since February, 2014 works are carried out in habitat of broad leaved forest on slopes (9180*) as well as on other sites where habitat management activities are needed. Removal of surrounding fast growing tree species and bushes around old oak trees and creation of large gaps for promoting oak regeneration is done in 25,8 ha (24 ha in Ungurmuiža, 1,8ha in Sigulda municipality). In the final reporting period remaining 36 ha will be managed in Sigulda municipality. In mid November is foreseen to continue the management works of removing surrounding trees and bushes around old oak trees and creation of large gaps for promoting oak regeneration, after the upper groundcover will be frozen. In order to reduce the stress on ground level vegetation it is advisable to do the management works in winter. Also in the last reporting period coppicing and tree stump grinding will be done in all managed territories.

Experts from Finland and Sweden visited the area on April, 2014 and the existent results were discussed with them. Workshop about habitat type 9180* and *Osmoderma eremita* for local people were organised in Sigulda municipality during the Grand Joint Work initiative in April, 2014. French students were introduced with works done in Ungurmuiža and workshop was organised for them too. In the international Museum night in May, 2014, visitors of Ungurmuiža were introduced with Hermit beetle.

It is foreseen that the management actions in Sigulda and Ungurmuiža will end until the end of project.

Problems/delays/changes. It took longer than anticipated to get all agreements from responsible institutions – permits for logging from the State Forest Service and resolutions from The State Inspection for Heritage Protection – that was needed because the management territories are also part of landscape heritage sites. So the actual management works were started in February, 2014. It is also crucial for management works to be done mainly in winter, when the groundcover is frozen. Logging works should not fundamentally affect the groundcover vegetation. As well the mud roads that are used by local people to get to their

homes cannot be affected. Management works will resume on November, 2014, and will go on until the end of the project.

Regardless of the delay it is unlikely to affect the implementation of Action C.1 in time.

Name of the Milestone	Code of the associated action	Deadline	Actual date
Habitat management actions started	C.1	01/10/2013	19/08/2013
Habitat management actions finalized	C.1	31/08/2015	Action will be completed as planned

Additional information – Annex C.1-1 Agreement with Pārgauja municipality

Action C.2: Restoration of hydrology of bog woodland

Timetable: 3rd quarter of 2014 – end of the project

Status: Started

During the previous reporting period experience from other related LIFE projects in Finland was obtained. Restoration site was chosen.

Progress –Public procurement procedure for building supervision and company that will carry out the engineering works of hydrology restoration will end on 31st October, 2014 and the winning company will be contracted until mid-November, 2014. Actual works on site will start in the end of November, 2014. The work supervision will be done by “Nāra” Ltd. Territory has been surveyed by “Nāra” Ltd. several times and markings for construction works were made in January, 2014. Experts from Finland visited the area on April, 2014 and gave their insight on how the territory should be restored. The actual works that must be done in order to restore hydrology are described within action A.3. Territory map can be seen within the Technical project (Annex A.3-1). Anticipated time for ending hydrology restoration works in the territory is 31/07/2015.

Problems/delays/changes – We acknowledge that the actual management works have fallen far behind schedule, but there are several reasons why that happened. Firstly, the management works could only be started after the implementation of Action A.3 that took longer than anticipated. Secondly, the management works are restricted by state regulations that forbid forest exploitation in nature reserve zones from 15th March to 31st July. It means that notwithstanding whether the technical project would be handed in according to schedule, the works could only be theoretically started in August. Thirdly bog habitats are sensitive and tricky ecosystems to manage, because the ground water levels alternate from weather conditions. We have to wait for more dry weather conditions to start the works, because for now the ground water levels are too high for excavators to enter the territory.

After evaluating the reasons conclusions are that regardless of delays the works will be done on time. We assure that winter time and early spring will be enough time to accomplish planned management works.

Milestones of the project proposal:

Name of the Milestone	Code of the associated action	Deadline	Actual date
Restoration of hydrology started	C.2	01/04/2014	20/11/2014
Restoration of hydrology finalized	C.2	31/08/2015	Action will be completed as planned

Action C.3: Management of Western Taiga

Timetable: 4th quarter of 2013 – end of the project

Status: On-going

During the previous reporting period site for management works was chosen and preparatory works started. The site was surveyed by the Project Coordinator of management activities and Forest Habitat expert to understand the best methodology for implementing management activities.

Progress: Since February, 2014 area of 17,5 ha has been managed by cutting the undergrowth of spruces, creating openings in forest stand and increasing the dead wood amounts in order to expose pine tree stems to the sunlight and maintain the biological diversity in pine forests of Western taiga. Because the management actions foresee the increase of dead wood amounts the fire safety issues also increase in the territory. Fire safety rules in the forests of Latvia determine that firebraker zones must be created in forests where tree cutting works are done. On the 15th August such zones were made around 17,5ha. Firebrakers are 2,5m wide bars of land which are plowed and maintained free from overgrowth.

In the final reporting period remaining 262,5 ha will be managed in nature reserve zone Lenčupe in Pārgauja municipality. The undergrowth of spruces will be cut, openings in forest stand made and dead wood amounts in the territory increased. In order to reduce the stress on ground level vegetation the works will resume in mid-November and will be completed by the end of project.

Problems/delays/changes – Additional Western taiga management activity – prescribed burning – was planned in August, 2014. During July large protests from society and forestry sector developed against prescribed burning activity. The burning territory was scaled from 17,5ha to 2,8 ha, but it still grew as a national scale issue and gained a lot of media attention. In result MEPRD advised NCA to postpone on this action till next year. At this moment it is unknown whether project will be able to do some burning in the area, but NCA will continue on educating and informing society about benefits of prescribed burning in dry pine forests. The goals of action C.3 still will be reached without prescribed burning action by cutting undergrowth, making openings in forest stand and increasing dead wood amounts in the territory.

Milestones of the project proposal:

Name of the Milestone	Code of the associated action	Deadline	Actual date
Management works of western taiga started	C.3	01/10/2013	19/08/2013
Management works of western taiga finalized	C.3	31/08/2015	Action will be completed as planned

3.1.3 Public awareness and dissemination of results

Action D.1: Creation and maintenance of project's website

Timetable: September 2011 – end of the project (3rd quarter of 2015)

Status: On-going

During the previous reporting period the website was established and launched on February 2012. The project website <http://for-rest.daba.gov.lv/public/> is a subdomain of NCA website. The website contains main information on the project – general information of duration of the project, funding and project partners as well as information on project staff and contact-details. It also includes description of the project, its objectives and project actions. Website

contains logos of LIFE+ programme, NATURA 2000 network and has a clear reference to LIFE financial instrument.

Progress:

During the reporting period the website has been updated, providing information on project progress, achieved results and events. Since the MidR there have been published:

- 27 news in Latvian version and 12 news in English version of the website;
- 7 photo galleries both in Latvian and English version of the website.

From November 2012 the website is connected to the Google Analytics, so the statistical data is not available from beginning of Project start date. Since October 1, 2013 until October 1, 2014 the website has been visited 2221 times and the average number of visits per month is 171 (min. 105; max 609). In comparison to period reported in the MidR, website has increased the number of visitors. Visitors mainly are from Latvia. Overview by Google Analytics is attached in Annex D.1-1.

Problems/delays/changes – No any problems, delays or changes are foreseen until now.

Milestones of the project proposal:

Name of the Milestone	Code of the associated action	Deadline	Actual date
Project website set up	D.1	28/02/2012	01/02/2012

Additional information – Annex D.1-1 overview by Google Analytics

Action D.2: Preparation of information boards and signs

Timetable: 1st quarter of 2013 – end of the project (3rd quarter of 2015)

Status: Completed

In the previous reporting period information for development of information signs was collected.

Progress: The project proposal foresees production of 14 A0 and 50 A4 size information boards. During the reporting period public procurement procedure for sub-contracting the company that will produce information boards and signs was carried out. Individual enterprise of J.Baikovs “Kobalts” won the procedure.

In the project proposal it is foreseen to put up A0 information boards in 9 locations where project habitat management works (Actions C.1,C.2,C.3) are done. To insure the maximum visibility of the information it was decided by PMU to put up information board in two additional places, so in total there would be 11 locations where the boards will be seen. The location of information boards are well thought out and the boards are placed in publicly visible places. The aim of boards is to inform local habitats and visitors of the territories about habitat management actions and to serve as additional helping material for nature education. The locations and board visibility matters are described in the table 1.

Six information boards were produced containing description of management activities within action C.1. Four information boards describing management activities within action C.2 and four information boards describing management activities within action C.3 (Annex – D.2-1). It was decided by PMU to produce one additional information board for each management territory as a reserve in case the existing boards get damaged by weather or people.

50 A4 size signs are produced. They shortly inform about management works done in territory were produced (Annex – D.2-2). All information boards and signs have clear reference to EU LIFE+ programme, Nature 2000 network and beneficiaries. All information boards and signs were produced until 30/06/2014.

Table 1.

