UNITED NATIONS DEVELOPMENT PROGRAMME
Global Environment Facility
Project of the Government of Lithuania

Project information

Project number:	LIT/03/G31/A/1G/99
Project title:	Conservation of Inland Wetland Biodiversity in Lithuania
PIMS number:	1761
Estimated start date:	November 2003
Estimated duration:	5 years
Executing agent:	Ministry of Environment
Implementing agent:	Nature Heritage Fund
Project site:	Lithuania's Inland Wetlands
Beneficiary countries:	Lithuania

ACC sector and subsector:	Environment / Environment Enhancement and Management
DCAS sector and subsector	Natural Resources / Environmental Preservation and Rehabilitation
Government sector and subsector:	G3: Environment
Primary areas of focus/sub-focus:	Promoting Environment and Natural Resources Sustainability
Primary target beneficiaries:	Target Place (Environmental Habitats)

Summary of UNDP and cost-sharing inputs [*as per attached budgets*]

UNDP/GEF:	**$ 3,261,000**
PDF B stage	**$180,000**
Cost-sharing:	
Government (MoE):	**$ 2,239,400 cash/in kind**
Municipalities:	**$ 829,400 cash/in kind**
ISPA:	**$ 4,443,300 cash**
SAPARD:	**$ 815,000 cash**
Other:	**$ 2,097,300 cash/in kind**
Co- fin. subtotal	***$ 10,424,400***[1]
TOTAL:	**$ 13,865,400**

LPAC review date:

Programme officer: Lina Jankauskiene

Brief description:
The project objectives are to a) demonstrate improved wetland management *in-situ* at five globally significant sites, and b) with the lessons learned from these experiences, institutionalize best practices through a formal intersectoral mechanism for replication to other wetland sites throughout Lithuania. The project has six main outputs. Five will deliver biodiversity conservation at the top five priority wetlands in Lithuania (Cepkeliai, Kamanos, Viesvile, Zuvintas and Girutiskis). These five demonstration sites will provide lessons learned and best practices to inform institutionalization, policy dialogue and reform regarding biodiversity conservation and economic and social benefits. The sixth output will result in a formal intersectoral mechanism for institutionalization and replication of best lessons learned in conservation of inland wetland biodiversity.

Main activities include the establishment of a system of tradable collection permits for cranberries, the reconversion of farming lands to wetland-friendly agricultural activities, the adoption of biodiversity-friendly forestry protocols, the establishment of a biosphere reserve, strengthening enforcement of reserve regulations and boundaries, restoration of selected wetland habitats, public awareness and public support activities, the gathering and codification of lessons and best practices and the elaboration of a strategy for replication to other wetlands.

On behalf of:	**Signature**	**Date**	**Name & Title**
Ministry of Environment			Mr. Arūnas Kundrotas, Minister
Implementing agent			Mr. Gediminas Raščius, Director
UNDP			Ms. Cihan Sultanoglu, Resident Representative

[1] The total co-financing for the project document is higher than the amount reflected in the proposal, which was $8,958,400. Additional 1,466,400 is contribution from MoE, which originally was not included into co-financing, as this was contribution to the baseline. After the May Council Meeting, when new rules for co-financing were put in place (see GEF/C.20/6 Rev), the contribution to the baseline was considered as co-financing, and thus its total gives the amount of $10,424,400.

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ACRONYMS

DANCEE:	Danish Cooperation for Environment in Eastern Europe
DEPA:	Danish Environmental Protection Agency
EA:	Executing Agency
ECAT:	Environmental Centre for Administration and Technology
EIA:	Environmental Impact Assessment
EPA:	Environmental Protection Agency
EU:	European Union
FMoE:	Finnish Ministry of Environment
FZS:	Frankfurt Zoological Society
GEF:	Global Environment Facility
GoL:	Government of Lithuania
GTZ:	German Overseas Development Agency
IA:	Implementing Agency
IC:	Incremental Cost
ISPA:	Instrument for Structural Policies for Pre-Accession
IUCN:	International Union for the Conservation of Nature
KHP:	Key Habitat Project
LEF	Lithuanian Environmental Fund
MoA:	Ministry of Agriculture of Lithuania
MoE:	Ministry of Environment of Lithuania
NGO:	Non-Governmental Organization
OMPO:	Migratory Birds of the Western Palearctic (from the French)
PA:	Protected Area
PASRT:	Public Agency Soil Remediation Technologies
PDF:	Project Development Facility
RSGF:	Ramsar Small Grant Fund
SAPARD:	Special Accession Programme on Agricultural Rural Development
SC:	Steering Committee
SEPA:	Swedish Environmental Protection Agency
SFC:	State Fishery Center
SFE:	State Forestry Enterprise
SFF:	State Forest Fund
SRF:	State Road Fund
STAP:	Scientific and Technical Advisory Panel
UNDP:	United Nations Development Programme
UNDP-CO:	Country Office in Lithuania of the United Nations Development Programme
UNEP:	United Nations Environment Programme
USEPA:	Great Lakes – Baltic Sea Partnership Programme
WNSF:	Wild Nature Support Fund
WWF:	World Wide Fund for Nature

1. COUNTRY OWNERSHIP

1.a. Country Eligibility

Lithuania ratified the Convention on Biological Diversity on 1 February 1996 and is currently eligible for technical assistance from UNDP.

