Conservation of wetlands in Ķemeri National Park, Latvia

Project LIFE2002/NAT/LV/8496

SUPPLEMENTARY PROGRESS REPORT WITHOUT PAYMENT REQUEST
Covering period 1 September 2002 – 31 March 2004

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Report compiled by: **Gatis Pavils, project manager, Ķemeri National Park.**
Address: **"Meža māja", Jūrmala, LV-2012, LATVIA**
Tel: **+371 730 200** Fax: **+371 730 200**
E-mail address: **gatis.pavils@kemeri.gov.lv**

Table of Contents

Section 1. INTRODUCTION

1.1. Background to the project

Ķemeri National Park is a newly-established (1997) nature conservation area in Latvia, comprising 380 km^2 of diverse habitats of EU priority such as mire woods, black alder swamps, raised bogs, rich fens etc. About a half of the territory (19,500 ha) is directly targeted by the project. The territory of the park and the project area host rich populations of species listed in the Bern Convention and EC Birds and Habitats Directives, e.g., *Crex crex, Aquila pomarina, Porzana porzana, Cypripedium calceolus, Lynx lynx, Canis lupus* etc. The lake Kaņieris is designated as an internationally important wetland under Ramsar Convention and is an important site for migratory and nesting bird species. Ķemeri National Park is an Important Bird Area and CORINE site. The area holds about 30 habitats of Community importance listed in the Bern Convention and EC Habitats Directive. Due to such a high biodiversity, Ķemeri National Park will be proposed for designation as a potential NATURA 2000 site because it meets all its criteria. Whole area of Ķemeri National Park would be proposed for designation as internationally important wetland under Ramsar convention.

In 2000-2001, with the support from the Danish Environmental Protection Agency, the nature protection (management) plan for the park was elaborated and its practical implementation was be necessary. This LIFE project will be the first step toward implementation of the management plan through specific management measures related to the on-site protection of valuable wetland areas within the park. At the same time should be recognised that the nature protection plan is not detailed and numerous issues have to be developed while implementing this project.

Section 2. SUMMARY

2.1. Summary of the activities during the report period

Project "Conservation of wetlands in Ķemeri National Park, Latvia" was launched in September 2002. Project team was employed and started to work in December 2002. Project office and necessary equipment was purchased until August 2003. Until 1st of March 2004 there were spent some 18% of project financing (in calculations used exchange rate of European Central Bank, 1st March 2004).

Latvia and especially vicinities of Riga since the writing of the project have changed very much, sometimes to the benefit of project (upcoming agro-environmental subsidies to farmers) sometimes to the harm (multiple increase in land prices). Numerous unexpected changes have slowed down several project activities, mainly – different design activities. Many of project activities have required serious reconsiderations and adjustments. These reconsiderations and adjustments are done now, in March 2004 and are presented in this report.

Most of design activities have been started. The most complicated design activities – Slampe river renaturalisation (action C.3.) and Great Kemeri Bog renaturalisation activities (action C.2.) are completed and are undergoing necessary approval procedures.

Several activities have been started, including recurring managament activities, building of fence, discussions with local farmers and leasing th land, purchase of land and other activities.

Detailed description of the activities, including modifications and delays are described in the following sections. Any additional information to the description of activities, such as pictures, copies of contracts, maps etc. is attached in Appendixes.

2.2. Summary table of activities

Number of action	Action	Time plan	Status
A.1.	Hydrological and engineering investigations	Dec 20002 - Sep 2005	In progress
A.2.	Call for tender for construction works	May 2004 – Dec 2004	Not started
B.1.	Land purchase	Dec 2002 – Mar 2005	In progress
C.1.	Restoration of meteorological (hydrological) field station for monitoring purposes	Sep 2004 – Sep 2005	Not started
C.2.	Blocking drainage ditches and ensuring access to the bog surroundings after raising water level	Jul 2004 – Jul 2005	Not started
C.3.	Restoring natural riverbed of the Slampe River	Aug 2004 – Nov 2004	Not started
C.4.	Building the fish migration way at the sluice by the lake Kanieris	Apr 2004 – Dec 2004	Design started
C.5.	Lowering the level of dry land of 4 artificial islands on lake Kanieris	Oct 2004 – Dec 2004	Not started
C.6.	Natural grazing of the floodplain meadows by the Lielupe and Slampe rivers	Mar 2004 – Jul 2005	Started building of fences
C.7.	Aerial photography of the territory	Mar 2003 – Sep 2005	Aerial photographs made, postprocessing ongoing
D.1.	Removing reed and scrubs in the area of 66 ha of meadows and calcareous fens	Each year Jul - Oct	In year 2003 done in Aug – Sep
D.2.	Mowing the hay in the area of 140 ha of meadow	Each year Jul – Sep	In year 2003 done in Aug – Sep
D.3.	Remove reed and scrubs from the islands on the lake Kanieris	Dec 2002 – Sep 2005	On-going since Dec 2002
D.4.	Water level and regulation by the sluice at the lake Kanieris	Dec 2004 - Dec 2005	Not started
E.1.	Creating a home page of the park and the project	Jul 2003 – Dec 2005	On-going, project homepage prepared
E.2.	Preparing the layman's report	Oct 2005 – Dec 2005	Not started
E.3.	Producing a video for visitors of the information centre about nature conservation and rare and endangered species in the park	Jan 2003 – Sep 2005	On-going, company contracted
E.4.	Producing CD with info on the park and the project	May 2005 – Dec 2005	Not started
E.5.	Establishing a management center at the lake Kanieris	Sep 2004 – Mar 2005	Not started
E.6.	Establishing a field station near river Lielupe	Sep 2004 – Mar 2005	Not started
E.7.	Media work	Dec 2002 – Dec 2005	On-going
F.1.	Establishment of project office and administration	Sep 2002 – Aug 2003	Done
F.2.	Project administration	Sep 2002 – Dec 2005	On-going
F.3.	Project monitoring	Jan 2003 – Dec 2005	On-going

2.3. Milestones during report period and checklist of identifiable products

2.3.1. SUMMARY OF PROJECT MILESTONES

Milestone	Number of action	Initially planned	Accomplished
Project office arranged	F1	September 2002	Yes, December 2002
Project staff contracted	F1	December 2002	Yes, December 2002
Technical investigations finished	A1	April 2003	Planned in June 2004
Call for Tender announced	A2	May 2003	Planned to announce in May – August 2004
Meadows fenced	C6	September 2003	Planned in May 2004
Management centre at the lake established	E5	December 2003	Planned in December 2004
Sluice reconstructed	C4	December 2003	Planned in December 2004
Slampe River meandered	C3	September 2004	Planned in November 2004
Level of 4 artificial islands on the lake Kanieris is decreased	C5	September 2004	Planned in December 2004
Meteorological station renovated	C1	December 2004	Changed scope of the works, monitoring system established by February 2005
Field station by river Lielupe built	E6	December 2004	Planned in December 2004
Purchase of land completed	B1	March 2005	Planned in March 2005
Drainage ditches blocked; culvents road repaired	C2	September 2005	Planned in July 2005
Aerial photos of the territory taken	C7	September 2005	Planned in September 2005
Free-ranging horses and cows released	C6	December 2005	All animals – planned in July 2005
Meadows and fens cleaned from reeds and scrubs	D1	Continuous, 22 ha/year	In 2003 the planned area was cleared
Typical hay meadow vegetation maintained	D2	Continuous, 100 ha/year	In 2003 183 ha was mowed
Reeds and scrubs removed from islands of Kanieris	D3	Continuous, 12 ha/year	In February 2003 – cut bushes in 12 ha area, in August 2003 - 19 ha reed moved, in February 2004 – cut bushes in 12 ha area
Water level control and regulation at the sluice	D4	Continuous	Planned to start in December 2004, after rebuilding the sluice gate
Media work	E7	Continuous	Started in December 2002, ongoing

Administration of the project	F2	Continuous	Started in December 2002, ongoing
Project monitoring	F3	Continuous	Started in January 2003, ongoing

2.3.2. SUMMARY OF DELIVERABLE PRODUCTS

Product	Number of action	Planned	Accomplished
Ķemeri NP home page with highlights on the project established	E1	June 2004	Project homepage made in August 2003
Layman's report	E2	December 2005	-
Two movies of different length and movie clip about nature conservation in the Ķemeri NP	E3	September 2005	-
CD produced	E4	December 2005	-
Final report	F2	December 2005	-

2.4. Problems or difficulties expected

Since the preparation of the previous project report in September 2003 the unclear issues have been clarified and there have been taken necessary decisions to achieve the nature conservation goals set by the project. Although numerous reasons, described in the previous report, have delayed most of the planned construction activities, we have clear understanding about the activities to be done and the necessary time schedule and financing to realise them.

Main difficulties experienced in this time period are the following:

- some of the project activities are new in Latvia, including – flooding of former peat quarries in Great Kemeri bog and renaturalisation of Slampe river. Latvian state authorities often do not have experience when approving the design for such activities. This slows dow the approval and requires good cooperation with these authorities;
- prolonged dispute about the land ownership near Lake Kanieris has forced us to decrease the amount of activities here. We have modified the activity E.5. to avoid negative consequences if the dispute ends infavourable to Kemeri National Park.
- incertainty over agro-environmental subsidies for a while deterred us from taking decisions regarding the implementation of activity C.6. (Natural grazing). Now we take these subsidies into consideration and are sure that they would be available starting from 2004 or 2005.
- good hydrotechnical experts for designing the sluice gate are not easily available. Only in March 2004 we started contract negotiations with the experts.
- establishment of cost-efficient hydrological monitoring system in Great Kemeri Bog requires analyse of abundant data. Hydrogeology of this area is very complex and fragile and the influence of project activities on this hydrological system is very complex. This delays the development of hydrological monitoring system.

There is another potential problem as well – the delays have piled all the construction activities together to summer – autumn 2004. This would require good advance planning for project management.

In general we feel confident about positive outcome of the project and are certain that through the changes we have obtained optimal set-up of the project.

Section 3. TECHNICAL REPORT (BY ACTIVITY)

A. Preparatory actions, elaboration of management plans and/or of action plans

ACTION A.1. Hydrological and engineering investigations:

Overall progress:

In December 2002 there was analysed legislation and consulted State Environmental Impact Assessment Bureau regarding the need for environment impact assessment procedures. State Environmental Impact Assessment Bureau assured us that no assessment is needed for any of the project activities.