No	Management site	Public visibility		Set up status
1	Sigulda municipality (Action C.1)	Information board is set up at the beginning of path that leads through habitat 9180* up to Sigulda castle ruins.	Sigulda is the top tourism destination in GNP. Each and every one of the information boards are or will be set up near the popular tourism trails. So the boards will be well visited and visible to different kind of audience - locals as well as tourists. Also boards will serve as educational visual material for local school teachers to educate children about nature management (Map of board locations Annex D.2-3)	1 - Set up
2		Board will be situated near path that leads through habitat 9180* up to Krimulda castle ruins.		2,3,4,5 - will be set up until the end of 2014.
3		Board will be set up near Gūtmaņala. Nearby habitat 9180*.		
4		Board will be set up in the Klauku līcis, nearby habitat 9180*.		
5	Pārgauja municipality (Action C.1)	Board will be set up in the old park of Ungurmuiza manor	Ungurmuiza is one of the top tourism destinations in Pārgauja municipality. People visit the manor from all around Latvia and abroad, so the information will be well visible to a wide range of people (Map of board locations Annex D.2-4)	
C.1 - 1 information board is kept as a replacement in case the existing boards will get damaged by weather or people.				
6	Pārgauja municipality (Action C.2)	Board will be set up in Kūdums village near the old Valmiera-Cēsis road. As the village is local gathering place, the locals will be informed that in the nearby bog restoration works are done.	As the nature reserve zone Gulbju sala bog where the management actions are done is very large, three places for board placement was chosen to make the information more visible. GNP is the most populated specially protected area in Latvia. The management territories are often used as recreation places by locals from nearby and distant territories. Information boards set up in this territory will be well visited. Also boards will serve as educational visual material for local school teachers to educate children about habitat restoration activities (Map of board locations Annex D.2-4)	6, 7, 8 will be set up until the end of 2014
7		Board will be set nearby lake Drišķins. Lake is popular recreation place and people from Vidzeme region centre Valmiera and Cēsis, and nearby villages visit this place. So the board will be well visited and larger population will be informed about restoration aims and management actions.		
8		Board will be set up close to the lake "Caunu dzelve" in "Gulbju sala bog", because surrounding of this lake in the future is planned to be as a resting place for tourists.		
C.2 - 1 information board is kept as a replacement in case the existing boards will get damaged by weather or people.				
9	Pārgauja municipality (Action C.3)	Board is set up near the bicycle route that goes through the management territory.	As the territory is quite large, three locations for board placement are chosen to ensure that information is visible to people who enter territory from different locations. The territory is a popular recreation place for locals from nearby villages and towns. Two GNP bicycle paths are going through and around the management territory of Action C.3. Local business owners use this place for tourist attraction. The boards will inform the cyclists that they are entering nature reserve zone where concrete management actions are implemented. Also boards will serve as educational visual material for local school teachers to educate children about habitat restoration activities (Map of board locations Annex D.2-5)	9 - Set up.
10		Board will be set up in the eastern part of territory on the other end of bicycle route.		10, 11 - Will be set up until the end of 2014.
11		Board will be set up in the north part of territory near the bicycle route.		
C.3 - 1 information board is kept as a replacement in case the existing boards will get damaged by weather or people.				

The same as information boards, also small signs about project activities are thought to be set up until the end 2014 mostly on tourist trails, where management activities will be implemented to set the borders of managed territories and information centres, such as Gūtmaņala information centre, Sigulda ruins information point, Ungurmuiža and others.

The information boards and signs will be completely set up till the end of year 2014. Staff of NCA is appointed for setting up large information boards. Due to NCA staff workload the setting up of the information boards will took longer than anticipated.

Problems/delays/changes – To insure the maximum visibility of the information it was decided by PMU to put up information boards in two additional places. Instead of 9 locations as stated in project proposals, boards will be set up in 11 locations. In total 14 information boards were produced but it was decided by PMU that 3 information boards will not be set up, they will be preserved in NCA in case if standing boards get damaged by weather or people. There is delay in setting up the information boards and signs due to NCA staff workload. It is foreseen to put up all information boards till the end of November.

Milestones of the project:

Name of the Milestone	Code of the associated action	Deadline	Actual date
Information boards and signs set up (forest habitat restoration and management sites)	D.2	31/06/2014	30/11/2014

Additional information – Annex D.2-1 model of A0 information board.

Annex D.2-2 model of A4 information sign.

Annex D.2-3 Information board map Sigulda Municipality.

Annex D.3-4 Information board map Ungurmuiža and nature reserve zone Gulbju sala bog.

Annex D.3-5 Information board map nature reserve zone Lencupe.

Action D.3: Organisation of seminars

Timetable: 4th quarter of 2011; 3rd quarter of 2013; 3rd quarter of 2014 – end of the project (3rd quarter of 2015)

Status: On-going

In the previous reporting period the introductory seminar was organized on 28th of February 2012 in the premises of NCA, in Sigulda with 67 participants. Additional calibration workshop for State Environmental Inspectors of NCA was organized on 19th of March, 2013. As informed in MidR one planned seminar for nature protection organizations (state institutions and NGOs, the staff of the other LIFE+ projects) was not organised in the 3rd quarter of year 2013 due to reason that habitat management actions were not started yet and long-term forest habitat restoration and management programmes would be finished within the next reporting period.

Progress:

1. *Seminar for local land owners and local communities*

In the reporting period three seminars were organised for local land owners and local communities focusing on issues related to forest habitat management. In the project proposal one seminar was foreseen for this target group, but it was decided by PMU to organise additional two to increase the overall awareness and understanding about the habitat management measures and their significance for nature protection. Despite the seminars were

not specifically organized for nature protection organizations, representatives from state institutions, nature NGOs and staff from other LIFE+ projects also attended them.

Seminar for local society about the restoration of natural groundwater regime in the nature reserve zone “Gulbju sala bog” was held in Stalbe village, Pārgauja municipality in February 20, 2014. 28 people attended the meeting. It was moderated by Rolands Auziņš (Director of NCA Vidzeme regional administration). The draft version of technical project and habitat management programme was presented during the meeting, as well as basic information about Project and actions done so far. During individual meetings and in the seminar opinion leaders of local society expressed their thoughts that planned works will result in a significant raise of groundwater levels in an unpredictably large area and the welfare of local society will be compromised. Also other questions concerning the management of GNP area by NCA were discussed. After the seminar project coordinator prepared a press release and summarized answers to most frequently asked questions. The summary was sent to all participants to given e-mails. The information was published in the regional newspaper, in Pārgauja municipality newsletter and project website (Annex D.3-1).

On 23rd and 30th July, 2014 in Sigulda and Auciems additional two seminars were organised to explain management actions foreseen in action C.3. Together 81 participants attended both seminars. Seminar in Sigulda was widely represented in national media – national televisions LNT, TV3, LTV1, written national and regional media – Neatkarīgā rīta avīze, Diena, Latvijas avīze, Vides vēstis, Druva, Liesma etc., and radio. In the seminar Project and management plan for Western taiga habitat was presented as well as background information about history of management of dry pine forests with fire. Representatives from project LIFE “Birds in Adazi, LIFE12 NAT/LV/000509 presented information about Heather (*Calluna*) habitat maintenance with fire. For seminar requirements independent moderator was contracted for guiding seminar course so all parties would have their chance to express their opinion (Annex D.3-2, D.3-3). Moderator was also needed for assuring that seminar will stay on topic and will have some constructive outcome.

Overall conclusion after the seminars was that local society is concerned about Bog woodland and Western taiga habitat restoration impact on their properties and a large part of controversy is created by emotion-based assumptions (general negative attitude towards nature conservation and different prohibitions for land use in nature reserve zones in GNP). Therefore it is necessary to continue the communication with the local society – to search the points of mutual interest.

The costs of organising 3 seminars instead of 2 seminars as foreseen in MidR did not require additional expenses from the project budget.

2. Workshops

Additional to project proposal two workshops for general public with informative elements were organised in Sigulda municipality and Pārgauja municipality. PMU sees workshops as amazing opportunity through working experience educate people about nature conservation, because the leading opinion within general society about nature conservation is that specially protected nature territories do not need any management.

The first workshop for local inhabitants of Sigulda municipality was organised during nationwide initiative – Big Cleanup 26/04/2014. Interview to national radio station (Latvijas radio 1) was given during the happening. 20 people gathered in forest habitat of slopes, scress and ravines (9180*) in Sigulda and cleaned logging residues that were left after management works done in this habitat in late winter. Participants also listened to short presentation about Project and management actions for this habitat presented by project coordinator (Annex D.3-4). In 5th September, 2014 local students from Straupe elementary school participated in the

firebraker belt making workshop in nature reserve zone Lenčupe, Pārgaujas municipality. 2.5m wide firebraker was scarified on a slope where this work could not be done by tractor. Kids were introduced with basic principles of the project, the aims of management actions within Western Taiga and lectured about importance and dangers of fire (Annex D.3-5). The workshops were promoted in local media. Project brochures were distributed during the workshops. Costs of additional workshops were insignificant and didn't influence the overall budget foreseen for activity D.2

It is planned to organise 3 seminars in final reporting period. Two in the 1st and 2nd quarter of 2015 about biotechnical management measures, stimulating discussion about different management activities for maintaining biodiversity. Nature protection authorities, scientific research institutions and non-governmental nature protection organisations will be invited to participate in these seminars. And the final seminar in the 3rd quarter of 2015 to present results and to discuss future perspectives of forest habitat restoration/management programmes of the GNP. Local municipalities, nature protection authorities, scientific research institutions and non-governmental nature protection organisations will be invited. As well as public educational work will be continued through different kind workshops.