1.b. Country Driven-ness

The Government of Lithuania has identified wetland biodiversity as a top priority for conservation action in its National Biodiversity Strategy and Action Plan, especially as indicated in the general action plans "Protection of Wetland Ecosystems" and "Protection of species." The five sites proposed here are identified in the National Biodiversity Strategy and Action Plan as priority sites for biodiversity conservation. All sites - with the exception of Girutiskis, which is awaiting formal designation - are Ramsar sites. The action plan for the protection of wetland ecosystems aims to conserve wetland areas, ban new exploitation of wetlands, restore excavated peat lands, and restore damaged wetlands. Actions include the improvement of the legal framework, institutional strengthening, territorial planning/design, research and monitoring, information, and training and education. Wetlands and protection of their biodiversity have high priority in the National Environmental Protection Strategy.

1.c. Endorsement

The project has been endorsed by the GEF Operational Focal Point in a letter dated 24 Feb 2003 – see Annex 2 B."

2. PROGRAM & POLICY CONFORMITY

2.a. Program Designation & Conformity

The project meets GEF eligibility criteria under Operational Program #2 "Coastal Marine and Freshwater Ecosystems". The project promotes the conservation and sustainable use of biological diversity of freshwater ecosystems. Threats to wetlands biodiversity will be removed in targeted areas by mainstreaming biodiversity protection with socio-economic goals[2]. The end-of-project situation will show sectoral integration in the management and conservation of project sites and in areas adjacent to those sites[3]. Project activities include expanding a system of conservation areas[4], remedial actions in areas under threat[5], and sustainable use and awareness components[6]. It has built-in mechanisms for monitoring outcomes, both in terms of ecosystem structure/function and sustainable use by local populations[7]. Finally, project risks have been minimized by applying best practice and best available knowledge and by ensuring that local communities share the conservation objectives of the GEF project[8].

This project will build sustainability of protected wetlands areas in Lithuania by building and institutionalizing capacity and best management practices; demonstrating innovative financial mechanisms such as tradable permits, users fees, long-term leasing, and forest certification; and ensuring the participation of local stakeholders in design, implementation, management and monitoring of wetlands conservation management. The project will also focus strongly on mainstreaming biodiversity conservation principles and practices into the agriculture, forestry and tourism sectors. It will work directly with relevant Ministries and other institutions and organizations to leverage significant financing to support farmers and forestry companies in adopting adaptive

[2] In accordance with GEF-OP2 criteria; see GEF-OP2 para 2.8
[3] In accordance with GEF-OP2 criteria; see GEF-OP2; para 2.15
[4] In accordance with GEF-OP2 criteria; see GEF-OP2; para 2.17 (a)
[5] In accordance with GEF-OP2 criteria; see GEF-OP2; para 2.17 (c)
[6] In accordance with GEF-OP2 criteria; see GEF-OP2; para 2.17 (l)
[7] In accordance with GEF-OP2 criteria; see GEF-OP2; para 2.12
[8] In accordance with GEF-OP2 criteria; see GEF-OP2; para 2.19 (a) and (c)

management principles, new technologies, and practices aimed at ensuring positive synergies between economic production and biodiversity conservation. As part of the project's strategy, it will demonstrate an ecosystem management approach in one of five demonstration sites built upon a multisectoral planning and management framework. This project's five demonstrations will provide lessons learned and best practices to inform the inter-institutional policy dialogue facilitated by this project through the establishment of the Multisectoral Wetlands Working Group (MWWG) and which will become institutional practice.

2.b. Project Design

2.b.1 Introduction

Occupying only about 5% of its territory, wetlands are among Lithuania's most important ecosystems. They contain a host of rare, endemic and endangered species and are situated strategically along two major bird migration routes. The first of these connects Russia and the Baltic States with Western Europe and Africa; the second connects Scandinavia with the Middle East and Asia. During spring and autumn migrations, over 170 migrating bird species have been recorded.

The diversity of wetland vegetation in Lithuania consists of 4 broad classes: (1) fens alder (*Alnetea glutinosaea*), (2) fens - small sedge thicket (*Scheuchzerio-Caricetea nigrae*), (3) raised bogs - grassy peat-moss (*Oxycocco sphagnetea*), and (4) raised bogs - whortle-berry (*Vaccinietea uliginosi*). Within wetland communities, raised bogs are interesting from a phytogeographical point of view. Species which grow at the boundaries of their range here include: *Rubus chamaemorus,* and *Chamaedaphne calyculata*. Raised bogs edge communities include: *Caricetum heleonastes, Eriophoro-Trichophoretum caespitosae, Myrico-Salicetum auritae,* and *Seslerietum uliginosae.* The limy fen communities of the *Caricetalia davallianae* series, in southeastern Lithuania, contain quite large populations of *Liparis loeselii* and *Hammarbya paludosa*. The foregoing species are subject to protection under the Bern Convention.