Project proposal envisaged that this activity is covering all the investigation and designing needs for the following seven activities of current project: C.1., C.2., C.3., C.4., C.5., E.5., E.6. Each of these activities is planned separately and is having each its own time schedule. This has resulted in separate timing for each of the hydrological and engineering investigations. Due to this hydrological and engineering investigations have been described in this report for each activity separately.

Restoration of the meteorological field station for monitoring purposes (C1)

Time plan: (shaded cells mean – this work is done)

January – March 2003	Elaboration of Terms of Reference for external hydrogeology expert
March 2003 – March 2004	External hydrogeology expert prepares outline of monitoring system, collects previous data
October – November 2003	Elaboration of Terms of Reference for hydrogeologist – project team member
December 2003 – May 2004	Elaboration of hydrology monitoring system proposal
May– June 2004	Approval of the monitoring system proposal by State Geology Service

Progress:

Work of External expert at Hydrological Monitoring programme In March 2003 there was made an agreement with external expert in hydrogeology to prepare survey about the potential hydrological monitoring of Great Kemeri bog. The report was completed in March 2004. Report included overwiev about the past activities in monitoring of Great Kemeri bog, there was made short overview about publications about the geology of Kemeri National Park. Report includes also recommendations for the new monitoring system, as well as overview about the existing boreholes and their potential to be used for the renewed monitoring system. The report and consultations of external expert assisted us in formulating the goals of the hydrological monitoring system as well as in elaboration of the practicalities regarding the development and maintenance of this system. The elaboration of exact monitoring program requires field work, including the testing of existing boreholes for validity. It is expected that there would be need for development of new boreholes.

Uniqueness of Great Kemeri bog hydrology Should be mentioned that the hydrogeology of Great Kemeri bog is unique – it seems to be the largest producer of hydrogen sulphide mineral water in Eastern Europe. This powerful healing agent has been used by numerous

spa in recent past and there are certain signals that this natural resource could be used in nearest future again. Thus the Kemeri Great bog and its vicinities are considered to be very fragile hydrological systems which should be specially protected against the groundwater pollution. The uniqueness of Great Kemeri bog has played also adverse role – in Soviet times it has been investigated numerous times and this has resulted in high number of open and forgotten boreholes, developed since 1946. Unfortunately most of these boreholes are not usable today for monitoring purposes, as the walls of boreholes in most cases have been damaged, the piping has been stolen or the boreholes have been filled up with soil. This complex situation should be taken into account when developing another monitoring system.

Meteorological field station Initial project proposal planned to reconstruct the existing buildings to host the meteorological field station and small information centre. The analysis done by the external expert shows that there is no need for separate meteorological field station, as nowadays it is possible to provide the necessary set of data with far less monitoring activities. It has been decided that far cheaper for Ķemeri National Park would be to locate the necessary monitoring equipment in the central administrative building without developing a separate field station in Greater Ķemeri Bog.

Meteorological station or hydrological station? By tradition the former scientific field station in Greater Ķemeri Bog was called meteorological station although the main investigations were made in the hydrology field. There is no need to rename the activity but at current stage of the project there is seen the following:

- qualitative meteorological monitoring is expensive, requires good qualification and it always formed small part of the total monitoring data flow in Great Kemeri bog monitoring station. There are meteorological stations around Kemeri National Park (f.e. Sloka, Kalnciems) and it is more feasible to use their data for the monitoring purposes instead of installing a new station. It is planned that instead of meteorological monitoring we would focus on hydrological monitoring.

Employment of permanent hydrology expert The work of external assistant showed that for development of feasible hydrology monitoring system there is needed to employ permanent hydrogeologist who should analyse the existing situation, propose the new monitoring system and develop it in day-to-day work. Such expert has been envisaged in project proposal as long term contract with the total number of working hours – 6 720. Since December 2003 there is employed hydrogeologist. She works in project office in Kemeri National park headquarters. The shortened translation of terms of reference for hydrogeologist could be found in Annexes to this report. The Terms of reference have been developed in a way to secure continuity of the activities of hydrological monitoring even in the case if hydrogeologist leaves the park after the end of the project.

The expert was introduced to Latvian State Geology Service and there has been agreed that the hydrological monitoring poposal for Great Kemeri bog would be approved by a board of hydrogeology experts at Latvian State Geology Service.

Purpose of hydrological monitoring system Since 1946 in Great Kemeri bog there has been ongoing monitoring of hydrology by using several boreholes. Such long-term monitoring of hydrology in wetlands is rare in the world and has huge potential importance for investigating the influence of human activities on bog. This simple monitoring system would allow us to check the changes in wetland after building the dam system.

Establishment of bog's management centre and visitors information point Project proposal envisaged also establishment of specific management centre. Further analysis shows that Great Kemeri bog does not require any specific management activities which would require facilities near the bog. The visitor trail – the only parth leading in the bog – is on regular

basis checked by the responsible inspector of the park, he collects also the garbage left by unaware visitors.

Currently Kemeri National Park has erected information shields at the entrance of the visitor trail. These information shields inform the visitors about the hydrology of bog, its geomorphology, nature values. There is space for car and bus parking site, toilets, constantly are ongoing improvements of acess road and other facilities. Development of permanent visitor centre with constant employees currently is not feasible due to several reasons including the following: a) high costs to install eletricity in this remote area; b) seasonal character of tourism here; c) high running costs of such a centre. Kemeri National Park may develop or support development of such an centre in future, if this would be financially feasible.

It was considered that propose for this project to develop in Ķemeri National Park qualitative and cheap Greater Ķemeri Bog hydrological monitoring without development of separate monitoring field station.

Budget:

External expert	750 EUR
Checking and testing of existing boreholes	5000 EUR
Personal costs, KNP (Kemeri National Park)	2000 EUR
Consumables	1 200 EUR
Total	**8 950 EUR**

Renovation of hydrological regime in Greater Ķemeri Bog (C2)

Time plan

December 2002 – May 2004	Elaboration of technical design by external consultant, Great Kemeri bog, approvals
April – July 2004	Elaboration of technical design by external consultant, Lielupe floodplains hydrotechnical works
May 2004	Elaboration of Terms of Reference for external consultant, Lielupe floodplains management plan
June 2004 – September 2005	Elaboration of Lielupe Floodplain Meadows management plan by external consultant, hydrological investigations

Progress:

In December 2002 there was organised price quotation and selected designer for this action. After several changes of the amounts of the work and detailed tasks of the project the final technical design has been elaborated by the end of January 2004 and there is ongoing the process of getting approval from different state institutions.

This project component has been divided in three subactivities and each of them has its own time schedule and budget

C.2.1. Flooding of peat quarries Flooding of the abandoned peat quarries has been challenging to designers. There has been no similar activity in Latvia but the unique characteristics of Great Kemeri bog requires this nature conservation activity. There is possibility that the current reduced level of groundwater in peat quarries is dangerous not

only for the primeval nature of Great Kemeri bog but also for the unique processes of hydrogen sulphide water genesis. Currently the peat quarries are drained and are overgrowing with bush. The planned restoration of groundwater level in this area would create beneficial conditions for natural restoration of Great Kemeri bog, the flooded peat quarries. The design of works for this wast area has required repeated topographical measuring and long analyse.

Currently the design has been completed and external consultant is getting the necessary approvals. Project area is located in area of three Regional Environmental Protection Boards, three administrative districts and three municipalities. Should be mentioned that each of these institutions is having somewhat different requirements and it takes much time to discuss with them and agree about common rules for permits.

C.2.2. Blocking the ditches around Great Kemeri bog Project proposal envisaged that ditches around the Great Kemeri bog should be blocked to decrease the impact of former drainage activities. The designer in cooperation with experienced employees of Kemeri National park have analysed the ditches and there has been elaborated design which envisages building of 18 dams and ditches. Similar as in previous chapter this activity requires approval by different state authorities. We expect to start the works.

C.2.3. Blocking the ditches in the floodplain of river Lielupe This activity envisaged that 20 ditches in the floodplain meadow near river Lielupe will be entirely filled up by shovelling the ground from the banks created during the process of melioration.

Floodplain meadow near river Lielupe contains very complex network of ditches which at the beginning of the project has not been mapped thoroughly. These ditches have been created over long years of attempts to make these meadows "manageable". Now the land has been abandoned, the system of ditches is deteriorating, creating in some areas swamps with standing water and making other areas too dry. Before closing of the ditches there are needed complex investigations of rather huge area as well as sophisticated modelling to see the impact of flooding on this system. Besides this part of the land in this area belongs to private owners (see description of activity B. – purchase of land).

We propose that under this project there is prepared comparatively simple design improving the water exchange in the middle part of Lielupe meadows, belonging to the state. The works include some topographic measuring, levelling of the high banks of Parupji ditch, levelling of Lielupe flood dam at this section. These works would prevent the bogging-up of some 15 ha of meadows and they would allow the flood water freely come in an leave the meadows in this part.

External consultant is hired for this activity.

Lielupe Floodplain Meadows action plan. We propose to make one more task for maintaining the biological value of Lielupe floodplain meadows. Our activities over the last year have made clear that correct solution of the nature management problems in this valuable area requires to elaborate more detailed plan for coordinated future activities and to consult regarding this plan private owners, municipalities and other stakeholders. The main problems of the area – 1) the huge meadow over the last decades becomes increasingly divided by lines of bushes and trees growing along the artificial ditches; 2) there have been built polders and dams preventing the natural rhythm of flooding – this has resulted in gradual overgrowing of area with bushes and trees; 3) there is taking place bogging-up due to the standing water. Standing water pools have appeared among the dikes. 4) the land is divided among numerous private owners, most of them have no certain plans regarding this land. The aim of Lielupe Floodplain Meadows action plan – elaborate well-agreed set of activities with aim to decrease the risk to biological diversity in Lielupe meadows inside Kemeri National Park. The preparation of this management plan

would involve hydrological investigations, division of the meadow area in management areas, elaborate action plan for each of these areas. There would be needed also consultations with the landowners in this area, with the municipalities and other stakeholders. Preparation of this plan is intended to be involving as many stakeholders as possible to develop a good partnership model for implementing this action plan later and to increase the knowledge about the value of Lielupe floodplain meadows. This plan would be necessary tool for Kemeri National Park in future, it would open the way to solve the problems of this valuable area. The comparatively high cost of this action is explained by the fact that it is longterm activity, involving work of public relations experts, organisation of several public meetings, making opinion poll as well as making some hydrological investigations.