Problems/delays/changes: The project proposal foresees one seminar for local land owners and local communities, but it was decided by PMU to organise additional two to increase the overall awareness and understanding about the habitat management measures and their significance for nature protection. The general society does not understand the need for any management actions within specially protected nature territories. The statement was very clearly seen during nationwide discussions about prescribed burning in July, 2014. Also additional workshops were organised to draw attention to habitat management. The costs of workshops are very low but the knowledge that people gain are priceless.

Milestones of the project:

Name of the Milestone	Code of the associated action	Deadline	Actual date
Introduction seminar organised	D.3	30/11/2012	28/02/2012
Final seminar organised	D.3	31/08/2015	Action will be completed as planned

Additional information – Annex D.3-1 Agenda, list of participants, minutes and photos of seminar on 20/02/2014, Stalbe

Annex D.3-2 Agenda, list of participants of seminar on 23/07/2014, Sigulda

Annex D.3-3 Agenda, list of participants and photos of seminar on 30/07/2014, Auciems

Annex D.3-4 Agenda, list of participants and photos of workshop on 26/04/2014, Sigulda

Annex D.3-5 Agenda, list of participants and photos of workshop on 05/09/2014, Lenčupe

Action D.4: Production of audio-visual materials

Timetable: 1st quarter of 2012 – end of the project (3rd quarter of 2015)

Status: On-going

Background: In the previous reporting period team of EM filmed different project activities as well as different habitats at project sites. 30 hours of footage were collected.

Progress: Short films will focus on four different issues: application of remote sensing technologies for nature conservation, restoration of hydrology of bog woodland and management and restoration of forest habitats. Films will also give overview on development of sites during implementation of restoration and management measures as well as background information on particular forest habitat management issues. In mid-July 2014 EM

project team together with the FOR-REST leading habitat specialist Viesturs Larmanis went on a filming trip to explore and film the nature values of dry boreal forests, bog woodlands and wooded meadows. During two days there were shooting of valuable moss, lichen and plant species, which characterize high-quality natural forest habitats. Shooting of typical key elements and landscapes of boreal fire subject forests and bog woodlands in protected landscape area "Ziemeļgauja" and nature reserve "Kadajs". Shooting of typical wooded meadows landscape and such valuable species as very rare polypore fungus *Hapalopilus croceus*. EM project team participated and filmed the process of project informative seminars on controlled burning for pine forest ecosystem regeneration and protection in project site Lenčupe on July 15th, in Sigulda on July 23rd in Sigulda and on 30th July 2014 in the Pārgaujas municipality Raiskuma parish. Continued work on short films scenarios, discussed them with project partners and habitat specialist. Several shootings of *Osmoderma eremita* trap installation and controlling in project site Ungurmuiža, also filming *Osmoderma eremita* beetles and their habitats. Shootings of autumn landscapes of project site in Sigulda by Gauja river.

Interactive information materials are planned to be set up in the visual demonstrations exposition. It is planned that these informative materials will be all four films, produced during the Project, photos of sites before and after the restoration actions, short informative texts about habitats and management activities of the Project. It is foreseen, that the visual demonstrations exposition will be set up in the Gūtmaņala information centre in 3rd quarter of 2015.

In the final reporting period it is planned to:

- shoot some extra material on natural boreal forests' landscapes in GNP;
- Point out the main headlines for all four short film scenarios;
- Edit the filmed material;
- Film the works of restoration of hydrology of bog woodland;
- Film the management works of *Osmoderma eremita* habitats and Western taiga habitat;
- Short films produced.

Problems/delays/changes – We propose to make changes in original project proposal and buy USB flash drives instead of DVD for short film distribution. The technology is more commonly used than DVD nowadays. The costs of buying USB flash drives instead of DVD will not exceeded amounts of allocated budget foreseen for this activity.

Milestones of the project:

Name of the Milestone	Code of the associated action	Deadline	Actual date
Interactive informative materials set up	D.4	31/07/2015	Action will be completed as planned

Deliverables of the project:

Name of the Deliverable	Code of the associated action	Deadline	Actual date
4 short films produced (USB)	D.4	31/07/2015	Action will be completed as planned

Additional information – No additional information

Action D.5: Production of printed-materials

Timetable: 4th quarter of 2012. 2nd quarter of 2013 – 2nd quarter of 2014, 1st quarter of 2015 – end of the project (3rd quarter of 2015)

Status: On-going

Progress: Leaflet with information on forest habitats management in the GNP will be printed out till 28/11/2014. The leaflet will include information about the habitats managed within the project, will describe and illustrate management actions, contain information about specially protected species that depend from these habitats. The target group for this leaflet will be inhabitants and visitors of GNP. During the loud summer discussions about prescribed burning we came to a conclusion that people need to be educated about habitat management actions, their necessity and aim. The leaflet will be in A4 format, 2000 copies in Latvian, 500 in English, printed on environmentally friendly paper (FSC certified). Leaflets will contain logos of LIFE+ programme, NATURA 2000 network and will have a clear reference to LIFE financial instrument. For layout and printing the leaflets “Talsu tipogrāfija” Ltd. is sub-contracted.

As the actual budget for printing leaflet was lower than planned in the Project budget in the next reporting period Project will think about producing some representative or educational materials for public distribution.

The table provided below shows the distribution of introductory leaflets that were produced at the begging of project.

Activity/place	Amount of leaflets spread out	Language
Seminar “Forest industry news”, Stalbe village, 14/03/2014	50	Latvian
Pārgauja county libraries (3)	150	Latvian
Cēsu city library	50	Latvian
Ungurmuīža manor	100+100	Latvian/English
Gūtmaņala information centre	30+30	Latvian/English
Seminar “Hydrology restoration in Gulbju sala bog”, Stalbe, 20/02/2014 “Prescribed burning” Sigulda 23/07/2014, Auciems 30/07/2014	40	Latvian
Brochure stand in NCA	20+20	Latvian/English

In the last reporting period a printed report on forest habitat restoration and management will be prepared towards the end of 2nd quarter of 2015. It will include description of remote sensing data interpretation and technical details of management works conducted and results achieved. It will also describe experience from other projects in Latvia and of similar projects from other countries of boreal region visited within action E.3. Target group of this publication will be nature conservation experts and organisations dealing with similar issues both in Latvia and other countries in boreal region. Publication will be printed as a brochure in 1000 copies with full contents both in Latvian and in English, printed on environmentally friendly paper (FSC or PEFC certified). Publications will also be available on electronic format on websites of NCA and associated beneficiaries.

Problems/delays/changes – The first public procurement procedure for designing and printing the leaflet was announced on 17/07/2014. The delay in the timetable arose after the first public procurement procedure was incomplete. The specification for leaflet design was poorly defined and instead of announcing the winning company, new, more complete procedure was

announced. After revising the specification the second public procurement procedure was announced on 28/08/2014 and the contract with “Talsu tipogrāfija” Ltd. was signed in 18/09/2014. The network of distribution of forest management leaflets is well thought out, so the delay will not affect it.

Deliverables of the project:

Name of the Deliverable	Code of the associated action	Deadline	Actual date
Project leaflet printed	D.5	31/01/2012	February, 2012
Forest habitat leaflet printed	D.5	30/09/2014	28/11/2014
Report on forest habitat restoration and management printed	D.5	31/05/2015	Action will be completed as planned

Additional information – No additional information.

Action D.6: Production of the layman’s report

Timetable: 2nd and 3rd quarter of 2015

Status: Not started

Progress - A layman’s report will be prepared and produced at the end of the project both in paper (750 copies) and in electronic format, in about 8-10 pages, in Latvian and in English. It will present project objectives, actions and results.

Deliverables of the project:

Name of the Deliverable	Code of the associated action	Deadline	Actual date
Layman’s report printed	D.6	31/08/2015	Action will be completed as planned

Additional information – No additional information.

3.1.4 Overall project operation and monitoring

Action E.1 Project management

Timetable: September 2011 – end of the project (3rd quarter of 2015)

Status: On-going

Progress:

Project management by NCA

PMU hold regular communication (phone, e-mails, Skype and meetings) to discuss the progress of work and coordinate actions. During reporting period there have been changes in Project staff. Project coordinator Ilze Sabule went on long-term leave, so in her place is working Kristīne Kampuse.

Following employees are involved in the project management

- Project manager Mārtiņš Zīverts is responsible for overall coordination and leadership of the project (action E.1), coordination of meetings and reporting to the Steering Group (action E.2) and the European Commission. Supervising implementation of the project activities and work of PMU, organising networking with other LIFE Nature projects. Project manager is the only permanent employee in the project.