As is the pattern in many countries, wetland loss in Lithuania over the past 30 years has been dramatic, with 70% of total wetland area lost. The continuing existence of wetlands vegetation is seriously threatened by the effects of intensive land reclamation primarily carried out during the Soviet period. Vast areas of wetlands suffer from eutrophication, which has adverse effects on vegetation, including stagnation in raised bogs, characterized by a reduced growth rate.

Drainage causes wetlands soils to become drier and then to mineralize. With mineralization, atypical meadow and forest species appear. *Oxycocco-Sphagnetea* class communities in raised bogs undergo transformations into *Vaccinietea uliginosi*. The reduction in the ground water level promotes the growth of dwarf shrubs (*Ledum palustre, Calluna vulgaris, Vaccinium uliginosum,* etc.) and reduced vitality of cranberries (*Oxycoccus palustris*). Trees tolerant of drier mineral soils replace wetland varieties of pine (*Pinus sylvestris*). Wetland grasses give way to meadow and forest species of wide amplitude, and the overall biomass shrinks to a third. Particularly threatened are limy fen communities of *Caricetalia davallianae* whose total area in Lithuania is approximately 100 ha. During the past 50 years, the area of *Seslerietum uliginosae* communities has noticeably decreased.

Wetland drainage has had a dramatic impact. Of 213 bird species breeding in Lithuania, 53 have decreasing populations. Resulting changes in habitat has reduced the number of birds nesting in shrub thickets and meadows by 90%, and in shrub and forest by 70 and 40%, respectively. Economic activities of the forest sector have had an adverse effect primarily upon the larger birds - birds of prey, black storks, and woodpeckers. Similarly, modified ecosystems have also had an adverse impact on the migration routes and wintering sites of migrating birds and bats. Land reclamation, land drainage, and the application of agro-chemicals have also caused a reduction in the numbers and diversity of amphibians in specific habitats.

The status of wetlands in Lithuania is highly dependent on their size. Small wetlands, particularly within the productive landscape, were destroyed by land reclamation and forest drainage. Small wetlands enhance the *mosaic* character of a landscape and render an ecotonal effect, and are

therefore among the most valuable. Their role is particularly important in agricultural landscapes, where wetlands are often affected by succession.

The *mosaic of ecosystems* in Lithuania is a result of centuries of economic activity and development. Recently, with the collapse of the kolkhoz agricultural system, vast stretches of land have been sub-divided, and the ecological mosaic thus increased. During the first stage of decline of the agricultural sector after 1989 there was an increase in extensively used meadows and pastures, which have since tended to become overgrown with shrubs and forest.

For further information on the international importance of Lithuanian biodiversity, see http://www.biodiv.org/doc/world/lt/lt-nbsap-01-en.doc.

2.b.2. Description of project sites

As part of a broader strategy (see section 2.b.5, below), the project will target conservation of wetland biodiversity by undertaking demonstration actions in five Strict Nature Reserves. These five Strict Nature Reserves differ in the value of their different elements (species, habitats and communities) and stand as internationally important locations for breeding, feeding, moulting, and resting of water birds. BirdLife International lists four of the five sites as Important Bird Areas (IBA) - Cepkeliai, Kamanos, Viesvile, and Zuvintas.[9] The sites contain a number of bird species that breed in or migrate through the region that are included in the **Red Data Book of Lithuania**, the annexes of the **Bonn Convention**, the **African-Eurasian Water Bird Agreement** and the **Birds** and **Habitats Directives** of the European Union. The following is a description of the target sites:

Table 1: Description of the project sites:

Reserve	Description of the Area	Biodiversity
Cepkeliai (Area: 11,212 ha)	The mire complex is located on the catchment of the rivers Ula, Gruda and Katra. The site contains Cepkeliai (5,858ha) mire, which constitutes the largest mire complex in Lithuania. Raised bogs cover more than half of its territory. There is a large area of fens, swamps and permanently flooded forests. The average peat layer is 5-6m deep. Sandy continental dunes adjacent to the raised bog create a unique landscape in Lithuania. There are more than 80 dry forested islands and 21 lakes (with a total area 55.3ha) in the mire. The wetland has enjoyed strict protection status since 1975 and only scientific research and limited traditional cranberry picking (by 800-1000 local inhabitants) are formally allowed.	Vertebrate fauna is represented by 253 species including 41 mammals, 183 birds (122 nesting), six reptile, nine amphibian and 13 fish species. More than 2,500 insect species have been recorded. There are **86 species of fauna** included in the **Red Data Book of Lithuania**. There is a rich flora of 624 species of vascular plants and 119 species of mosses. **44 plant species** from the **Red Data Book of Lithuania** are present in Cepkeliai. The site also contains the largest population in Lithuania of the **globally important** species of crane *Grus grus (*20-25 nesting pairs). Great Snipe (*Gallinago media*) populations are also among the highest in the country.
Kamanos (Area: 3,935 ha)	The site contains the largest raised bog (2,434 ha) in northern Lithuania (a farming region) with ridge-pool complexes, numerous small lakes (over 120 pools each less than 2 ha in area) and surrounding wet forests. Kamanos Lake has an area of 5.55 ha. Kamanos bog is located in the catchment of four small rivers of the Venta River basin and plays an important role as a natural reservoir in a region of relatively intense agricultural activities.	The known vertebrates total 235 species, including 180 species of birds (87 nesting), four species of reptiles, seven species of amphibians and three species of fish. 1442 species of insects have been recorded. 60 fauna species are listed in the **Red Data Book of Lithuania**. 669 species of vascular plants and mosses have been recorded, **including 41 species of protected plants**. There are more than 900 known species of insects. The **globally threatened** *Aythya nyroca*, *Anser erytropus*, *Calidris alpina* can be found in Kamanos.
Viesvile (Area: 3,216 ha)	The site is a complex of mires surrounded by dry coniferous forests on a sandy fluvial plain with continental dunes. The mire complex of Artoji bog (1,072ha, average peat layer 3.6m deep) and Glitis bog (455ha, average peat layer 2.3m deep) encompass the upper reaches of the Viešvile rivulet, a 21km long tributary of the Nemunas river. The dystrophic lakes Buveinis (5.4ha) and Glitis (13.2ha) together with Viešvile and Ištakos	The known vertebrates total 203 species, including 141 species of birds, five species of reptiles, six species of amphibians, nine species of fish and one of Cyclostomata. This site hosts 2,615 invertebrate species (insects and mollusks). The area is a breeding sites for the following species listed in the **Red Data Book of Lithuania:** *Pluvialis apricaria* (4-6 pairs), *Grus grus* (about 7-8 pairs), *Ciconia nigra* (2-3 pairs),

[9] Heath, M. F. and Evans, M. I., eds. (2000) *Important Bird Areas in Europe: Priority Sites for Conservation.* 1: Northern Europe. Cambridge, UK: BirdLife International (BirdLife Conservation Series No. 8).

	rivulets form a unique hydraulic complex surrounded by raised bogs.	*Botaurus stellaris, Pernis apivorus, Aquila pomarina, Tetrao tetrix, Numenius arquata, Dendrocopos leucotos, Lanius excubitor*. The Viesvile River has a population of brown trout (S*almo trutta fario) bullhead (Cottus gobio)* and lamprey (*Lampetra planery*) that are **globally threatened.** The area is also an important site for the **protected** insects *Ceruchus chrysomelinus* and *Peltis grossa).* A floral inventory revealed about 500 species of vascular plants including *Baeothryon caespitosus, Saxifraga hirculus, Eriophorum gracile, Listera cordata, Liparis loeselii, Dactylorhiza rusowii, Dactylorhiza maculata* that are listed in the **Red Data Book of Lithuania.** In total **67 flora and 53 fauna species** in Viesvile are listed in the **Red Data Book of Lithuania.**
Zuvintas (Current (Area: 18,490 ha)	Located in the depression of a plain, the site contains the eutrophic Lake Zuvintas (970 ha), two areas of raised bogs (3,400 ha), fens (about 2,000 ha) and surrounding forests. Zuvintas is a shallow lake (max depth is 3.4m) over a deep bottom mud layer. The lake is surrounded by reed-swamps, sedge fens (mainly in its southeastern part) and raised bogs.	The area includes 44 mammal species, 255 bird species (135 nesting), five reptile, 10 amphibian and 21 fish species. There are more than 2,000 insect species. Together with its surroundings, the lake is an important breeding site for numerous species of waterfowl and other birds. The site is mostly known for numerous **rare bird species**, such as: *Acrocephalus paludicola*, *Tringa glareola, Philomachus pugnax*, *Sterna albifrons, Great Snipe* (*Gallinago media*) and many others. The site hosts more than 89 **species of vertebrates and insects** included in the **Red Data Book of Lithuania**. Zuvintas presents about 734 species of vascular plants including *Pedicularis sceptrum-carolinum, Saxifraga hirculus, Viola stagnina, Corallorhiza trifida, Eriophorum gracile, Gentiana pneumonanthe, Liparis loeselii, Nuphar pumila, Salix lapponum, S. myrtilloides, Malaxis monophyllos, Nymphaea alba, Peplis portula,* and *Dactylorhiza spp* that are listed in the **Red Data Book of Lithuania.** The total number of floral species listed in the Red Data Book is 64.
Girutiskis (Area: 1,483 ha)	A mire complex with numerous small lakes, overgrown by submerged vegetation. Several sections of the reserve are in an almost pristine state with surroundings that have never been used for agriculture or forestry. The mire complex is abundant in bogs and fens of various size. This reserve is a particularly good example of natural or near-natural wetlands.	Of 187 vertebrate species found at this site, 22 are mammals, 145 birds, five reptiles, seven amphibians, and eight fish. The site presents 530 species of vascular plants, and 103 moss species. Of these, 36 plant species are listed in the **Red Data Book of Lithuania** including **rapidly decreasing and highly endangered** species such as *Carex heleonastes, Lycopodiella inundata, Corallorhiza trifida, Huperzia selago, Hydrilla verticillata, Nymphaea alba, Dactylorhiza maculata, Dactylorhiza russowii, Listera cordata, Malaxis monophyllos, Carex paupercula, and Salix myrtilloides.* There are **two species** of mammals listed in the **Red Data Book of Lithuania**: Mountain Hare (*Lepus timidus)* and the River Otter (*Lutra lutra)*. The site also presents five species of reptiles: *Vipera berus, Anquis fragilis, Natrix natrix, Lacerta agilis, Lacerta vivipara.* Girutiskis 53 species of fauna listed in the Red Data Book. The site is the only place in the country where **internationally endangered** lake plant *Lobelia dortmanna,* clean stream mollusc (*Margaritifera margaritifera*) and open bog willow grouse (*Lagopus lagopus*) can be found.