This activity would be done under the framework of current A.1. activity.

Budget:

Design services, external consultant, Great Kemeri Bog	4630 EUR
Design services, external consultant, Lielupe floodplain	900 EUR
External experts, elaboration of Lielupe floodplain action plan	8000 EUR
Personal costs, KNP	6000 EUR
Consumables	3 000 EUR
Total	**22 530 EUR**

Restoration of natural riverbed in Slampe River (C3)

Time plan

December 2002 – April 2004	Elaboration of technical design by external consultant

Progress:

Designing In December 2002 there was organised price quotation and selected design company. There has been elaborated design which envisages creation of several new riverbends between current Slampe river and another ditch. Current Slampe river would turn into strain of artificial "oxbows". The length of the new riverbed would be approximately 3 km. There would be needed to build also spillway at the end of meandered part of the river – this would slow down the current in meandered part and increase groundwater level. Spillway would be located some distance before Kauguri channel to avoid the washing out of road, going along Kauguri channel.

This is the first case of artificial meandering of a river in Latvia. The responsible institutions in Latvia did not have prior experience with the permitting of deliberate destroying of irrigation system for nature conservation needs. Especially long time took the permitting from the side of Ventspils Regional Environmental Protection Board and North Kurzeme Drainage systems board. Rising of the level of groundwater still is considered to be something negative and we have been asked "to decrease harmful impact of spring floods and increased groundwater level as much as possible" – in such case there is necessary to visit the responsible state institution and explain the phylosophy of this nature restoration project more in detail. This slows down the receival of the necessary permits but we expect that this activity would not be delayed.

Design works have been completed in November 2003 and we expect to receive the permits up to the end of April 2004.

Land ownership. The land in the project site was not owned by the state initially. Most of the land was purchased in June 2003 after hard talks with the previous owner – bargaining over the high price of the land delayed the purchase and consequently the design works (see description in B.1.). There still is need to purchase two more smaller land parcels, which would be affected by the project activities. Currently there is ongoing the evaluation of these land parcels by independent land expert.

Old riverbed or new? Project envisaged restoration of former riverbed of River Slampe. Already initial investigations showed that restoration of exact former riverbed is nearly impossible and not necessary for renovation of biological diversity in this area. It is nearly impossible to spot the old riverbed in this area, but it is clear that part of former alluvial meadows are covered with forest now. There was decided to make new riverbed with numerous meanders and diminished fall, with spillway at the lover end. It has been calculated that this profile would create extensive spring flooding in low meadows around it, thus creating new (renewed) area of alluvial floodplain.

Other project activities in this area The same site is place for two more project activities – grazing (C6) and mowing the hay (D2). The drainage works would decrease the area of the meadows. The initial herd of *koniks* would be too small to have any problems regarding this – each of them still would have at least 10 ha of fertile meadow. Mowing of the hay seems to be secondary if comared to restoration of floodplains. We expect that the need of mowing of hay would decrease in future as *koniks* start grazing there.

The tendering documents for the works are under preparation now. The works here should not be done during the breeding season and the fish migration period – thus the only time when the works could be made is in late July – September.

Budget:

Design services, external consultant, restoration of Slampe river	7 320 EUR
Personal costs, KNP	2 000 EUR
Consumables	2 000 EUR
Total	**11 320 EUR**

Building the fish migration way at the sluice by the lake Kanieris (C4)

Time plan:

September 2002 – September 2003	Settling the land issues between Kemeri National Park and Lapmezciems municipality
October – December 2003	External expert prepares conclusion about the technical condition
April – August 2004	Preparation of technical design by external expert as a part of turn-key Project (the reason for time gap from December to April – external experts not available)

Progress:

Two sluice gates The channel connecting Lake Kanieris and Baltic sea is approximately 1 km long and has some 2 m high fall. In 1960ies there were built two sluice gates with some 200 m distance among them. The reason for having two of them was the following – they worked as a kind of sluice system for migrating fish. In spring nights there was opened the sluice gate nearer to the sea. Migrating fish came in and stopped at the second sluice gate. Nearer to the morning the seaward sluice gate was closed and the sluice nearer to the lake was opened to let the fish in. Although the poachers managed to reduce the number of migrating fish, still quite a lot of fish managed to do this migration and the ichtiological diversity of Lake Kanieris and its rivers was considerably higher. Unfortunately the mechanism for elevating the sluice is broken.

Priority of this activity The priority in this project component is to renovate the sluice gates to keep the level of the water in the lake. The existing sluice gate is the only possibility to keep the water level in the lake stable during the bird breeding season – othervise the natural fluctuation would decrease the percentage of survived chicks tremendously. In earlier times the lake had another outlet through River Lielupe, but this land today is ameliorated, there are buildings on it in some places as well. Kanieris Lake is Ramsar site and its bird population is the priority in the management of this lake. There are no specific legal provisions regarding the adjustment of the water level in the lake except the nature conservation plan, which states that in the lake there should be maintained existing level and during the breeding season the fluctuations of water level should not exceed 20 cm.

Discussions about the land ownership Although the land around the sluice belongs to the state, it was unexpectedly litigated by the municipality of Lapmezciems until we came to an agreement in September 2003. There is agreed that Ķemeri National park can manage the land under the constructions of the sluice gate and there would be secured free access to the sluice gate. The remaining issues regarding the disputed land would be agreed separately, as this is not subject of the current project. This discussion delayed the start of the design works.

Bad condition of sluice gates During the dry July the old sluice gate did not keep the water well and the level in lake Kanieris fell dangerously low. August was wet and the situation improved. We hope very much that this was the last summer with the old sluice gate – we fear that in the next summer it would not keep the water anymore and the bird population in this Ramsar site would be seriously endangered. Should be mentioned that the sluice buildings might look rather good at first sight but the sluice mechanism and concrete is of bad quality.

Conclusion about the technical condition Before starting any more detailed studies and plans regarding the sluice gates there was needed to check the present technical condition of the sluice gates. We needed also specialist advice to choose the technology for the fish path, as this decision was very important for our future activities.

The conclusion was ordered in October 2003 and received in November 2003. Main conclusions are the following:

a) lover (seaward) sluice gate – concrete constructions are in satisfactory condition; watergate lets through the water; lifting mechanism is damaged and unusable. Necessary actions: change of watergate; installation of new, electrical lifting mechanism; fencing of sluice area;

b) upper (lakeside) sluice gate – left watergate has been damaged and it is not possible to lift it what may create emergency conditions in a case of flooding; watergate lets through the water, lifting mechanism is damaged and most likely – unusable, the bed of the river below the sluice gate has been washed out. Necessary

actions: changing of the support constructions of watergates, changing of watergates, installation of a new lifting mechanism, construction of handrail for bridge, renovation of the riverbed below the sluice gate, fencing of sluice area.

This means that there is no need for costly new concrete structures, but still there is needed quite extensive reconstruction.

<picture – damaged sluice gate>

Fish path Consultations with the experts, who checked the technical condition of sluice gates convinced us that the historical system for fish migration is the most feasible in this case.

There is physically no place of proper fish path around the sluice gate. There is village beneath the channel and near both sluice gates there have been built houses. Latvia has got no good experience with specific fish paths – none of recently built fish paths is working.

The non-mechanical sluice gates, resembling rapids, are not feasible either. The flow in the channel can increase more than 20 times in spring time and in such case rapid-type sluice would have too little crossection for draining all the water. This would lead to wast overflooding of private properties around the lake.

Former system, having two consequent sluice gates has been effective. In earlier times there was no National park and no inspectors, but the fish anyway managed to escape poachers. Nowadays it should be more efficient – during the fish migration time inspectors could guard the fish. Thus we choose the certain way of renovating the former fish migration with two sluice gates. We would not need also expensive consultation from foreign experts.

Designers. In Latvia there are not many experts of hydrotechnical buildings. The best experts are engaged in numerous projects and we had to wait for several months until these experts were available for our needs. Only in March we have started contract negotiations with them. We are convinced that this delay was worth it as the quality of sluice gate is extremely important for secure and successful longterm management of the whole Ramsar site – Lake Kanieris. We have decided that in this case it would be simpler to announce single tender for turn-key project – tendered company would organise both design and construction works.

Budget:

Conclusion about technical condition, external expert	450 EUR
Design services, external consultant, restoration of sluice gates	8 000 EUR
Personal costs, KNP	1 500 EUR
Consumables	1 500 EUR
Total	**11 450 EUR**

Lowering the level of dry land of 4 artificial islands on the lake Kanieris (C5)

Time plan:

April 2004 – July 2004	Elaboration of technical design by external consultant

Progress:

This simple action in another place would not need specific design works to be done but as the islands are located in protected area, formal design is needed. We have selected for this work the same external experts, who are elaborating other hydrotechnical design works, described above. This design has been delayed due to the reason that the experts have been involved in other design works, namely – Slampe River renaturalisation project and Great Kemeri Bog renaturalisation project.

Designers have informed us that the following technology is the most feasible:

We should wait for late autumn 2004 when there would be comparatively high water in Lake Kanieris. Then there would be hired company for making the following work – with pontoon should be transported excavator to the islands. The work should last not more than a week, if machinery is in good condition. The design would outline which parts of islands should be levelled and where should be put excess soil.

The islands have been cleared of bush and reeds to ease the designing work (activity D.3.).

Budget:

Elaboration of technical design by external consultant	600 EUR
Personal costs, KNP	400 EUR
Consumables	400 EUR
Total:	**1 400 EUR**

Establishment of a management centre at the lake Kanieris (E5)

Time plan:

May – July 2004	Designing the monitoring tower and electricity works
July – August 2004	Price quotations, preparation of agreements

Progress:

Land issues with Lapmezciems municipality Action was postponed due to the unclear land property issues – Lapmezciems municipality litigated the rights of Kemeri National Park (state) to own and manage this land. There is on-going court process regarding this. Due to this Kemeri National Park has decided to repair and improve the existing facilities. The only new addition would be monitoring tower, which would be located in lake, near the shore – outside the litigated area.