- Project coordinator/communication manager Kristine Kampuse is a full-time temporary employee of the project. The project coordinator is in charge of the project content coordination, the interlink between all actions, practical preparation of technical reports and performing of project secretariat functions (actions A.2, A.3, C.1, C.2, C.3, D.6 and E.4) as well as is responsible for communication with associated beneficiaries (E.1, D.4), development of the project website (action D.1), production of printed materials (action D.5), preparation of information boards and signs (action D.2) and organisation of seminars (action D.3). New Project coordinator started work on project in November 1st, 2013.

Change of project coordinator is planned to be in January 1st, 2014, when Inga Pikšena, the first project coordinator who went on maternity leave will start to work in place of Kristine Kampuse.

- Project financial assistant Irina Spuriņa is in charge of keeping the accounts of the project, control of accounts and expenditures of partners, preparing of financial reports, coordinating the action E.5 – Audit of the project.
- GIS specialist Aldis Ceriņš is responsible for GIS data produced within Actions A.1, A.2, A.3, C.1, C.2, C.3 and E.6 maintenance at the NCA.
- Coordinator of management actions Jānis Andrušaitis is responsible for managing restoration process within actions C.1, C.2 and C.3.
- Lawyer, procurement expert has been sub-contracted as an external assistance in Action E.1, as it was planned in Project proposal. Lawyer is responsible for preparation of legal documents or document projects, including contracts with the project staff, contracts for goods and services, etc., and, if necessary, prepare replies on letters, administrative provisions to the applications, alerts and other documentation. Writing or in verbally provide advice on legal matters and on the application of public procurement procedures and relevant laws and regulations as well as to prepare documentation for public procurement procedures.

Project management by IES

Active communication with Coordinating Beneficiary was carried out on planning of project activities, on progress of actions as well as financial reporting. Project areas within the GNP were visited to evaluate quality of the acquired Remote Sensing data, to collect forest data necessary for forest ecosystem/habitat classification and analysis of forest structures, as well as to obtain data on drainage systems and other information necessary for elaboration of hydrology restoration programme as well as planning and implementation of the monitoring activities.

To carry out implementation of the Project in total ten employees of the Institute for Environmental Solutions were involved. At the current moment 8 employees of IES are working for the Project (table 2).

Name	Position	Started working in the project	Finished work in the project
Linda Avena	Financial Assistant	01.09.2011.	
Gatis Eriņš	Technical Coordinator	01.09.2011.	
Valts Līcis	Administrative Coordinator	01.09.2011.	
Uģis Rotbergs	Forest expert	23.05.2012.	
Edgars Beiša	Monitoring Expert	01.05.2013.	
Juris Taškova	GIS data processing and analysis expert	01.02.2013.	
Oskars Purmalis	Monitoring Expert	01.10.2013.	

Rūta Abaja	Data analysis expert, restoration programme expert	01.10.2013.	
Inese Suija-Markova	Partner Coordinator	01.09.2011.	01.10.2013.
Bruno Helmut Andres	Remote Sensing data processing expert	01.09.2012.	01.10.2013.

List of employees Table 2.

- Technical coordinator Mr. Gatis Eriņš is responsible for coordination of the implementation of the Actions A.1., A.2., C.1., C.2., C.3., E.1., and E.6. He is responsible for daily communication with project management from Coordinating Beneficiary, project partners as well as with involved experts and consultants.
- Administrative coordinator Mr. Valts Līcis is responsible for legal issues (e.g. contracts), financial planning, internal audit and procurement procedures (Action E.1.).
- Financial assistant Ms. Linda Avena is responsible for accounting and financial reporting of the IES (Action E.1).
- Data processing experts Mr. Juris Taškovs; Mr. Bruno Andres are responsible for pre-processing of remote sensing data, data analysis and elaboration of maps and GIS data layers (Actions A.1., A.2., C.1., C.2., C.3. and E.6.).
- Data analysis and restoration programme development expert Ms. Rūta Abaja was responsible for elaboration of Bog woodland (habitat type 91D0*) hydrology restoration programme (Action A.2.).
- Forest data evaluation and management planning specialist Mr. Uģis Rotbergs was involved in elaboration of long-term forest habitat restoration and management programme (Action A.2.).
- Monitoring specialists Mr. Oskars Purmalis; Mr. Edgars Beiša are responsible for data collection on hydrology systems and monitoring data collection and analysis (Action E.6.).

Project management by LFN

To carry out implementation of the project activities following employees of the Latvian Fund for Nature are involved: Baiba Strazdiņa (project coordinator of associated beneficiary, action E.1), Ilze Danefelde (financial assistant, action E.1) and Viesturs Lārmanis (forest expert, responsible for actions A.1, A.2 and takes part in C, D and E activities).

- Project coordinator Baiba Strazdiņa is responsible for communication with coordinating beneficiary, planning and daily supervision of project expert's work and preparation of quarterly activity reports to the coordinating beneficiary. She also takes part in public awareness activities and activities connected with dissemination of project results when necessary (participation in project meetings and seminars, information for information boards, leaflets etc.).
- Forest expert Viesturs Lārmanis is responsible for acquisition of ground survey data for forest habitat assessment (action A.1) and for elaboration of forest habitat restoration and management programmes (action A.2). His duties also include scientific consultations during planning and evaluation of concrete management actions (action C.1, C.2, C.3) as well as participation in public awareness and networking activities.
- To develop the methodology for evaluation of effectiveness of restoration of Western Taiga habitats to invertebrate species, entomologist Kristaps Vilks was hired in February and March 2014 (action A.2).

- To develop the methodology for evaluation of effectiveness of management activities in oak habitats to invertebrate species entomologist Dmitrijs Teļnovs was hired from August 2013 to March 2014 (action A.2). To collect the monitoring data on invertebrate species in oak habitat management sites, a contract for carrying out a voluntary work was signed by Dmitrijs Teļnov in May 2014.

Project management by EM

Project team at EM consists of two part-time employees. Project financial assistant/scriptwriter Ieva Goba during the reporting period is replaced by Maija Grandāne. She is in charge of coordinating Elm Media activities and communication with Nature Conservation Agency and preparation of reports as well as planning the filming process and developing the script for the film.

Lelde Goba is the main cinematographer shooting project activities and different habitats in project areas.

Milestones of the project:

Milestone of the project	Code of the associated action	Deadline	Actual date
Project manager contracted	E.1	30/09/2011	28/09/2011
Partner contracts signed	E.1	30/11/2011	29/11/2011
PMU established	E.1	30/11/2011	29/11/2011

Additional information – No additional information

Action E.2: Steering Group

Timetable: 1st quarter of 2012; 1st quarter of 2013; 2nd quarter of 2014; 3rd quarter of 2015

Status: On-going

Progress

As reported in the MidR the first meeting of the Steering Group was conducted on 29th March 2012. According to the timetable the second meeting of the Steering group has to be organised on 1st quarter of 2013. But after discussions with project management staff, it was decided to organise meeting of the Steering group on November 2013 after the Mid-term report will be prepared. There are no changes in the Steering group staff until now. The Steering Group consists of representatives from the Ministry of Environmental Protection and Regional Development, the Ministry of Agriculture, the Latvian State Forest Service and representatives from the project beneficiaries – NCA, IES, LFN and EM (Provided in MidR Annex 6.4.1).

In the reporting period the second meeting of Steering group was held in Ungurmuiža, Raiskuma parish on 28th November, 2013. It is the place where part of management actions of Activity C.1 is implemented. The meeting consisted from two parts – presentation about activities in previous period and challenges for the next one. The second part of the meeting was held in the field to show to the Steering group members' situation of habitat before restoration actions, to listen to comments before planned management activities and to get suggestions for achieving best possible results (Annex E.2-1).

In the final reporting period two steering group meetings will be held. Based on the fact that the second meeting was held in November, the third Steering group meeting will be held on 28th November, 2014 as well, to keep to one year interval between meetings. The final Steering group meeting will be held towards the end of Project in August, 2015.

Problems/delays/changes: With the MidR it was indicated that second Steering group meeting will be held in November. It was decided also to organise the third Steering group meeting in November to report project activities for full year.

Milestone of the project:

Milestone of the project	Code of the associated action	Deadline	Actual date
Steering Group established	E.2	30/03/2012	29/03/2012

Additional information – Annex E.2-1 Participant list, minutes and photos from Steering group meeting.

Action E.3: Networking with other related projects

Timetable: 3rd quarter of 2012 – 1st quarter of 2013, 4th quarter of 2013, 3rd quarter of 2014 – 1st quarter of 2015

Status: On-going

In the previous reporting period active co-operation was maintained with several LIFE projects – HYDROLPAN (LIFE10 NAT/LV/000160), NAT-PROGRAMME (LIFE11 NAT/LV000371), RAISED BOGS (LIFE08 NAT/LV/000449), and EREMITA MEADOWS (LIFE09 NAT/LV/000240). Employees of associated beneficiary IES (Gatis Eriņš and Uģis Rotbergs) attended conference “MANAGING BIOMASS FROM FORESTRY, AGRICULTURE & LANDSCAPE CONSERVATION: SUSTAINABLE WOOD”, that was organized by LIFE+ project BEST4VARIOUSE. Two experience exchange study tours to Sweden and Finland was organized. Experience exchange study tour in Latvia was organized to get acquainted with the experience of other projects with forest habitat restoration and management issues in specially protected territories of Latvia.