The selected project sites provide important habitats for a significant number of endemic, threatened and rare species. A number of these species are of international importance and are listed in the annexes of the IUCN, the Bonn and Bern Conventions, the African-Eurasian Water Bird Agreement

and the Birds and Habitats Directives of the European Union. Table 2 shows the number of species that are protected by one or another Convention, Agreement, Directive or Red Data Book of Lithuania as well as the number of EU priority habitats present in each site.

Table 2: Species and habitats of significance according to European and global criteria

Criteria (species and habitats) of significance	Cepkeliai	Kamanos	Viesvile	Zuvintas	Girutiskis
IUCN Annexes (1996; VU, EN)	6	5	2	8	1
RDBL (E,V)	56	51	42	61	49
EU Habitat Directive (Annex II)	16	10	14	16	17
EU Bird Directive (Annex I)	45	38	30	70	27
Bern Annexes	174	153	132	227	111
CMS-Bonn *Annexes (I, II)*	27	27	20	46	15
AEWA Annexes	35	40	28	64	23
Prioritized habitats (EU)	6	5	7	5	3

As demonstrated in Tables 1 and 2, the five sites differ from each other in terms of types of habitat and species composition. The list of habitats of European importance is different for each site, each having at least one habitat not registered at the other sites. Zuvintas is characterised also by 2 protected plant communities *Tilio-carpinetum betuli* and *Betulo humilis – Salicetum repentis*, not registered at the other sites.

Species lists for the sites differ, and each site is characterised by a different assemblage of fungi, plant and animal species not found at other sites. Highest diversity of algae was found at Kamanos and Cepkeliai (196 and 145 species), highest diversity of lichens and fungi at Viesvile (203 and 197 species), highest plant diversity at Zuvintas (710 species). Highest diversity of beetles was found at Kamanos and Cepkeliai (883 and 873 species), butterflies and moths at Cepkeliai and Viesvile (1018 and 980 species), highest diversity of hymenopterans, dipterans and arachnids at Viesvile. Zuvintas is unique for its diversity of bird species.

Significant differences are found between sites also in number of species with priority conservation status (national and international, including globally threatened species) – see table 3.

Table3: Number of species with priority conservation status, which are unique to sites

Group	Čepkeliai	Girutiškis	Kamanos	Viešvilė	Žuvintas
Fungi				2	3
Lichenes	1			7	
Bryophyta		1	1	3	1
Lycopodiophyta	1	1			
Magnoliophyta	4	9	7	5	5
Odonata					1 (1)
Coleoptera	2 (2)				1 (1)
Lepidoptera				1 (1)	
Mollusca		2 (2)			
Cyclostomata				1 (1)	
Amphibia			1 (1)		
Reptilia	1 (1)				1 (1)
Aves		1 (1)		1 (1)	9 (9)

Note: number species of international importance are additionally presented in brackets

In summary, the project has selected five sites that stand as important habitat for species of global and national significance identified in several conventions. The five sites differ from one another in terms of types of habitats and their species composition. The biodiversity significance of the sites is demonstrated by their categorization as top priority sites in the Biodiversity Action Plan, as Ramsar sites, and as Important Bird Areas.

2.b.3. Threats affecting the project sites

The project will address the threats to biodiversity and their root causes in the five selected wetlands. In general, disturbance, pollution, overgrowth of bog, fen and meadows with bushes and trees, intensive forestry activities around the core areas, and drainage of bogs are factors observed in one or more project sites. However, each site demonstrates important differences among the threats to be

addressed and therefore in the potential measures to counter them. Table 4 presents a description of the specific factors affecting biodiversity and their root causes for the five selected sites:

Table 4: Threats and root causes of biodiversity loss in the five selected sites

Reserve	Factors Affecting Biodiversity	Root causes
Cepkeliai (Area: 11,212 ha)	1) Increasing numbers of visitors during the cranberry-picking season disturb wildlife and damage significant areas of raised bog vegetation cover. 2) Overgrowth of meadows in Katra River valley due to cessation of mowing, and haying, and land abandonment	1.1) The current system of permits to collect cranberries and mushrooms has proven unable to address the problem of disturbance. Only local people can apply for these permits, which are not tradable or transferable - they cannot be sold to non-locals. However, the origin of disturbance is mainly from non-locals who can come from as far as Vilnius; 1.2) Low public awareness regarding reserve regulations and importance of biodiversity; 1.3) Low enforcement levels of reserve regulations; 2) Gradual abandonment of agricultural activities;
Kamanos (Area: 3,935 ha)	1) Extensive drainage of the bog; 2) Overgrowth of bog areas with vegetation given change in hydraulic regime;	1) The strict nature reserve is bordered on the north and south by a farming belt. Drainage canals extend inside the reserve, which results in extensive drainage of the bog area. While the authorities can legally block the canals within the strict nature reserve, this action alone would be insufficient. Because of the particular location of farms relative to the bog, it is also necessary to block several canals outside the reserve, something that will require the cooperation of affected farmers; 2) The root cause is the change in the hydraulic regime (see 1 above), which favors colonization by trees.
Viesvile (Area: 3,216 ha)	1) Intensive forestry activities around the reserve cause a negative impact on the reserve because of disturbance to species/habitat and change in the landscape mosaic; 2) Two small dams in the Lower Viesvile creek negatively impact habitat for a species of global significance, by impeding migration and spawning along the river. 3) Disturbance from cranberry picking and tourism; 3) Water, solid waste and pesticide pollution;	1) Logging by the State Forestry Company around Viesvile complies with existing laws and regulations. The reserve has little leverage to force a biodiversity favorable solution on the State Forestry Company. This situation is also observed in other nature reserves around the country; 2) Dams were built without EIAs; 3) Viesvile is a relatively new strict nature reserve, and conflicts with local inhabitants occur regarding restrictions on land use. In addition, the reserve is not able to enforce its own regulations; 4) Inappropriate infrastructure for waste handling and treatment;
Zuvintas (Area: 18,490 ha)	1) An altered hydraulic regime in the catchment has a negative impact on the preservation of wetland biodiversity 2) Water pollution; 3) Overgrowth by woody vegetation in bogs, meadows and fens;	1) There is insufficient coordination and information exchange between the authorities in charge of managing the hydraulic regime in the Dovine River basin and the reserve authorities. In addition, part of the water regulatory infrastructure is out of use and impedes circulation of water; 2.1) Farmers have an insufficient technical and financial capacity to adopt techniques that minimize impact on wetlands; 2.2) Deficient infrastructure for treatment of waste water from villages; 3.1) A disturbed hydraulic regime and agricultural runoff favor eutrophication; 3.2.) A changed hydraulic regime favors colonization of bogs and fens by trees and bushes; 3.3.) Abandonment of traditional agricultural practices results in growth of woody vegetation in meadows
Girutiskis (Area: 1,483 ha)	1) Disturbance from tourism; 2) Drainage of the bog; 3) Overgrowth of open bog habitats with trees;	1.) The area is a popular destination for tourists and the reserve is ill prepared to deal with existing tourist flows; 1.2) The reserve shows insufficient capacity to enforce its own regulations; 2) There are two drainage canals in Balinės and Aisputiškio raised bogs that have changed the hydraulic regime of the reserve; 3) A changed hydraulic regime allows trees to colonize open bog habitats;

Girutiskis, Viesvile and Cepkeliai are all affected by ***disturbance***, caused by ***visitors*** trespassing in strictly closed areas. Disturbance, however, differs from site to site and is motivated by different

incentives. In Cepkeliai, people from outside the local communities are mainly responsible for habitat damage. Cranberry and mushroom picking is the economic activity motivating their incursions into the reserve. In Viesvile, the reason for disturbance is also cranberry and mushroom picking, but the people responsible for habitat damage are not outsiders, but from the local communities around the reserve. Viesvile is a relatively new protected area, and there are conflicts between local stakeholders and reserve authorities in regard to its boundaries and regulations. ***Tourism*** is responsible for habitat damage in Girutiskis, with the site's scenic value attracting tourists in increasing numbers. The different origins of and motivation driving each site's primary threats exert a significant influence on the choice of strategy to address each site's threats to biodiversity (see section 2.b.3 Description of the project strategy).

In addition to disturbance from cranberry picking, Viesvile is also affected by ***forestry activities*** taking place outside the reserve. These activities affect the mosaic of habitats that the reserve forms part of and cause disturbance to species with a habitat range exceeding that of the reserve boundaries. Unfortunately, disturbance by forestry activities in or around protected areas is widespread in Lithuania. Kamanos is also affected by activities taking place outside the reserve boundaries. In this case, however, it is ***drainage of the reserve's bog*** to permit the use of drained land outside the reserve for agricultural purposes – this is a common problem for many other wetlands in Lithuania.

Kamanos and Viesvile differ not only in terms of the sector responsible for the disturbance and the transmission mechanisms involved but, most importantly, also in terms of the bargaining power of reserve authorities to change the status quo in favor of increased protection of biodiversity. In Viesvile, forestry activities are carried out in compliance with existing laws and regulations, and the reserve has limited leverage to force a change on the State Forestry Company, responsible for logging operations. There is a need to find alternatives to current practice either through logging practices that provide acceptable solutions to both parties (reserve and State Forestry Company) or through forest certification, which would provide an economic incentive to adopt biodiversity friendly practices. As a first step, there is a need for a confidence building process between those with responsibilities over reserve management and those with responsibilities to deliver a given output quota.