<picture – draft design of tower>

Scope of works Kemeri National park has decided that instead of development of brand new management centre we would use the existing facilities, improving them. Main focus of the activities – management and inspection facility improvement.

There are planned the following activities: 1) repair of the boat station to make it usable for storing the inspection boats. Currently the boats during the winter are stored some 8 km away, in central office of National Park. In Summer time they stand under open sky for most of the time. The boat station needs mainly the following repairs – new roof and new doors. 2) building of monitoring tower in the lake, some meters from the shore. There was an earlier monitoring tower here but due to the bad technical condition it was removed.

Kanieris lake is divided in protection zones and monitoring tower would be simple solution to overlook the lake and check whether the visitor boats are not in the protected zone. The monitoring tower would be open to visitors as well, and there would be located information desks at the tower and in it. 3) leading the electricity to management centre. Currently there is electrical connection of bad quality, with unisolated cable attached to poles. There would be needed also lights in the watching tower.

Implementation of Actions C4, D3 and D4 would be secured from the existing facilities in the central administrative building of the National Park and the existing facilities at the lake.

Budget:

Design of monitoring tower	600 EUR
Design and approval of cable electricity connection	600 EUR
Personal costs, KNP	2 000 EUR
Consumables	1 200 EUR
Total:	**4 400 EUR**

Establishment of field station near river Lielupe (E6)

Time plan:

May – July 2004	Designing the monitoring tower, making cooperation agreement with Odini farmer
July – August 2004	Price quotation, preparation of agreement

Progress:

Initial plans Initially Kemeri National Park planned to have this facility in southern part of Lielupe meadows. Several reasons have changed our mind: 1) the land there does not belong to the state; 2) initially it was planned to have the herd of bovids in southern part of the meadows. Now we are building the fence in middle part of the meadows and it is not planned to have grazing in southern part. 3) southern part does not have any houses nearby. We had concerns about safety of management centre. 4) there is no electricity. Although field station initially does not require any electricity, it is possible that in future it might be needed.

<picture – Odini farm>

Odini – suitable place Now there is selected place near Odini house in the middle part of Lielupe meadows. The land there belongs to the state. There is planned that there would be located low monitoring tower and information shields. Area would be adopted for basic needs of tourists. If this site would be suitable for nature tourism, we expect that the farmers in Odini farm would use this opportunity and develop it further.

Planned activities There are planned two activities: 1) building of low monitoring tower. This tower would be needed for managing the herd of bovids – otherwise in the low, bushy meadows it is nearly impossible to spot them in a case of necessity (veterinary checks, case of floods). Tower would be of good use also as bird watching tower. 2) placing the visitor information shields – containing information about the value of Lielupe floodplain meadows and their management. We see potential to develop here more nature education facilities after the current project if further cooperation with Odini farmers would be successful.

Budget:

Design of monitoring tower	600 EUR
Personal costs, KNP	1 000 EUR

Consumables	400 EUR
Total:	**2 000 EUR**

Total budget for A.1.:

Restoration of the meteorological field station for monitoring purposes (C1)	8 950 EUR
Renovation of hydrological regime in Greater Ķemeri Bog (C2)	22 530 EUR
Restoration of natural riverbed in Slampe River (C3)	11 320 EUR
Building the fish migration way at the sluice by the lake Kanieris (C4)	11 450 EUR
Lowering the level of dry land of 4 artificial islands on the lake Kanieris (C5)	1 400 EUR
Establishment of a management centre at the lake Kanieris (E5)	4 400 EUR
Establishment of field station near river Lielupe (E6)	2 000 EUR
Total:	**62 050 EUR**

Variations/complications/delays:

Activity was planned to take place from September 2002 until middle of 2003. In reality it has turned out that A.1. activity is very diverse, consisting of numerous smaller, unrelated activities, each having its own timeflow. Design works of different construction activities have required bringing in order of many issues unsolved before, f.e. land ownership issues. There has been need to recinsider also many of project activities. This has delayed the activity considerbly. It is expected that the design works would be completed until August 2004.

There is proposed additional activity under A.1. - Lielupe Floodplain Meadows action plan, which should last until September 2005.

We expect that the design works would be successful and would provide to Kemeri National Park numerous valuable documents.

The changes are described above in detail.

Additional information:

- Appendix III. Terms of reference for hydrogeologist;
- Appendix IV. Map, proposed sites of hydrogeological monitoring stations;
- Appendix V. Map, renovation of hydrological regime in Greater Kemeri Bog
- Appendix VI. Map, restoration of natural riverbed in Slampe river.

ACTION A.2: Announcing Call for Tender works

Time plan (listed by actions):

July – August 2004	Preparation of tender documents, tendering, action C.1.
September – November 2004	Technical supervision, action C.1.
May – June 2004	Preparation of tender documents, tendering, action C.2.
July – December 2004	Technical supervision, action C.2.
May – July 2004	Preparation of tender documents, tendering, action C.3.
August – November 2004	Technical supervision, action C.3.
April – May 2004	Preparation of tender documents, tendering, action C.4.

October – December 2004	Technical supervision, action C.4.
July – August 2004	Preparation of tender documents, actions E.5. and E.6.
September 2004 – December 2004	Technical supervision, actions E.5. and E.6.

Progress:

Number of Calls for Tenders: There are expected the following Calls for Tender for construction works:

- to prepare C.1. activity – Call for Tender for development of hydrological monitoring system;
- to prepare C.2. activity – Call for Tender - flooding of the former peat quarries and raising the level of forest road
- to prepare C.3. activity – Call for Tender for restoration of natural riverbed of Slampe river
- to prepare C.4. activity – reconstruction of sluice gates by lake Kanieris
- to prepare E.5. and E.6. activity – building of two monitoring towers at lake Kanieris and in Lielupe meadows

Each of these Calls for Tender would be announced separately. All tender documents would be prepared basing on the technical designs elaborated under activity A.1.

Technical supervision: Employees of Kemeri National Park do not possess the necessary technical knowledge to follow the implementation of the works for ensuring high quality and timely performance. There would be made single technical supervision contracts with the external experts to elaborate the tender documents and supervise the construction works.

Some costs in this activity would come also from publications of advertisements in mass media, as required by national legislation.

Budget:

Call for Tender and supervision for C.1. activity (development of hydrological monitoring system)	2 000 EUR
Call for Tender and supervision for C.2. activity (flooding of the former peat quarries and raising the level of forest road)	1 800 EUR
Call for Tender and supervision for C.3. activity (restoration of natural riverbed of Slampe river)	1 800 EUR
Call for Tender and supervision for C.4. activity (reconstruction of sluice gates by lake Kanieris)	2 000 EUR
Call for Tender and supervision for E.5. and E.6. activities (building of two monitoring towers at lake Kanieris and in Lielupe meadows)	800 EUR
Tender publications	800 EUR
Personal costs, KNP	4 000 EUR
Consumables	1 500 EUR
Total:	**14 700 EUR**

Variations/complications/delays:

- Initially it was planned that these activities would take place in second quarter of 2003. This activity is consequent to A.1. – as A.1. has been delayed also A.2. is delayed. There are five tenders expected for construction works. The tendering will take place from May to December 2004.
- This activity includes also technical supervision during the construction period.

Additional information: NO

Total budget, activity A:

Action A.1. Hydrological and engineering investigations:	62 050 EUR
Action A.2: Announcing Call for Tender works	14 700 EUR
Total:	**76 750 EUR**

B. Purchase/lease of land and/or rights

ACTION B.1: Land purchase

Time plan:

December 2002 – February 2003	Informing the landowners about the land purchase
March 2003 – Mar 2005	Purchase of the land, organisation of independent land price evaluations

Progress:

Annex VI provides statistical data about land purchase situation in project.

The rise of land prices Action started in December 2002, as the project team started to inform the landowners about the possibility to sell their land. Since the receiving of the bids it became clear to us that the land price in region has raised. There are several reasons for this sharp land price increase, including rather long period between the project writing and project realisation as well as the expected agricultural subsidies.

Priority purchases To secure the most efficient use of the financing available the land purchase was prioritised in the following way:

A priority (121 ha, 14 % of initially planned land) – Land necessary for realisation of construction works. This priority covered only the land in the lover part of Slampe river, where it is planned to meander the river (activity C.3.).

B priority (147 ha, 17%) – valuable forest biotopes. We considered this to be priority because there are not planned any considerable compensations for forest owners. Due to this the private forests are endangered by human activities and having them as state property removes most riscs.

C priority (258 ha, 29%) – meadowlands. There are expected agro-environmental subsidies to manage this land in an environmentally friendly way. Most of the meadow land parcels included in the project are considered to be grasslands of high biological value. The managers of these lands would receive substantial subsidies for managing their land. These meadowlands generally are not suitable for intensive agriculture or construction and we consider that meadows are not endangered now by human activity or non-activity irrespective of ownership. If we want to see Lielupe meadows as they are today – there is no need to purchase the private owned land here.

<picture – Slampe river>

Still in Lielupe meadows the state ownership of land is necessary if we plan to make here extensive drainage works (see description of activity C.3. – Lielupe meadows). Thus we would like to leave open the possibility to buy the land in this area.

D priority (351 ha, 40%) – Odini polder. The high cost of the land here made it impossible to buy this land and there was agreed that Odini polder is excluded from the land purchase list. Government in January issued normative act which prohibits to transform agricultural land in polders into land for construction. This has removed the risc that Odini polder would be covered with urban sprawl in nearest future. It is now up to Kemeri National

Park to rise the necessary funding for further activities in Odini polder to increase the biological diversity of this area through hydrological construction activities.
The land purchase program in Odini polder got the lowest priority and was excluded from project after the last report was approved.
Unplanned land purchases Before the start of the project there were selected certain land parcels to be purchased during the project. Each of the selected land parcels has biological value. During the project it turned out that there are several cases of unforeseen land purchase.
First of such cases (Slampe river purchase, see appendix VIII) was described and approved in previous report. There are two more cases of unforeseen purchases:

1) forest land in lower reaches of Slampe river, 6,1 ha. The activity C.3. (meandering of river Slampe) would influence the groundwater level in this land parcel. Attempt to agree with the owner has been not successful and we would like to buy this plot of land (see the map - Appendix VIII).
2) forest land Lejassausi, area 3,9 ha. (see the map - Appendix IX). Initially it was envisaged to buy only small corner of this property – 0,1 ha (VII map, parcel 8 in project proposal). This property hosts the same biological values (EU habitat 91EO) and the owner is willing to sell all land. Land parcel No.5 (see Appendix IX) has been purchased by Kemeri National park two years ago.