Progress – In the reporting period the project management team of NCA is still regularly communicating with the staff members of LIFE+ projects – HYDROLPAN (LIFE10 NAT/LV/000160) and NAT-PROGRAMME (LIFE11 NAT/LV000371). New networks with other LIFE+ projects have been created during reporting period. Excellent cooperation was established with the new LIFE project LIFE Birds in Adazi (LIFE12 NAT/LV/000509). Opening seminar of the project was attended by FOR-REST PMU, as well the PMU of Birds in Adazi participated in meetings with Swedes and Fins in April, 2014. Consultations about hydrology restoration legal framework in the GNP and information about communication issues with local society in GNP was provided for LIFE project WETLANDS (LIFE13 NAT/LV/000578).

The project management team of LFN is regularly communicating with experts of LIFE+ project EREMITA MEADOWS (LIFE09 NAT/LV/000240). The experience gained during planning the oak habitat restoration actions in the Gauja National Park, were used in the long-term management programme for wooded meadows in Latvia that is being elaborated within the EREMITA MEADOWS project. Forest expert Viesturs Lārmanis attended the seminar “Biological diversity in wooded grasslands” that was organized by Estonian Nature Conservation Board and was held in Muhu Island, Estonia on May 28th 2014 (Annex E.3-1). During the seminar best management practice of wooded meadows and oak habitats from all Baltic States were presented. The findings of management programmes for oak habitats in Gauja National Park were also presented during discussions. Findings from the seminar are used in the planning of detail management actions for oak habitats in the project.

Two experts from Finland state-owned forest management enterprise “Metsähallitus” and Hame university lecturer visited project in April, 2014. C.1, C.2, C.3 activity territories were

visited and best management practices were discussed with them (Annex E.3-2). On April 26th, 2014 30 nature experts of Nature Conservation unit at the County Administrative Board of Ostergotland visited the project sites – Ungurmuiža and Sigulda – during their experience exchange trip to Latvia. During the visit forest expert Viesturs Lārmanis presented the management activities that has been done in the sites till the date and talked about the management works that is planned to implement in the near future. After short presentation a fruitful discussions were organised between project staff who attended the event (Viesturs Lārmanis, Jānis Andrušaitis, Baiba Strazdiņa) and colleagues from Sweden to improve the planned management and to take over the Swedish experience (Annex E.3-3). During the final reporting period regular communication with mentioned LIFE+ projects will be continued.

Milestones of the project:

Name of the Milestone	Code of the associated action	Deadline	Actual date
1 st experience exchange Study Tour done	E.3	30/09/2012	27/09/2012

Additional information – Annex E.3-1 Agenda for Seminar “Biological diversity in wooded grasslands”

Annex E.3-2 Agenda for Finnish expert visit to FOR-REST habitat restoration sites.

Annex E.3-3 Swedish expert report from Nature Conservation study trip to Latvia.

Action E.4 After-LIFE Conservation Plan

Timetable: 1st quarter of 2015 – end of the project (3rd quarter of 2015)

Status: Not started

After-LIFE Conservation Plan will be elaborated by the Project Management Unit as a separate chapter of the final report at the end of the project; it will be presented both in Latvian and in English, available in paper and electronic format.

Deliverable of the project:

Name of the Deliverable	Code of the associated action	Deadline	Actual date
After LIFE conservation plan prepared	E.4	31/08/2015	Action will be completed as planned

Action E.5: Audit of the project

Timetable: 3rd quarter of 2015

Status: Not started

Progress – Public procurement procedure was held on August/September 2013 to nominate independent organisation, who will verify statement of expenditure and income at the end of the project. As a result of public procurement, the official contract with independent organisation was signed on 24th of September, 2013.

Deliverable of the project:

Name of the Deliverable	Code of the associated action	Deadline	Actual date
Audit report prepared	E.5	31/08/2015	Action will be completed as planned

Additional information – No additional information

Action E.6: Monitoring of restoration and management measures

Timetable: 2nd quarter of 2013 – end of the project (3rd quarter of 2015)

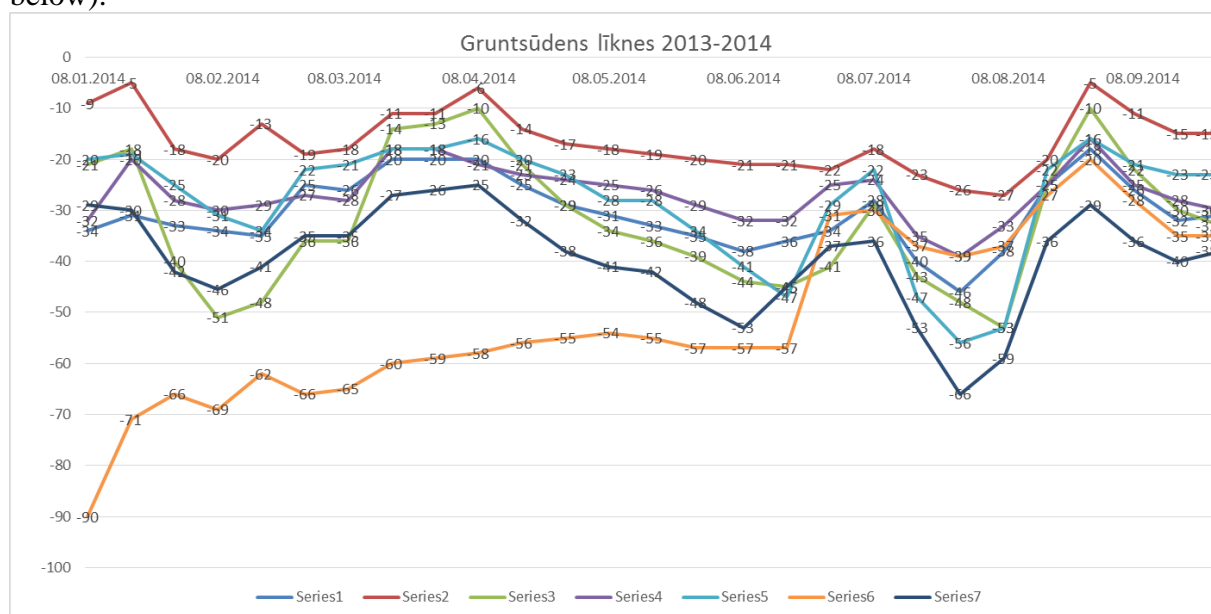
Status: On-going

In the previous reporting period work was begun on the development of the vegetation monitoring system. 7 groundwater observation wells were established within the area of action C.2 and data gathering started.

Progress:

Hydrology monitoring

Groundwater level measurements within Gulbjusalas bog were launched in October 2013, in total 7 groundwater observation wells were installed in the area (Annex E.6-1). Ground water level measurements are collected 3 times every month (see changes of water level in graph below).



From data curves it is clearly visible that water level changes are characteristic for drained areas – wide fluctuations during the year. Lowest water levels are observed during winter (when the soil/peat is frozen and there is no or limited water infiltration from surface) and during dry periods in summer.

From bog woodland hydrology studies in Finland it is concluded that water level in bog woodland in natural state rarely drop 20 – 30 cm below the ground level. Monitoring data from Gulbjusala bog shows that due to drainage water levels are below favourable levels for several months during the year.

Water level monitoring will be continued with the same regularity until the end of the Project. Ground water measuring well will be removed and restored as close as possible to current location in case of possible damage during restoration actions.

Vegetation monitoring

Schemes for vegetation monitoring for all project management activities (C.1, C.2, C.3) are elaborated and described by long-term forest habitat restoration and management programmes (Action A.2). Vegetation monitoring is assessed in circular plots of 10 m diameter. In the sampling plots all vascular plants, mosses and lichens are counted accordingly by forest stands (first forest stand, second forest stand, undergrowth (shrub stand), herbaceous stand, moss and lichen stand). Each vegetation stand is visually assessed to the total percentage cover of each species in the stand.

Vegetation monitoring data from Gulbjusala bog (Action C.2) were collected during September 2014. Four (4) localities for vegetation monitoring were selected representing drained areas of habitat type Bog woodland (91D0*), in total 16 sample plots were established and data were collected for vegetation description (Annex E.6-2). Next set of vegetation data will be collected during August 2015.

Vegetation monitoring data from Lencupe (Action C.3) were collected during September 2014. Ten (10) localities for vegetation monitoring were selected taking into account foreseen different habitat management activities, in total 20 sample plots were established and data were collected for vegetation description (Annex E.6-3). Next set of vegetation data will be collected during August 2015.