In Kamanos, the threat to biodiversity originates in a network of drainage canals that extends inside the reserve boundaries. While reserve authorities have the right to close them, this in itself would be insufficient to halt drainage because Kamanos is a *raised bog*, a common formation in Lithuania. Because of the position of the bog relative to the farms benefiting from the drainage, drainage canals should also be closed some distance *outside* the reserve boundaries to ensure conservation of the bog and its important habitats. The origin of the greater bargaining power of reserve authorities lies in that the closing of channels inside the reserve would create conditions too wet for farming *outside* the reserve. If there were credible prospects that the reserve is committed to at least partially halting drainage of the bog (by closing the network of channels inside the reserve), this would provide farmers with an incentive to negotiate an alternative solution acceptable to both parties (farms and reserve).

In Zuvintas, threats to globally important biodiversity originate in ***development activities*** inside and around the buffer zone. Zuvintas requires an encompassing multisectoral approach if it is to successfully address synergistic threats. Zuvintas is the most complex of the five sites. The area around the reserve contains several medium size villages, an active farming belt and forestry activities. The hydraulic regime of the Dovine River, which enters Zuvintas Lake, was altered by the installation of ***water regulation structures*** prior to 1989, which in turn resulted in diminished water inputs for wetlands inside the Zuvintas reserve. The impact of diminished water inputs is compounded by ***water pollution*** from nearby villages. Together, these two threats favor eutrophication and vegetative overgrowth. The farming belt around the reserve and lake contributes to this problem through ***agricultural runoff***. The reserve suffers moderate disturbance to globally significant habitats from visitors and is losing important habitat through overgrowth of meadows with woody vegetation.

2.b.4. Description of proposed project strategy

The project approach is two-pronged. First, it will demonstrate improved wetland management *in-situ* at five globally significant sites, then, second, with the lessons learned from these experiences, it will institutionalize best practices through a formal, intersectoral, institutional mechanism for replication to wetland sites throughout Lithuania. The goal of this mechanism – the **Multisectoral Wetlands Working Group –** is to mainstream optimum wetland management requirements into sectoral policy so that economic activities - primarily agriculture, forestry and tourism - contribute to the conservation and sustainable use of wetlands and their biodiversity. This will provide an opportunity to leverage EU agriculture and environment funds for wetland conservation in the context of compatible productive activities. At the same time, the project will be in a position to inform EU agricultural policy for accession countries regarding the conservation of biodiversity and wetlands in the productive lands

The project aims to achieve two objectives - 1) sustainable management of wetland biodiversity on five important sites and 2) institutionalization of best practices and mainstreaming of biodiversity conservation principles into sectoral policy. Objectives and corresponding outputs are described below.

2.b.4.1. Sustainable management of wetland biodiversity on five important sites:

The five pilot sites selected are important in terms of globally significant biodiversity, and each of them allows for application of *different* approaches to threat removal, a fact that will permit the generation of a broad range of lessons and experience. The five sites encompass the main threats to inland wetlands in Lithuania. Work in these sites can be understood as the first stage in a longer-term effort to protect inland wetland biodiversity in Lithuania.

A description of the project approach at each site follows immediately below (see also ANNEX 2A: Logical Framework Matrix):

Cepkeliai

Threats to biodiversity at this site encompass disturbance from cranberry picking and overgrowth of fen, meadows and bog areas with trees.

Cepkeliai uses a system of legal permits to collect cranberries. However, only local people can apply for these permits. Permits are not tradable or transferable, that is, they cannot be sold to non-locals. However, non-locals account for the bulk of disturbance. Cepkeliai is a popular destination for cranberry picking, and harvesters come from as far as Vilnius (100 Km). Trespassing within the reserve is common.

Aging of the local population makes the system of permits even more ineffective. A number of local people do not make full use of their permit quota because harvesting is physically demanding for their age. The result is that for a portion of the local population, the permit system does not generate benefits although the generation of local benefits was one of the main original purposes behind the permits.

The Cepkeliai reserve is poorly prepared to tackle the seasonal flood of harvesters. Reserve boundaries are not clearly defined, and the reserve lacks capacity to direct the harvesters to areas where the activity could take place in a sustainable fashion. The rigid system of permits has failed to limit disturbance, and problems are compounded by the low capacity of the reserve to enforce its own regulations.

The project will explore the effectiveness of an alternative system of permits combined with higher enforcement capacities and increased public support for protection of the reserve. Tentatively, local people would continue to receive permits for cranberry picking but these permits could be traded freely between locals and non-locals. The number of permits would take into account carrying capacity of the site and would not be valid for all sections of the reserve (some would still be off limits). The new system of permits would allow locals to generate income either by picking cranberries themselves or by selling their permits to non-locals. The new system would be

introduced together with actions aimed at increasing enforcement (e.g. better demarcation of reserve boundaries; regular boundary patrols), expanding capacity of the reserve staff to provide information to, and engage in dialogue with, locals and non-locals alike. Better enforcement is deemed as necessary because otherwise there would be few incentives to obtain a permit.