Agro-environmental support schemes and Lielupe meadows Since August 2003 the information regarding the expected agro-environmental schemes has not become much more clear. During our consultations with the responsible persons in Ministry of Agriculture in March there was explained the following:

- the system of these subsidies most likely would become operative this year (2004). There has been prepared project proposal to European Commission and now Latvia is waiting for response. In unlikely case of rejection in next year there would be prepared another project with similar aim.
- One of subsidies under this program may solve most problems regarding the management of meadows in Kemeri National Park:
    - sustaining the biodiversity in meadowlands. For this subsidy there are enlisted valuable meadows, including Lielupe meadows and also meadows in lower part of Slampe river. The person, who realises here extensive management or late mowing, would receive payment 138 EUR per ha. Comparing with current profitability of agriculture this is very good proposal. We have consulted several farmers around the valuable meadows and are convinced that they would use the opportunity to get this profit.

Lielupe meadows are owned by numerous landowners. We consider that for farmer it would be possible to involve all these landowners one by one into environmentally friendly management scheme. Kemeri National Park is ready to assist the farmers in making these agreements if farmers would find it necessary. In a case of such agro-environmental scheme there is no better way to make profit in this floodplain – thus we expect that Lielupe meadows would be managed in environmentally friendly way in future. Still there is one reason why there would be needed to buy this land: planned extensive amelioration works in Lielupe meadows to remove the ditches and dams. These works are not expected to take place during this project.
Total price of land purchase program: Still it is not possible to tell the total price of land purchase in this project. There are on-going discussions with landowners, many among them are still waiting for more clarity regarding agro-environmental subsidies and are not expressing any certain decision regarding the sale of their land.

Part of the land (8,4% of planned purchase area) was transferred to state (Kemeri National Park) without involving any payment and Odini polder (40% of planned purchase area) has been excluded from the scope of project. At the same time the land price has been increasing and there has appeared a need to buy additional land parcels. Thus we have decided to keep the total price of the land purchase as it was in initial project document.

Budget:

Land purchase (Odini polder excluded, land parcel No IV.6. included)	313 348 EUR
Independent evaluations (External assistance)	23 180 EUR
Admeasurements	8 000 EUR
Consumables	3 130 EUR
Total:	**347 658 EUR**

Variations/complications/delays:

- Odini polder area (40% of planned purchase area) excluded from planned purchase list;
- Agro-environmental subsidies are expected. These subsidies would provide stable solution for nature management in meadowlands, these subsidies rise also the price of the land;
- As land market in Latvian countryside is becoming more lively over the last four years, land price has rised in general;
- There are two earlier unplanned land parcels to be purchased.

Additional information:

- Land purchase situation, table

C. Non-recurring management

ACTION C.1: Restoring the meteorological field station for monitoring purposes

Time plan:

September – November 2004	Development of hydrological monitoring system
July 2004 – January 2005	Purchase of necessary equipment for monitoring purposes
February – September 2005	First tests of water, testing and running the monitoring system

Progress: Action was not started due to the reasons described in A1. The situation around this activity is described at A.1. activity.

Variations/complications/delays: The accent is changed - the main priority should not be the building of the meteorological field station. The goal of this action – development of stable, justified and cheap hydrological and meteorological monitoring system for Greater Ķemeri Bog. It is planned to make several new boreholes, purchase necessary monitoring equipment and to develop simple visitor information facilities. This change of the concept has delayed the start of the action. It should not create danger to the whole project schedule, as the scope of the action is simplified.

To simplify the reporting we would keep the initial name of action – it will still contain the word "meteorological".

Estimated budget:

Monitoring equipment	11 000 EUR
Development of boreholes, checking of existing boreholes, installing flow meters on the streams	32 000 EUR

Initial tests of water	7 000 EUR
Personal costs, KNP	3 000 EUR
Consumables	4 000 EUR
Total:	**57 000 EUR**

Variations/complications/delays:

- Activity is going to be delayed – it will start in September 2004 and end in September 2005;
- The scope of activity is shifted from construction works of monitoring station building to development of system of monitoring boreholes and flowmeters. This has decreased the costs of the action considerably.

Additional information: NO

ACTION C.2: Blocking drainage ditches and ensuring access to the bog surroundings after raising water level

Time plan:

July – December 2004	Flooding of former peat quarries and raising the level of forest road
July 2004 – July 2005	Building of 18 small dams around Great Kemeri Bog
August – November 2004	Hydrotechnical works in Lielupe meadows

Progress:

The current situation is described at A.1. activity.

The monitoring of biological impact from this activity is described at activity F.3.

Budget:

Raising the level of forest roads (4,5 km)	62 800 EUR
Building of dams in peat quarries	48 000 EUR
Building of 18 small dams around Great Kemeri Bog	38 000 EUR
Hydrotechnical works in Lielupe meadows	28 000 EUR
Car for inspector	15 991 EUR
Personal costs, KNP	3 000 EUR
Consumables	2 500 EUR
Total:	**198 291 EUR**

Variations/complications/delays:

- The start of activity is delayed to July 2004;
- It is expected that the works would be cheaper than initially expected. At the time of writing the project proposal there was used precautionary approach as the amount of the works was not quite clear.

Additional information: NO

ACTION C.3: Restoring natural riverbed of the river Slampe

Time plan:

August – November 2004	Restoring the natural riverbed in river Slampe

Progress:

Action was not started due to the reasons described in A1. The situation around this activity is described at A.1. activity.

The monitoring of biological impact from this activity is described at activity F.3.

Budget:

Hydrotechnical works incl. building of the spillway	42 800 EUR
Total:	**42 800 EUR**

Variations/complications/delays:

- Activity is shifted from spring 2004 to summer – autumn 2004. The main reason – requirement of Environmental Protection Board to do the activity outside bird breeding season.
- Activity is more expensive than initially planned. During the preparation of the project proposal there were not envisaged the real costs of earth-works of such amount.

Additional information: NO

ACTION C.4: Building the fish migration way at the sluice by the lake Kanieris

Time plan:

October – December 2004	Restoration of sluice gates by the lake Kanieris

Progress:

Action was not started due to the reasons described in A1. The situation around this activity is described at A.1. activity.

Budget:

Restoration works, two sluice gates	120 000 EUR
Total:	**120 000 EUR**

Variations/complications/delays:

- Action is delayed for one year due to the unsolved land property issues;
- It is decided to renovate existing two sluice gate system which have proved to be reliable for fish passage.
- The activity is expected to be cheaper due to the fact that there is no need to rebuild sluice gates totally and there is no need for building separate fish path. At the same time it is still rather expensive due to the fact that there is need for two electrical lifting systems for two sluice gates.
- We have selected to organise here turn-key project. Through tender there would be selected one company which would organise both design, approval and construction works. This was the most reasonable solution for us – hydrotechnical buildings require specific knowledge for logistics of these works and there is need for specialist advice throughout all project development phases and good advance planning. For purposes of this report these works still are divided among activities A.1., A.2. and C.4.

Additional information: NO

ACTION C.5: Lovering the level of dry land of 4 artificial islands on the lake Kanieris

Time plan:

October – December 2004	Lovering the level of dry land of 4 artificial islands on the lake Kanieris

Progress:

Not started yet. The situation around this activity is described at A.1. activity.

Budget:

Bulldozing works	7 500 EUR
Total:	**7 500 EUR**

Variations/complications/delays: NO

Additional information:

- Appendix 11. Artificial island in Lake Kanieris

ACTION C.6: Natural grazing of the floodplain meadows by the rivers Lielupe and Slampe

Time plan:

October – December 2003	First talks with farmers about supervising the animals
December 2003	Conclusion of land lease agreements with farmers
March – April 2004	Building of fence for bovids
April – May 2004	Building of fence for *koniks*
June – July 2004	Supply of *koniks* to Slampe meadows and 5 – 7

	bowids to Lielupe meadows
August 2004 – March 2005	Conclusion of supplementary agreements for other landowners to make Lielupe meadows available for grazing
March – May 2005	Extending the fence to cover most part of Lielupe meadows
June – July 2005	Supply of 5 – 7 more bowids to Lielupe meadows

Progress:

As it is planned to introduce two kinds of grazers – horses and bovids in two separate areas of the park, both activities could be looked at separately in this report:

Bovids.

Location of first fence. Approximately half of middle part of Lielupe meadows belong to private owners and first talks with several of them have shown that there is no will to cooperate, if there is no financing for letting "your cows to graze on our land". Thus, until arrival of agro-environmental subsidies we have to use the state owned land and the land which farmers offer for free. Initially we planned to place the herd of cattle in the southern part of Lielupe meadows. Further analyses showed that southern part of meadows is more dry and there are high botanical values. This part would benefit more from late mowing instead of grazing. In southern part there is no farmhouse nearby to supervise the animals. In autumn 2003 we decided to start with the northern part of Lielupe meadows, south from Odini farm. Currently there is fence under construction. The fence will enclose 24 ha of meadowland. This land belongs to state and Odini farm. The state land in December 2003 was leased out to the owner of the farm to enable him to receive agro-environmental subsidies for managing this land. Lease agreement does not include any obligation for both sides to pay anything, but there is stated that in a case of agro-environmental subsidies the manager should act in accordance with additional activity plan provided by Kemeri National Park. Later, as cattle would come to Kemeri National Park, there would be prepared an agreement with the farmer about managing the herd.

<picture – wild cows near Lake Liepaja>

To the north there is located Odini polder which could provide safety to animals in a case of flooding. The southern part of Odini polder belongs to Odini farm. Farmer has decided that he would fence part of this land for the needs of bovids in a case of flood.

In the beginning of January together with the family of Odini farm owner we visited herd of bovids in Grobina (western Latvia) to exchange experience. Farmers expressed the wish to go on with keeping bovids in Lielupe meadows.

Management of whole area in Lielupe meadows Our plan proposes to start the activities with some 5 – 7 animals in state owned land – 26 ha. As agro-environmental subsidies would be available, it is planned to extend the grazing activities to remaining part of Lielupe meadows making lease agreements with other owners of the land. If subsidies would be available already in this year (2004), we expect that initiative in this extension of grazing land would be overtaken by Odini farmer.