To obtain the actual data on hermit beetle population in Action C.1 management sites in Ungurmuiža and Sigulda, six pheromone traps were exhibited in the sites by project entomologist Dmitrijs Teļnovs in July 2014. Traps were checked every 4 days. An average of two beetles was found every time in all traps except one in Sigulda vicinity. The largest number of beetles (5) in one trap were found in Ungurmuiža (Annex E.6-4).

Monitoring of canopy structure and dead wood amount changes

In the Sigulda municipality and Ungurmuiža municipality in the territories of Action C.1 second set of remote sensing data will be collected during July - August 2015 and results of restoration activities will be assessed as changes of forest canopy – forest canopy data from 2012 will be compared with data from 2015 and proportion of openings within forest canopy will be evaluated. Assessment will provide quantitative data on increase of sun-lit conditions within forest stands.

During November 2014 it is foreseen to carry out dead wood amount data collection on 40 randomly selected sample plots within Lenčupe site (Action C.3). Next set of data on dead wood amounts will be collected after habitat restoration activities will be carried out towards the end of project in 2015 (Annex E.6-5).

During the final reporting period hydrology, vegetation and canopy structure monitoring will be continued and monitoring report prepared and available on the website attached to final report.

Problems/delays/changes – No any changes or problems are foreseen until now.

Milestones of the project:

Name of the Milestone	Code of the associated action	Deadline	Actual date
Monitoring finalised	E.6	31/08/2015	Action will be completed as planned

Deliverables of the project:

Name of the Deliverable	Code of the associated action	Deadline	Actual date
Monitoring report prepared	E.6	31/08/2015	Action will be completed as planned

Additional information – Annex E.6-1 Map of monitoring well distribution in Gulbju sala bog.

Annex E.6-2 Map of vegetation sample plots in nature reserve zone Lenčupe.

Annex E.6-3 Map of vegetation sample plots in nature reserve zone Gulbju sala bog.

Annex E.6-4 Map of sample plots for *Osmoderam eremita* monitoring.

Annex E.6-5 Map of dead wood monitoring sample plots in nature reserve zone Lenčupe.

Gantt chart of the project progress from 01/09/2011 to 31/10/2014

Project Actions		2011				2012				2013				2014				2015				
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
Overall project schedule	Proposed			O	Start date							O									O	End date
	Actual				X							X				X						X
Action A.1	Proposed				■	■	■	■	■	■	■	■	■									
	Actual				■	■	■	■	■	■	■	■	■									
Action A.2	Proposed						■	■	■	■	■	■	■	■	■	■						
	Actual						■	■	■	■	■	■	■	■	■	■						
Action A.3	Proposed								■	■	■	■	■	■	■							
	Actual								■	■	■	■	■	■	■							
Action C.1	Proposed											■	■	■	■	■	■	■	■	■	■	■
	Actual											■	■	■	■	■	■	■	■	■	■	■
Action C.2	Proposed												■	■	■	■	■	■	■	■	■	■
	Actual												■	■	■	■	■	■	■	■	■	■
Action C.3	Proposed												■	■	■	■	■	■	■	■	■	■
	Actual												■	■	■	■	■	■	■	■	■	■
Action D.1	Proposed			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Actual			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Action D.2	Proposed									■	■	■	■	■	■	■	■	■	■	■	■	■
	Actual									■	■	■	■	■	■	■	■	■	■	■	■	■
Action D.3	Proposed				■							■			■	■	■	■	■	■	■	■
	Actual				■							■			■	■	■	■	■	■	■	■
Action D.4	Proposed				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Actual				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Action D.5	Proposed			■	■							■	■	■	■	■	■	■	■	■	■	■
	Actual			■	■							■	■	■	■	■	■	■	■	■	■	■
Action D.6	Proposed																			■	■	■
	Actual																			■	■	■
Action E.1	Proposed			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Actual			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Action E.2	Proposed				■					■				■							■	
	Actual				■					■				■							■	
Action E.3	Proposed							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Actual							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Action E.4	Proposed																			■	■	■
	Actual																			■	■	■
Action E.5	Proposed																				■	■
	Actual																				■	■
Action E.6	Proposed																				■	■
	Actual																				■	■

3.2. Envisaged progress until final report (9 months)

The final report will be submitted by 30th November, 2015 according to the project proposal. The envisaged progress for the final reporting period is provided below:

Action C.1 Management of broad-leaved forests of slopes, scree and ravines

Removal of surrounding trees and bushes around old oak trees and creation of large gaps for promoting oak regeneration in 36 ha in Sigulda municipality. Coppicing and tree stump grinding done in 61,8ha in Ungurmuiža and Sigulda municipality. Improved living conditions of the micro-populations of Hermit Beetle and ensured succession of broad leaved trees (oaks, lindens, elms) in Broad-leaved forests on slopes (Tilio-Acerion forests of slopes, scree and ravines 9180*) as well as in other sites (e.g. old parks, alleys) in 61,8 ha area.

Action C.2: Restoration of hydrology of bog woodland

37 drainage ditches with a total length of 13,954 m reconstructed. 4 peat dams built on 3 ditches. 29 wooden sheet pilings built on 5 ditches. 29 ditch sections fully filled with peat. Habitat deterioration caused by hydrology regime prevented and favourable conservation regime restored in 138 ha of bog woodland.

Action C.3: Management of Western Taiga

Undergrowth of spruces cut, openings in forest stand made and dead wood amounts increased in area of 262,5ha. Biological value of forest habitats of Western taiga within area of 280 ha restored.

Action D.1: Creation and maintenance of project's website

The website will be updated on a regular basis, providing the most actual information and photos on project activities and other relevant information.

Action D.2: Preparation of information boards and signs

All information boards and signs will be set up until the end of 2014.

Action D.3: Organisation of seminars

One seminar organised in the 1st quarter of 2015 about biotechnical management measures, stimulating discussion about different management activities for maintaining biodiversity. Nature protection authorities, scientific research institutions and non-governmental nature protection organisations will be invited to participate in this seminar. Final seminar organised in the 3rd quarter of 2015 to present results and to discuss future perspectives of forest habitat restoration/management programmes of the GNP.

Action D.4: Production of audio-visual materials

Extra material filmed on natural boreal forests' landscapes in GNP. The management works in the project habitats filmed. Main headlines for all four short film scenarios made, film material edited, four short films produced. Interactive demonstration exposition set up in the Gūtmaņala information centre in 3rd quarter of 2015.

Action D.5: Production of printed-materials

Leaflet with information on forest habitats management in the GNP printed out until 28/11/2014. A printed report on forest habitat restoration and management prepared towards the end of project in 3rd quarter of 2015.

Action D.6: Production of the layman's report

750 copies of the layman's report prepared and produced at the end of the project the end of project in 3rd quarter of 2015 both in paper and in electronic format.

Action E.1 Project management

Project management will be implemented by NCA, IES, LFN and EM throughout next reporting period accordingly to the project proposal and necessities of the project actions.

Action E.2: Steering Group

The last Steering group meeting will be held in the 3rd quarter of 2015. Steering group will evaluate and approve the final report of the project and the projects After-LIFE Conservation Plan.

Action E.3: Networking with other related projects

Regular communication with other LIFE+ projects carried on for providing general awareness among nature conservation specialists about the project, implemented management actions and achieved results. No more abroad experience exchange Study Tours are planned.

Action E.4 After-LIFE Conservation Plan

To promote continuation and After-LIFE Conservation Plan both in Latvian and in English elaborated by the PMU as a separate chapter of the final report. Report will be available in paper and electronic format.

Action E.5: Audit of the project

To ensure eligibility of incurred costs independent auditor will verify the financial statements provided to the Commission in the final report. The auditor will verify correspondence with national legislation and accounting rules as well as LIFE+ Common Provisions.

Action E.6: Monitoring of restoration and management measures

During the final reporting period hydrology, vegetation and canopy structure monitoring will be continued and monitoring report prepared and available on the website attached to final report.

Final report will be delivered in 4th quarter of 2015.