We expect to extend the grazing area both to Odini polder and Lielupe meadows in 2005 and there would be supplied more bovids to increase their number to 15. The exact area for grazing would be hard to predict – it depends on our success in making deals with the private owners and availability of agro-environmental subsidies.

Koniks. It is planned to have the herd of koniks in Slampe meadows – the same place where is planned activity C.3. – meandering Slampe river. This land was purchased from

the former owner in summer 2003. The former owner of these lands is the most active farmer in this area –we leased this land to him in December 2003 on the same terms as Lielupe meadows were leased to Odini farmer. In April there would start building of the fence around this area.
The horses would be living in Slampe meadows during the hydrotechnical works (action C.3.) We do not see here problem as the initial number of koniks would be low and there is possible to find large areas untouched by the works.
In summer 2003 it was possible to manage also wider area – local farmer used the biologically valuable meadows to the north from Slampe project site for grazing. This state owned land is leased to farmer now and would be grazed also in future.

The monitoring of biological impact from this activity is described at activity F.3.

Budget:

Building of fence, Lielupe meadows (2,8 km)	4 500 EUR
Building of fence, Slampe meadows (4,8 km)	8 500 EUR
Consultations about the large herbivores	2 000 EUR
Animals (15 cows, 10 horses)	23 750 EUR
Veterinary checking	2 000 EUR
Personal costs, KNP	5 000 EUR
Consumables	6 000 EUR
Total:	**51 750 EUR**

Variations/complications/delays:

- Activity was delayed due to the waiting of the results of EU referendum and clarifying the situation around agro-environmental subsidies.
- Initially it was planned that park would employ keepers of animals. Now we are going for another organisational setup – we would hand over the animals and land to local farmers and let them receive agro-environmental subsidies.
- The price of activity is significantly decreased by the expected EU agro-environmental subsidies and the fact that the responsibility about animals take farmers.

Additional information:

NO

ACTION C.7: Aerial photography of the territory

Time plan:

Mar – Apr 2003	State Land Service makes aerial photographing over the most area of Kemeri National Park
May 2003 – May 2004	State Land Service makes postprocessing of these maps
May - June 2004	Kemeri National Park purchases these maps
Dec 2004 – Feb 2005	Kemeri National Park organises price quotation and makes agreement about aerial photography of separate park areas
Mar – Apr 2005	Photographing of these areas
May – Sep 2005	Postprocessing of aerial photographs

Progress:

During the summer 2003 we found out that the State Land Service in 2003 has made the aerial photographing in the middle part of Latvia in scale 1:10 000 – it covers nearly all the park except the far west, which would be photographed in spring 2004. This is regular activity of this institution which will be not repeated in next five years – until 2008. The offer was cheaper than expected and of high quality.

Currently the project management is negotiating with the State Land Service. Should be mentioned that State Land Service is Latvian state institution but part of its activities, like preparation of such aerial photographs is of commercial character – thus Ķemeri National Park has no possibility to receive these maps for free. We plan to buy the set of printouts and files from spring 2003. In spring 2005 there would be repeatedly taken photos only in those areas of Ķemeri National Park, where active management activities would be taking place.

Budget:

Aerial photography, 2003 season, whole area of Kemeri National Park (routine photographing by State Land Service), postprocessing	3000 EUR
Aerial photography, 2005, separate parts of Kemeri National Park (specially for Kemeri National Park), postprocessing	12 000 EUR
Total:	**15 000 EUR**

Variations/complications/delays:

- Purchase of the maps started earlier due to the good opportunity to make cheap contract;
- Purchase price is much lower than expected due to the fact than we can use State Land Service aerophotographs, which are made for numerous clients.

Additional information: NO

Total budget, activity C:

Action C.1: Restoring the meteorological field station for monitoring purposes	57 000 EUR
Action C.2: Blocking drainage ditches and ensuring access to the bog surroundings after raising water level	198 291 EUR
Action C.3: Restoring natural riverbed of the river Slampe	42 800 EUR

Action C.4: Building the fish migration way at the sluice by the lake Kanieris	120 000 EUR
Action C.5: Lovering the level of dry land of 4 artificial islands on the lake Kanieris	7 500 EUR
Action C.6: Natural grazing of the floodplain meadows by the rivers Lielupe and Slampe	51 750 EUR
Action C.7: Aerial photography of the territory	15 000 EUR
Total:	**492 341 EUR**

D. Recurring management

ACTION D.1: Removing reed and scrubs in the area of 66 ha of meadows and calcareous fens

Time plan:

Aug – Oct 2003	Mowing in 2003 season
Jul – Oct 2004	Mowing in 2004 season
Jul – Oct 2005	Mowing in 2005 season

Progress:

In season of 2003 the works were done in August – September. It is possible that the first year was the most complicated as the meadows have been overgrown with thick bushes and trees. There were purchased two chainsaws and used also chainsaws previously owned by the park.

In August – September 2003 there was cleared the calcareous meadow (2 ha) near Lake Kanieris – this activity was needed as this unique meadow was for decades was slowly overgrowing.

In September – October 2003 there was done clearing of bushes in wider area of Lielupe meadows. After clearing of these areas further management could be done by farmers, who would receive agro-environmental subsidies for their activity here.

Project would elaborate separate plans for managing these meadows – these plans would envisage the frequency, season and method of managing these meadows.

Budget:

Personal costs, 2003 season	2 800 EUR
Personal costs, 2004 season	2 500 EUR
Personal costs, 2005 season	3 000 EUR
Equipment (chain saws)	4 000 EUR
Consumables	4 000 EUR
Total:	**16 300 EUR**

Variations/complications/delays: NO

Additional information: NO

ACTION D.2: Mowing the hay in the area of 140 ha of meadows

Time plan:

Jul – Sep 2003	Mowing in 2003 season
Jul – Sep 2004	Mowing in 2004 season
Jul – Sep 2005	Mowing in 2005 season

Progress:

Lielupe meadows For managing the Lielupe meadows in July 2003 there was contracted local farmer and in July – September he managed to mowe 33 ha. The meadows here have not been managed for more than 10 years and it was complicated to renew some management here. Most of the lands were unaccessible doe to the lack of bridges over the dikes. In October there was built one bridge enabling access to wider area.

In December 2003 the state owned land in southern part of Lielupe meadows was leased to this farmer to enable him to receive the agro-environmental subsidies for managing these biologically valuable meadows. If there would be no certain plans to receive any subsidies until July 2004, project would contract this farmer once more to do this work in 2004 season. If until July 2004 it would be clear that farmer can get agro-environmental subsidies for work done in 2004, there would be not made additional agreement and LIFE financing would be not spent anymore for this activity here.

The state does not own any land in Odini polder and mowing the meadows in this area of Lielupe meadows was not supported by project thus far.

Slampe meadows Similar as in Lielupe meadows, for managing the huge meadows around Slampe river there was made an agreement with another local farmer. In July – September 2003 he managed to mowe 130 ha, his livestock grazed some 10 ha of these meadows.

In December 2003 the state owned land was leased to this farmer on similar terms as the land in Lielupe meadows. The sequence of future activities here would depend on availability of agro-environmental subsidies as described at Lielupe section. But the situation in Slampe meadows is further complicated by two more factors: a) meandering of Slampe rivers for a while would decrease the area of meadows to be managed b) in 2004 in part of Slampe meadows would start grazing with koniks. Koniks most likely would be supervised by the same farmer. Both factors would be taken into account by project management.

Informing about other EU financing possibilities Any active farmer in Latvia is well informed both about SAPARD and also about expected EU subsidies. Kemeri National Park additionally informs about these subsidies the farmers, who were interested in management of this hardly accessible land.

Project management would organise elaboration of simple management plans for both meadows. It is expected that institution issuing agro-environmental subsidies for farmers would ask Kemeri National Park to check whether the farmer has observed the nature conservation goals for grassland. Management plan would assist Kemeri National Park to perform this task.

Budget:

External assistance, 2003 season	3 000 EUR
External assistance, 2004 season	4 000 EUR
Total:	**7 000 EUR**

Variations/complications/delays: NO

Additional information: NO

ACTION D.3: Removing reed and scrubs from the islands on the lake Kanieris

Time plan:

Dec 2002 – Jan 2003	Cutting the bushes on islands
Aug - Sep 2003	Removing the reed around the islands
Feb 2004	Cutting the bushes on islands
Jul – Sep 2004	Removing the reed around the islands
Jul – Sep 2005	Removing the reed around the islands

Progress:

The islands were overgrown with thick bush – due to this the works were done in late winter 2003 to simplify the later planning of the lovering of the islands (action C.5.) – during the winter the bush was cut in 12,2 ha area – on artificial, natural islands and on some shore areas. Cutting in whole area was done again during two turns at the beginning of September 2003 and February 2004. The bush was burned on the place.

At the end of August 2003 for one week there was rented reed-cutting equipment to remove the reed around the islands – there were mowed around 19 ha of reed in the lake around the islands.

We plan also to elaborate separate plans for managing the islands – these plans would envisage the frequency, season and method of managing the islands.

Budget:

Bush cutting in 2003 winter, personnel	600 EUR
Reed cutting in 2003 summer, external assistance	2 000 EUR
Bush cutting in 2004 winter, personnel	1000 EUR
Reed cutting in 2004 summer, external assistance	2 500 EUR
Reed cutting in 2005 summer, external assistance	2 500 EUR
Consumables	4 000 EUR
Total:	**12 600 EUR**

Variations/complications/delays:

- The activity is more frequent than initially planned – cutting the bushes is more convenient in winter while cutting reed – in late summer. This does not increase the costs;

Additional information: NO

ACTION D.4: Water level control and regulation by the sluice at the lake Kanieris

Time plan:

December 2004 – December 2005	Testing of renovated sluice gate, water level control in lake Kanieris
February – April 2005	Sluice gate opening for migrating fish, spring 2005
September – November 2005	Sluice gate opening for migrating fish, autumn 2005

Progress:

Current sluice gate does not allow to regulate the level of the lake. Action will start after the renovated sluice gate would start operating.