Gantt chart of the project progress from 01/10/2014 to 31/08/2015

Project Actions		2011				2012				2013				2014				2015				
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
Overall project schedule	Proposed			O		Start date							O								O	End date
	Actual			●	●	X							X			X						X
Action A.1	Proposed				■	■	■	■	■	■	■	■	■	■								
	Actual				■	■	■	■	■	■	■	■	■	■	■							
Action A.2	Proposed						■	■	■	■	■	■	■	■	■	■	■					
	Actual						■	■	■	■	■	■	■	■	■	■	■					
Action A.3	Proposed								■	■	■	■	■	■	■							
	Actual								■	■	■	■	■	■	■							
Action C.1	Proposed											■	■	■	■	■	■	■	■	■	■	■
	Actual											■	■	■	■	■	■	■	■	■	■	■
Action C.2	Proposed													■	■	■	■	■	■	■	■	■
	Actual													■	■	■	■	■	■	■	■	■
Action C.3	Proposed													■	■	■	■	■	■	■	■	■
	Actual													■	■	■	■	■	■	■	■	■
Action D.1	Proposed		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Actual		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Action D.2	Proposed									■	■	■	■	■	■	■	■	■	■	■	■	■
	Actual									■	■	■	■	■	■	■	■	■	■	■	■	■
Action D.3	Proposed			■								■			■	■	■	■	■	■	■	■
	Actual			■								■			■	■	■	■	■	■	■	■
Action D.4	Proposed				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Actual				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Action D.5	Proposed			■	■							■	■	■	■	■	■	■	■	■	■	■
	Actual			■	■							■	■	■	■	■	■	■	■	■	■	■
Action D.6	Proposed																			■	■	■
	Actual																			■	■	■
Action E.1	Proposed		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Actual		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Action E.2	Proposed			■					■				■			■				■		■
	Actual			■					■				■			■				■		■
Action E.3	Proposed						■	■	■	■		■			■	■	■	■				
	Actual						■	■	■	■		■			■	■	■	■				
Action E.4	Proposed																			■	■	■
	Actual																			■	■	■
Action E.5	Proposed																				■	■
	Actual																				■	■
Action E.6	Proposed							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Actual							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

3.3 Impact

Nature & Biodiversity

Ground surveys of habitats carried out within action A.1 have helped to improve and restore knowledge about protection status of habitats in project sites and in GNP territory as whole (including the disposition of EU importance habitats and their condition). During the ground surveys 8502 hectares large area of the GNP has been inspected. Additional to habitat types 9180*, 9010* and 91D0* 5 hectares of Fennoscandian old broad-leaved deciduous forests (9020*), 6 hectares of Sub-Atlantic and medio-European oak forests (9160) and 8 hectares of Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* were identified.

Restoration of hydrological regime of Bog woodland habitat in the nature reserve zone Gulbju sala bog will restore also Active raised bogs (7110*) and Degraded raised bogs (7210) still capable of natural regeneration.

Environmental Policy & Governance

LiDAR data set and hyperspectral imagery covering ~60'000 hectares of GNP that were collected during Project Activity A.1, will allow facilitating other activities, not connected with the Project, for example it can be used for developing Forest management plans, where other Areal data, such as Orthophoto must be used.

It is expected that project's use of innovative technologies – applying remote sensing data to modelling of restoration of hydrological systems containing habitats and species of EU importance – will encourage other stakeholders in Latvia and Baltic countries to use remote sensing techniques and methods demonstrated in the project for large scale nature conservation planning.

Obtained data from ground surveys can be used by NCA and other institutions for further habitat management planning.

Information and Communication

One of the threats for Project is a lack of awareness of nature conservation issues among general society of Latvia and this problem was seen also in the local society. Overall lack of understanding why hydrology restoration, dead wood creation or prescribed burning measures are needed for restoring the habitats was the main issues discussed with people in meetings. To date work has been devoted to reduce the public's resistance and build understanding about nature protection measures. We have realized that more explanatory work is needed about why ecosystems are worth saving, about different kind biotechnical nature management measures. Awareness must be raised about fire role in nature, that it is not only threat but healer.

3.4 Outside LIFE

In order to implement the concrete conservation actions, up-to-date forest management plans are needed for all territories where tree felling is planned. The legislation of Latvia indicates that no forestry works can be done in territory without an up-to-date forest management plan. Therefore forest management plan for 200 ha large area of nature reserve zone Lenčupe was developed by independent forest inventory company. The company was hired by NCA and was not financed by LIFE.

3.5 Publicity/presentation materials

1. Publicity in media

In the previous reporting period three press releases were prepared and sent to media as well as published in the project's website. From 01/09/2011 to 30/09/2013 press releases about project activities were published in such websites as www.eliesma.lv, www.ligatne.lv, www.morning.lv, www.mezi.lv, www.krimulda.lv, www.edruva.lv, www.vidzeme.lv,

www.latforin.lv, latvijas.daba.lv, www.daba.gov.lv, www.varam.gov.lv. Two articles about project activities prepared and published in home page of NCA.

In the reporting period 9 press releases mainly on prescribed burning but covering also management of other habitats have been prepared and sent to media as well as published in the NCA and project's websites

From 01/10/2013 to 01/10/2014 there have been:

- 7 articles on prescribed burning in national newspaper "Neatkarīgā rīta avīze". All articles were written against the action. The journalist who published them is well known for his views against the nature conservation measures.
- 1 article in national newspaper "Diena" about prescribed burning.
- 1 article in national newspaper "Latvijas avīze" about prescribed burning activity and media conference in nature reserve zone Lenčupe.
- 10 articles in local newspaper "Druva". Information about hydrology restoration, management of *Osmoderma eremita* habitat and prescribed burning. Some of these articles published both on website and on written version of newspaper.
- 4 articles in forestry newspaper "Meža avīze", "Baltijas koks" about project, habitat management activities. Several other mentions about project in "Meža avīze".
- 3 articles in internet news media Tvnet.
- 3 open letters from field professionals about prescribed burning.
- 6 opinion articles by field professionals published in internet news media Delfi, in local newspapers "Druva", "Liesma" and private blogs.
- At least 7 articles in different regional newspapers and webpages of Riga, Sigulda, Valmiera, Cēsis, Pārgauja region. Mainly re-publications of news posted in NCA, Tvnet, Delfi, etc. websites.
- 6 broadcasts in televisions – LTV1, TV3, LNT, Baltijas pirmais kanāls, Vidzemes televīzija about prescribed burning activity.
- 3 broadcasts in radio – LR1 and Biznesa radio about prescribed burning activity.
- Project has also been mentioned several times in Twitter, Facebook.

These are the publications that project could keep track on, it is not excluded that many more re-publications of press releases by NCA, LETA, BNS, etc. can be found on smaller local municipality webpages, newsletters, etc.

2. *Presentation of the project*

In January, 2014 individual meetings with local landowners were held to discuss their fears about influences of hydrology restoration on their properties. In total 10 visits were paid to the Gulbju sala bog surroundings visiting more than 10 households. Basic information about project activities and goals were provided and planned activities discussed in these meetings.

Project has been presented:

- In local Forestry days at Stable village, Pārgauja municipality.
- To several foreign forestry and nature conservationist delegations from Spain, Finland, Sweden, Lithuania, and Estonia.
- Twice to the Minister of MEPRD and local municipalities of GNP.
- To Turaida Museum reserve and Sigulda municipality council.
- In 15/07/2014 a media press conference was organised in order to introduce them with habitat management activities planned within Action C.3. All largest media attended this event.
- 1 letter prepared for local landowners who live in Sigulda municipality, nearby *Osmoderam eremita* management area. They were informed about management actions that will be implemented during winter 2014 and 2015 and informed that the local road will be used for bringing out the left over wood.

List and copies of press releases, publications and other materials are attached in Annex F.

4. Financial part

Costs incurred

Budget breakdown categories	Total cost in €	Costs incurred from the start date to 30.09.2014 in €	% of total costs
1. Personnel	402 394	315881	78.50
2. Travel and subsistence	69 388	34819	50.18
3. External assistance	230 876	54321	23.53
4. Durable goods			
Infrastructure	0	0	0
Equipment	19 842	16679	84.06
Prototype	0	0	0
5. Land purchase / long-term lease	0	0	0
6. Consumables	46 886	47497	101.30
7. Other Costs	0	0	0
8. Overheads	53 857	32926	61.14
TOTAL	823 243	502123	60.99

Comments on budget posts

Personnel

Personnel costs have been spent accordingly to the planned, 21 employees are involved in the implementation of the project. Personnel costs are charged in response to the actual time devoted to project. They are calculated on the basis of annual gross salary. Time, which each employee spends working on the project, is recorded on a timely basis in timesheets.

Personnel costs of NCA: 72% of total NCA Personnel costs are spent so far. Expenditure (140 892 EUR) is within actions A.2, A.3, C.1, C.2, C.3, D.1, D.2, D.3, D.5, D.6, E.1. Accordingly to the allocation of the costs in the provisional budget, personal costs of Project coordinator who combines duties of communication manager and duties of deputy project manager are composed of staff days in the activities A.2, A.3, C.1, C.3, D.1, D.2, D.3, D.5, D.6 and E.1. Salaries for Project manager, GIS specialist and financial assistant are calculated from the budget of Activity E.1.

Personnel costs of IES: 95% of total IES Personnel costs are spent so far. Expenditure (91909 EUR) is within actions A.1, A.2, C.1, C.2, E.1, and E.6. IES has spent proportionally more under this category than other beneficiaries, because activities of the IES are concentrated in the first years of the projects implementation. On the basis of IES research data and developed hydrology restoration programme, the practical Bog woodland hydrology restoration works will be carried out during the final reporting period, when involvement of IES is lower. IES has spent more personnel hours than planned in the provisional budget. More days than planned have been spent on developing hydrology restoration plan (Action A.2) searching the basis information about land amelioration history of Gulbju sala bog, existent habitat inventories and other relevant information about geological and biological state of the bog. It is anticipated that in the further course of the project these days will be covered by savings in other budget lines of IES. These additional costs do not reach the threshold of significant budget modifications.