To ensure the viability of this activity after the end of the project there has been decided not to employ additional staff for this activity. Kemeri National Park is renting the Kanieris lake to management company who makes its profit from limited angling and hunting activities, tourism in the lake. There would be made additional agreement with this management company about operation of sluice gate in cooperation with the inspectors of the park.

The necessary equipment for maintenance of the sluice gate would be purchased under activity C.4.

Budget:

Personal costs, learning the activity in fish migration times in 2005	1 000 EUR
Personal costs, testing the renovated sluice gates, regulating the level of lake Kanieris, 2005	2 000 EUR
Consumables	3 000 EUR
Total:	**6 000 EUR**

Variations/complications/delays:

- It is expected that the action would be delayed due to the reasons described in A1. In a case of successful design the costs of this activity might be considerably lower.
- The costs of this activity are decreased by the fact that there would not be employed keeper of sluice gate.

Additional information: NO

Total budget, activity D:

Action D.1: Removing reed and scrubs in the area of 66 ha of meadows and calcareous fens	16 300 EUR
Action D.2: Mowing the hay in the area of 140 ha of meadows	7 000 EUR
Action D.3: Removing reed and scrubs from the islands on the lake Kanieris	12 600 EUR
Action D.4: Water level control and regulation by the sluice at the lake Kanieris	6 000 EUR
Total:	**41 900 EUR**

E. Public awareness and dissemination of results

ACTION E.1: Creating a home page of the park and the project

Time plan:

July – August 2003	Creation of project homepage
August 2004 – June 2005	Creation of Kemeri National Park homepage
November – December 2004	Updating of project homepage
June – July 2005	Updating of project homepage
November 2005	Updating of Kemeri National Park homepage, inclusion of project results

Progress:

Project homepage Due to the uptight budget situation in the park the work at the homepage was started only in August 2003. Currently there is prepared the homepage about the LIFE project – see it in English at http://www.kemeri.gov.lv/life/Eng/life_Eindex.htm . The page contains basic information about the LIFE project, its goals, some documents (time schedule in comparison with the real performance, part of the project application), photographs, geographical map with the locations of main activities, list of links to all project financiers, partners, to all the other LIFE projects in Latvia and one project in Estonia. This page is updated to include recent documents, photographs, news, time schedule and additional links.

Homepage of Kemeri National Park Although Kemeri National Park has got homepage, there is needed to improve and enlarge it. Project management in cooperation with the staff of Kemeri National Park during October 2003 – January 2004 has prepared the concept of

renewed page. It is planned to develop it during the second half of 2004 – beginning of 2005, putting the new page in operation part by part.

Budget:

Personal costs, Kemeri National Park (preparation of information, pictures etc.)	7 000 EUR
External assistance	8 000 EUR
Purchase of Internet page update program	2 200 EUR
Total:	**17 200 EUR**

Variations/complications/delays:

- YES, development of the homepage started in August 2003.

Additional information: NO

ACTION E.2: Preparing the layman's report

Time plan:

October – December 2005	Creation of layman's report

Progress:

Not started.

Budget:

Personal costs, Kemeri National Park, preparation of information, pictures etc.	3 000 EUR
Putting text together, design, external assistance	2 000 EUR
Printing costs	5 000 EUR
Total:	**10 000 EUR**

Variations/complications/delays: NO

Additional information: NO

ACTION E.3: Producing a video for visitors of the information centre about nature conservation and rare and endangered species in the park

Time plan:

January – May 2003	Tender document preparation
May – July 2003	Tendering
July – September 2003	Preparation of agreement
December 2003	Approval of a movie scenarios
September 2003 – September 2005	Casting and producing movies

Progress:

Tendering The project document provided that the video would be produced by Environmental Film Studio. But according to the Latvian legislation there was needed to organise open tendering for selecting the company. During the January – May there were prepared tender documents. During the tendering period several companies expressed interest, but finally there came only one bid from Environmental Film Studio. This bid was in concordance with the requirements and in late August there was signed contract with Environmental Film Studio. There are envisaged several milestones during the making of films and the agreement provides that the final product would be ready in the beginning of September 2005.

Three movies instead of two During our preliminary consultations we were advised by several specialists to include in the tendering bid also requirement to make short clip about the park. This would be ~ 30 seconds long, impressive movie clip, showing the main, most impressive values of Ķemeri National Park. The necessity for the clip is the following:

- there is need for short introduction about the park often. The public is bored nowadays with longer presentations, but dynamic, elaborate clip is very good way to turn attention to any presentation. For example there would be needed presentation about the Slampe River project, which would be interesting issue in numerous seminars in the future. As 30 seconds long movie clip does not take much hard disk memory and time, this clip always would be very beneficial introduction to any presentation. This clip always would be good, dynamic introduction to any specific presentation about the park in schools, in municipalities or enterprises. This clip would be used by television in cases when there would be presented some information about the park.

Thus we included the requirement to make the clip in the tendering documents. Still the price offered by Environmental Film Studio turned out to be considerably lover than planned in the budget.

During the contract negotiations there were made also changes in the lengths of movies – the shorter video would be around 10 – 15 min long but the in-depth movie would be up to 1 h long. The reason for this change is the need to adjust to the habits of contemporary public. General public, which is the auditorium of the shorter movie, would be bored by 15 – 20 min long movie irrespective of the dynamics and effects shown in the movie. But the specialists would be interested to look 1 h long movie, which will include deeper look at all the values of the park as well as the deeds of LIFE project.

Current activities As the investment heavy activities have not started there has been no casting of them. Environmental Film Studio has already with material about the nature values in Kemeri National Park, and these materials are constantly supplemented. Environmental Film Studio is informed about the time schedule of the project and there are is agreed that project management would inform about intersting project activities.

Budget:

Tendering, publications	100 EUR
Preparation of movies, contract price	27 000 EUR
Purchase of radiomicrophone, other minor equipment	800 EUR
Personal costs, Kemeri National Park, preparation of information, pictures etc.	3 000 EUR
Consumables	1 500 EUR
Total:	**32 400 EUR**

Variations/complications/delays:

- Start of the action is delayed due to the tendering procedure. This does not create any danger to the quality and content of the movie, as the activities have been cast in good quality by the employees of the park, and there is agreed that this material could be used in the movie.
- To the final products of the action added short clip about the Ķemeri National Park. There is slight change in the expected length of the movies – the shorter version of the movie would be 10 – 15 min long instead of the planned 15 – 20 min. The longer version would be approximately 60 minutes long instead of the planned 45 minutes.
- Tendering has resulted in considerably lower price.

Additional information: NO

ACTION E.4: Producing CD with info on the park and the project

Time plan:

May – July 2005	Price quotation, making the agreement
Jul – Dec 2005	Producing the DVD

Progress: Action has not begun yet.

Budget:

Preparation of DVD disc, external assistance	10 000 EUR
Personal costs, Kemeri National Park, preparation of information, pictures, maps etc.	2 000 EUR
Consumable materials	1 000 EUR
Total:	**13 000 EUR**

Variations/complications/delays:

- Instead of the CD there is planned to prepare DVD. The reason for this decision: priority technologies during the last years has changed and now DVDs are widely used. Informative CD's were replaced now with Internet and are not widely used. DVD has higher capacity and thus there appears the possibility to include all the movies prepared by Environmental Film Studio, as well as digital presentations, important documents, interactive maps etc. There would be needed tendering procedure in order to select company. We have been consulted by Environmental Movie Studio about the pricing on preparation of such DVD's and are confident that this change in media of the deliverable would not increase the price above the limits set in the project for this activity.

Additional information: NO

ACTION E.5: Establish a management centre at the lake Kanieris

Time plan:

September – December 2004	Building of the tower
August – September 2004	Electricity works
December 2004 – March 2005	Production and placement of new information desks

Progress:

The action has not been started as the land ownership in project site was litigated – see description at A1. It is planned to develop the management center during the summer 2004.

Budget:

Monitoring tower	11 400 EUR
Repairs of boat station	4 700 EUR
Electricity works	5 800 EUR
Information desks	2 000 EUR
Personal costs, Kemeri National Park, preparation of information, pictures, maps etc.	4 000 EUR
Consumables	2 000 EUR
Total:	**29 900 EUR**

Variations/complications/delays:

- Delayed to late 2004 due to the long dispute with municipality regarding the land ownership;
- Instead of field station we propose to make repairs to boat sheds and building of lake monitoring tower;
- Decreased amount of building activities has decreased the costs of activity.

Additional information: NO

ACTION E.6: Establish a field station near river Lielupe

Time plan:

September – December 2004	Building of the tower
December 2004 – March 2005	Elaboration and placement of new information desks

Apr – Sep 2003

Progress:

The developments around this activity have been described at activity A.1. It is expected that the field station would be developed in autumn 2004 – spring 2005

Budget:

Monitoring tower	10 300 EUR
Information desks	2 000 EUR
Personal costs, Kemeri National Park, preparation of information, pictures, maps etc.	3 000 EUR
Consumables	2 000 EUR
Total:	**17 300 EUR**

Variations/complications/delays:

- Activity has been delayed to the end of 2004, when there would be built fence, would be supplied first animals and there would be more better understanding about the situation regarding agro-environmental subsidies.
- The costs have been decreased as it is not planned to build any shelter for animals and specific facilities for visitors. We expect these costs to be covered later as tourism infrastructure development activity by local farmer.

Additional information: NO

ACTION E.7: Media work

Time plan:

May 2004	Project seminar "Before hydrological works"
January 2005	Project seminar "Hydrology of Great Kemeri Bog and its monitoring"
October 2005	Project gala presentation
December 2002 – December 2005	Work with media
July 2004 – December 2005	Publication of booklets about project content, about Kemeri wetlands

Progress:

Project seminars Project proposal did not outline exact time of project seminars – there was left open an opportunity to elaborate schedule of seminars later. Still there have been no seminars. It is planned to have three project seminars:

a) "Before hydrological works". This seminar is planned to take place in the middle of May 2004. Aim: to inform about the planned hydrology works related to activities C.2. (Blocking drainage ditches and ensuring access to the bog surroundings after raising water level), C.3. (restoring natural riverbed of the river Slampe), C.5. (Lovering the level of dry land of 4 artificial islands on the lake Kanieris). In May 2004 moment none of these works would be started but there would be elaborated technical projects and it would be interesting to get the feedback from other specialists about our planned projects;

b) „Hydrology of Great Kemeri bog and its monitoring". This seminar is planned to take place in December 2004 or January 2005. Aim: to inform specialists about the monitoring system of Great Kemeri Bog and exchange the experience about similar monitoring systems elsewhere.

c) „Gala presentation" is planned to take place in September - October 2005. This seminar would serve as an report for public about the results of the project. It is planned to present the movies about Kemeri National Park and LIFE project as well as visit and discuss the project sites.