Personnel costs of LDF: 90% of total personnel costs for LDF are spent so far. Expenditure (69697 EUR) is within actions A.1, A.2, C.2, C.3, D.2, D.5, and E.1. More days than planned have been spent on field surveys in order to improve the quality of the management programmes (Action A.2). It is anticipated that in the further course of the project these days will be covered by savings in other budget lines of LDF. These additional costs do not reach the threshold of significant budget modifications.

Personnel costs of EM: 41% of total personnel costs for EM are spent so far. Expenditure (13383 EUR) is within action D.4 It's foreseen that remaining budget for this category for EM will be spent during final reporting period for ending the filming on project sites, point out the main headlines for all four short film scenarios, edit the filmed material and set the short-films in interactive exposition that will be mounted in GNP information centre nearby Gūtmaņala in Sigulda Municipality.

It is foreseen that project personnel costs will correspond to the provisional budget or in case of a change will not reach a threshold of significant budget modifications.

Travel and subsistence

In the reporting period travel and subsistence costs have been spent for 50% of total planned costs for this category. Travel and subsistence costs are divided in two approximately equal parts – expenditures for day-to-day travel (fuel for travel to project sites, institutions, project management trips, etc.) and expenditures for experience exchange trips in Latvia and abroad (Activity E.3).

Day-to-day travel costs in the provisional budget estimate 38 388 EUR that is 55% of all costs in the category. Accordingly to the implementation of project, these travel costs so far estimate 19883 EUR – 52% of planned expenditure for this purpose. Actions – A.1, A.3, C.1, C.2, C.3, D.4, E.1, E.6 for all beneficiaries. Mainly these costs consist from fuel purchases for day-to-day travel to project sites for monitoring, ground survey and management planning purposes. Also trips for project short-film making purposes, trips to institutions and project staff meetings.

Experience exchange costs (Action E.3) in the provisional budget estimate 31 000 EUR that is 45% of all costs in the category. Accordingly to the implementation of project, travel costs so far estimate 14935 EUR – 48% of planned expenditure for this purpose and were generally spent during year 2012 and 2013. Since the MidR in period of 31/09/2013 till 01/10/2014, there are no experience exchange travel costs. It is planned to direct some of the travel and subsistence costs to external assistance category if more finances as planned are needed for restoring the habitats in actions C.1, C.2, C.3. This change will not reach a threshold of significant budget modifications. The savings in this category arose because the costs for travelling abroad have been overestimated in the project proposal. Also the prices for travelling abroad have become lower since year 2012.

External assistance

In the reporting period external assistance costs have been spent for 24%. Major part of expenditure under this category is associated with the implementation of concrete conservation actions that will continue from November, 2014.

Following external assistance costs have incurred since MidR - Payments for "Nāra" Ltd. for developing the draft version of technical project for hydrology restoration within action A.3; Payments for legal assistance for time period from 01/09/2013-31/08/2014 within action E.1; Payments for logging companies within actions C.1, C.3; Payment for making the firebraker areas in nature reserve zone Lenčupe within action C.3; Payments for seminar catering within action D.3 for two practical seminars. One in 26/04/2014 about *Osmoderma eremita* habitats and the other in 05/09/2014 about role of fire in nature. Payments for informative seminars about prescribed burning in 23/07/2014 and 30/07/2014. Also payment to independent

seminar moderator was made for leading meetings about prescribed burning(expenditure corresponds to the provisional budget); Payment for Steering group meeting within action E.2, NCA; Payment for preparation of information boards and signs within action D.2; Car rental for IES within action E.1 and E.6

In the further course of the project, accordingly to the provisional budget, following expenditure is planned under this category – remaining payments for car rental for IES (Action E.1, E.6), legal assistance (Action E.1, NCA) and hydrology restoration technical project (Action A.3, NCA); Payments for logging companies and hydrology restoration company (Action C.1, C.2, C.3, NCA); Seminar catering and room rent for seminars (Action D.3, NCA) and final meeting of the Steering group (Action E.2, NCA); payments for production of printed materials – leaflet and report on forest habitat restoration and management (Action D.5, NCA) and laymans report (Action D.6, NCA); Payment for auditing company who will verify statement of expenditure and income at the end of the project (Action E.5, NCA); Development of materials for films and interactive exposition (action D.4, EM). It is expected that these costs will correspond the provisional budget.

Durable goods – Equipment

Equipment costs so far have been spent for 84 % of total budget for this category. Equipment for project management tasks, data processing, monitoring and filming has been purchased in previous reporting period and listed in the MidR.

In the future course of the project the equipment for interactive exposition (Action D.4) will be purchased by NCA. It was foreseen to buy the equipment for interactive exposition in the 1st quarter of 2014, but it was decided to postpone the deal and buy the equipment in the 4th quarter of 2014 due the consideration, that in the end of year it would be possible to buy more advanced and better equipment for the same amount of money.

It is expected that costs in the category will correspond the provisional budget.

Consumables

Expenditures under this category exceed anticipated costs by 1%. Pheromones and materials for pheromone-baited traps, necessary for *Osmoderma Emerita* habitat's restoration assessment within E6 was purchased by LFN. Purchases of materials for data processing and printing the background maps (cartridges, toners) made by IES and LFN within action A.1. Purchase of representative materials x-tubes, reported in MidR, exceeded the amount of finances for consumables purchases for NCA.

Other expenses in this category so far are seminar materials (paper) bought by NCA for seminars organised in year 2014 and second payment to “Maplant” Ltd. was made for hyperspectral images by IES.

Additional costs in this category mentioned above are not substantial changes to provisional budget and will be covered by savings in other budget lines of NCA.

Overheads

The amount of overheads at this moment does not exceed 7%. It is foreseen not to exceed the total amount of budget for Overheads in the final reporting period.

Information that has been requested in Commissions 21/02/2014 letter will be submitted and explanations provided by the final report as requested.

Financial review by actions

Action number and name	Foreseen costs	Spent so far on 30.09.2014.	Remaining	Projected final cost
Action A.1 Acquisition of data	100 000	89678	10322	

Action A.2 Forest restoration and management programme	30 000	37936	-7936	
Action A.3 Preparatory works for restoration	23 032	8327	14705	
Action C.1 Management of broad-leaved forest	49440	14056	35384	
Action C.2 Hydrology restoration	78 880	4906	73974	
Action C.3 Management of Western taiga	62 280	16781	45499	
Action D.1 Project's website	5 059	4072	987	
Action D.2 Information boards and signs	15 116	10690	4426	
Action D.3 Seminars	8 152	4405	3747	
Action D.4 Audio-visual materials	48 806	17399	31407	
Action D.5 Printed materials	20 406	8051	12355	
Action D.6 Layman's report	2 445	0	2445	
Action E.1 Project management	250 014	203081	46933	
Action E.2 Steering group	2 000	407	1593	
Action E.3 Networking with other projects	31 000	20197	10803	
Action E.4 After-LIFE Conservation plan	0	0	0	
Action E.5 Audit of the project	9 000	0	9000	
Action E.6 Monitoring	33 756	29211	4545	
TOTAL	769 386	469197	300189	

5. Annexes

- A.1-1 Renewed map of EU importance habitats identified during ground survey.
- A.2-1 Hermit beetle habitat restoration programme for GNP in Latvian.
- A.2-2 Restoration and management programme for priority habitat type Western Taiga in Latvian.
- A.2-3 Hydrology restoration programme for Bog woodland habitat in Latvian.
- A.3-1 Technical project in Latvian (Electronic version only).
- A.3-2 26th March, 2014 letter from SES (in Latvian).
- A.3-3 18th July, 2014 letter from SES (in Latvian).
- C.1-1 Agreement with Pārgauja municipality (in Latvian).
- D.1-1 overview by Google Analytics.
- D.2-1 Model of AO information board.
- D.2-2 Model of A4 information board.
- D.2-3 Information board map Sigulda municipality.
- D.2-4 Information board map Ungurmuiza and nature reserve zone Gulbju sala bog.
- D.2-5 Information board map nature reserve zone Lenčupe.
- D.3-1 Agenda, list of participants, minutes and photos from seminar on 20/02/2014, Stable
- D.3-2 Agenda, list of participants of seminar on 23/07/2014, Sigulda.
- D.3-3 Agenda, list of participants and photos from seminar on 30/07/2014, Auciems.
- D.3-4 Agenda, list of participants and photos from workshop on 26/04/2014, Sigulda.
- D.3-5 Agenda, list of participants and photos from workshop on 05/09/2014, Lenčupe.
- E.2-1 Participant list, minutes and photos from Steering group meeting.
- E.3-1 Agenda for seminar “Biological diversity in wooded grasslands”.
- E.3-2 Agenda for Finnish expert visit to FOR-REST habitat restoration sites.
- E.3-3 Swedish expert trip report.
- E.6-1 Map of monitoring well distribution in Gulbju sala bog.
- E.6-2 Map of vegetation sample plots in nature reserve zone Lencupe.
- E.6-3 Map of vegetation sample plots in nature reserve zone Gulbju sala bog.
- E.6-4 Map of sample plots for *Osmoderma eremita* monitoring.
- E.6-5 Map of dead wood monitoring sample plots.
- F Copies of press releases and publications and other materials.