Media work Media work started in December 2002, when project team started to work. Up to now there have been around 10 publications, mostly in local newspapers. The information about the open tenders has been distributed more widely – there was certain interest about the movie tender.

There is agreed that project secretary is preparing short descriptions about any events taking part in project and sending these to the news agencies and local newspapers. We expect that in future, as there would be more exciting news, project will have wider coverage in mass media.

Booklets It is planned to issue several small booklets about the project activities. There would be needed such booklets:

a) hydrology of Great Kemeri bog – this booklet would tell about C.1. and C.2. activities, their purpose;

b) Slampe river meandering project – this booklet would tell about C.3. activity, its purpose;

c) High rised bogs of Kemeri National park – this booklet would inform about the unique high rised bogs in Kemeri National park, their unique geological and biological values;

d) Lielupe floodplain – this booklet would inform about the floodplain of Lielupe in Kemeri National Park – one of the largest floodplains in Northern Europe. It would focus on project activities C.6 and D.2. as well as the unsolved problematics around these floodplains.

Budget:

Three project seminars	5 000 EUR
4 booklets about wetlands and project activities	7 000 EUR
Personal costs, Kemeri National Park, preparation of information, pictures, maps etc.	6 000 EUR
Equipment (overhead projector, colour printer etc.)	13 021 EUR
Consumables	2 000 EUR
Total:	**33 021 EUR**

Variations/complications/delays:

- Delayed the start of the action, as the project team started to work in December 2002;
- The activities have been outlined more clearly

Additional information: NO

Total budget, activity E:

Action E.1: Creating a home page of the park and the project	17 200 EUR
Action E.2: Preparing the layman's report	10 000 EUR
Action E.3: Producing a video for visitors of the information centre about nature conservation and rare and endangered species in the park	32 400 EUR
Action E.4: Producing CD with info on the park and the project	13 000 EUR

Action E.5: Establish a management centre at the lake Kanieris	29 900 EUR
Action E.6: Establish a field station near river Lielupe	17 300 EUR
Action E.7: Media work	33 021 EUR
Total:	**152 821 EUR**

F. Overall project operation

ACTION F.1: Establishment of project office and administration

Time plan:

September – November 2002	Recruitment of project team
November – December 2002	Repairs in project office
December 2002 – August 2003	Tendering and purchase of project equipment

Progress:

During the September – November 2002 there was recruited project team. The team started to work on 1st December 2002. The project management initially consisted of the following staff: **project manager**, **project co-ordinator**, **land issues lawyer**, **bookkeeper** and **secretary**. Since 1st December 2003 there works also hydrogeologist.

During November – December 2002 there were made minor repairs in the rooms, where is located project management now. Project management got the opportunity to select among several rooms. Finally it was decided that the project management would not be located in separate rooms, but would mix in with the other employees of the park, which definitely was a good solution.

The procurement of the necessary equipment took more time due to the price quotation and tendering procedures. In February 2003 there were supplied two computers and one server, digital photocamera. During the February - March 2003 the server was installed, making the computer network in Ķemeri National Park more stable. In March 2003 there were supplied Geographical Information System and colour printer. In May 2003 there were supplied videoprojector and screen. In November 2003 there was purchased computer for hydrogeologist.

In May 2003 there was announced open tender about the supply of two cars for the LIFE project. The tendering procedure was repeated two times and thus it made possible to "beat the price down" and purchase two pickups. The cars were supplied in early September 2003. One of the cars is used by project co-ordinator for daily check-up of current project activities – cutting of bushes, meadows, reed around the park. Another car would be used by the person in the national park, responsible about the practical activities. This car would be of great assistance to organise the building of fences, supervising the infrastructure in the park etc.

Initially project planned to buy a minitractor. But during the winter 2002/2003 there were made repairs to the minitractor owned by the park previously, and this equipment turned out to be usable. It was chosen to buy an ATV (four wheel working motorcycle) instead. There was organised price quotation and in March there was supplied new ATV. This equipment will have the following benefits – it would be the only equipment able to cross the numerous wetlands we have got – it has been of great assistance in building fences, nature trails and any other kind of infrastructure in high rised bogs, swampy floodplains meadows, lagoon lakes etc. throughout the year.

Budget:

Repairs of project office	14 000 EUR

Project equipment (including initial KNP input)	98 800 EUR
Personal costs, Kemeri National Park	4 000 EUR
Consumables	500 EUR
Total:	**117 300 EUR**

Variations/complications/delays:

- The budget for this activity has increased as most of the project equipment, which was initially spread over the other activities, is pooled together here.
- Instead of 4x4 Lada-Niva we purchased "Ford Ranger" pickup. The total price of the two cars (the other – in activity C.2.) does not exceed the sum available for this purchase. Instead of minitractor purchased ATV.
- The activities were delayed with numerous price quotations and tender procedure.

Additional information:

- Appendix 12. Provisional information on equipment to be purchased

ACTION F.2: Project administration

Time plan:

November 2003	Elaboration of Terms of Reference for Project Manager, Project Coordinator, Land Purchase Manager, Secretary, Bookeeper
December 2002 – December 2005	Employment of Project Manager, Project Coordinator, Secretary, Bookeeper. The employment time of Land Purchase Manager can be shorter
October – November 2003	Elaboration of Terms of Reference for Project Hydrogeologist
December 2003 – December 2005	Employment of Project Hydrogeologist
2 – 3rd October 2003	Visit of Kemeri National Park administration and project management to Teici Nature Reserve
27.03.2003., 17.06.2003., 30.09.2003., 11.02.2004., several more unspecified dates	Meetings of Project Steering Group
Each second Tuesday of each month since September 2003	Meetings of Project Management Committee

Progress*:*

Terms of Reference for team members During November 2002 for each project team member there were elaborated Terms of Reference, which form a part of the contract of employment. The terms of Reference have been elaborated in a way to provide both exact and flexible description of tasks. Later – during October – November 2003 there were elaborated Terms of Reference for another team member – hydrogeologist. Elaboration of these Terms of Reference required also some working input from external expert – hydrogeologist.

Project Steering Committee has the same members as the previous DANCEE project – representatives from all the local municipalities, Ministry of Environment, Latvian Fund for Nature. There have been four Project Steering Group Meetings – in 2003 - in 27th March, 17th June and 30th September and in 11th February 2004 – in these meetings Project Manager presented the project and its actualities, there were discussed controversial issues of cooperation with Lapmezciems municipality (see description at A1).

Project Management Committee In the beginning of September 2003 there was established internal Project Management Committee which meets once per month. Project Management Committee consists of all the project team members, Director of National Park, Manager of Scientific Department, Manager of Administrative Department. Project Manager before the meeting is preparing short written report about each of the project activities, and during the meeting this report is discussed, prepared minutes.

Visit to Teici Nature Reserve In 2 – 3rd October 2003 Kemeri National Park staff visited Teici Nature Reserve to get in-depth introduction to LIFE project "Measures to ensure the nature conservation management of Teici Area" which has many similarities to our LIFE project. We were well accepted by friendly staff of Teici Nature reserve – there were visited project sites, organised discussion panels – we learned about many aspects of project unknown to us before.

Other issues There is established the necessary bookkeeping system, we are following the rules, set by EU LIFE program as well as the Latvian legislation. Upon necessity – but rather often – there are contacted related projects in Latvia. Project staff is participating in different events organised by the other LIFE projects in Latvia.

Budget:

Project administration	190 000 EUR
Personal costs, Kemeri National Park	20 000 EUR
Travel	24 000 EUR
Independent auditing	37 500 EUR
Consumable materials (electricity, fuel, car maintenance)	45 000 EUR
Total:	**316 500 EUR**

Variations/complications/delays: NO

Additional information:

- Appendix I. Project funding and budget breakdown, March 2004
- Appendix II. Revised time schedule proposal
- Appendix III. ToR, Hydrogeology expert

ACTION F.3: Project monitoring

Time plan:

January – April 2003	Preparation of monitoring plan by external expert
May – September 2003	Development of additional monitoring stations, initial collection of data
May 2003 – September 2005	Collection of monitoring data during the project period
September – December 2005	Preparation of final monitoring report

Progress:

Monitoring plan In January 2003 there was contracted external consultant from Latvian University, Faculty of Biology to make the biological monitoring plan for project activities. In April 2003 this plan was prepared and accepted by project.

Monitoring stations Approximately half of the necessary monitoring activities are carried out already by the existing state monitoring systems. There was needed to develop network of monitoring reference points (monitoring stations) in the meadows - mainly for monitoring the changes in vegetation. This network was established by the employees of

the park during the summer 2003, using the GPS equipment. There was collected initial data in 23 stations of botanical monitoring and 8 stations of hydro-biological monitoring.

The description of the development of hydrological monitoring system is described at activity A.1. and C.1. description.

Speed of natural changes It is not expected that all project activities would bring changes to nature quickly, until the end of project. Such projects as Slampe river renaturalisation project, Great Kemeri bog renaturalisation project would have longterm influence but their influence would appear only after some time. The new riverbed of Slampe river would stabilise for many years and increased groundwater level would change biotopes quite slowly. We can not expect immediate positive results of all activities already at the end of project.

Budget:

Elaboration of Monitoring plan (external expert)	1 800 EUR
External assistance, parts of monitoring activities	9 000 EUR
GPS system	1 000 EUR
Personal costs, Kemeri National Park	14 000 EUR
Consumables	2 500 EUR
Total:	**28 300 EUR**

Variations/complications/delays:

- There was delayed the start of the action. This will not influence the results of the monitoring in any way.
- Activity is cheaper as numerous monitoring needs are covered by existing state monitoring system.

Additional information: NO

Total budget, activity F:

Action F.1: Establishment of project office and administration	117 300 EUR
Action F.2: Project administration	316 500 EUR
Action F.3: Project monitoring	28 300 EUR
Total:	**462 100 EUR**