The project will involve local people in activities related to the conservation of the reserve, for example, support for monitoring of off-limits areas for cranberry harvesting. The proponents expect greater participation by local people in project activities as a result of the additional potential income brought about by the new system of permits, higher awareness of the reserve's value (as a result of targeted information and educational campaigns) and limited support for diversification of income sources such as beekeeping. Participation of local people in monitoring would be considered a first step, with participation in other aspects of management to be explored depending on the interest of local stakeholders. Additional avenues for participation will be explored during implementation of the full project.

Finally, the introduction of an alternative system of permits in Cepkeliai would be complemented by restoration activities e.g., removal of woody vegetation in meadows, in specific areas of the reserve that are considered to host habitats for species of global significance. While removal of woody vegetation is essentially a one-off activity, maintenance of the meadows will be sustained by supplying the appropriate incentives to stakeholders to mow or graze farm stock or to carry out controlled vegetation burning. These incentives will be explored during the full project and may include farm subsidies as part of agri-environmental measures, direct payments from the state budget, and/or green-premium marketing of agricultural products.

Kamanos

Threats to biodiversity at this site include extensive drainage of the bog for both forestry and agricultural purposes, overgrowth of open bog habitats with trees, and ongoing disturbance from cranberry picking.

The main characteristic of Kamanos is farming around the strict nature reserve on land drained for this purpose. Drainage canals form part of a common system that extends throughout the areas adjacent to the reserve, as well as partly within it. The result is extensive drainage of the bog. The government has the capacity and the legal right to block drainage canals extending into the reserve, and can do so with or without the consent of neighboring farmers. However, this measure alone would be insufficient to halt drainage of the bog. Given the nature of the area's hydraulic system, it would also be necessary to block a number of canals that drain farmland around the reserve. To block channels in the farm area, it will be necessary to obtain the cooperation of farmers and forest owners. In this negotiation process, the reserve is in a relatively stronger bargaining position since blocking channels inside the reserve would considerably increase ground water levels in the surroundings, resulting in conditions too wet for traditional agriculture or forestry.

The project will establish a forum for discussions and negotiations between reserve authorities and local farmers with the objective of ensuring habitat conservation. For the nature reserve, the goal is to stop drainage of the bog, and this can be achieved, for example, by acquiring strategic parcels of land outright or by compensating owners for removing them from agriculture or forestry. The identification and selection of land to buy or leave idle will be part of the development of the site's management plan. The Frankfurt Zoological Society will cover the cost of purchasing land. As part of the process of negotiation between farmers and reserve authorities, the project will provide technical expertise and support for a confidence building process and the identification of solutions agreeable to all parties involved. This support can include the selection of priority land to purchase and the identification of compensation mechanisms that could serve as alternatives to purchasing land. The result of this work will inform protected area wetland practices and national agricultural and environmental policy so that appropriate regulations, management regimes and compensation systems can be institutionalized and lead to replication in agricultural areas surrounding other wetland sites. Thus this project component will produce a set of lessons and policy guidance on changing and financing agricultural practices for wetland conservation.

The project will also support dismantling the network of canals on farmland and provide limited support for habitat restoration in specific sites that are considered to be of global importance. These two activities are of a clear incremental nature since they ensure the conservation of habitats of global significance and build on a solid baseline. The project will also undertake actions aimed at increasing public awareness and support for the conservation of the reserve. Lessons learned from Kamanos will have a significant potential for replication in other wetlands of Lithuania and elsewhere. The continuing drainage of wetland areas from canals and drains constructed during the Soviet period is also observed in other protected and non-protected sites throughout the country.

Viesvile

Threats to biodiversity at this site encompass intensive forestry activities adjacent to the reserve, damming of a river that serves as habitat for a globally threatened species, localized wastewater pollution, and disturbance from cranberry picking and recreation. Viesvile represents a situation common to other wetlands in Lithuania in the sense that the wetland area is affected by forestry activities taking place *outside* its boundaries. The mechanism involved is habitat fragmentation and disturbance for species with a range exceeding that of the given wetland.

There are at least two potential solutions to problems of disturbance from forestry activities. The first is to negotiate a change in forestry practices so that these take into account the conservation of species of global and national significance. The second would be to establish a forest certification regime so that the State Forestry Company has an economic incentive to adopt more biodiversity friendly production practices.

Logging carried out by the State Forestry Company around Viesvile, as well as around other wetlands, is in compliance with existing regulations and approved practices. In terms of bargaining power – contrary to the example of Kamanos - the Viesvile reserve has little leverage to force a change in status quo on the State Forestry Company.

The project will support a collaborative consultation process between the staff of the State Service of Protected Areas and the State Forestry Company with the objective of finding common ground between forestry output needs and conservation of biodiversity of global significance. Work conducted during the PDF-B stage indicate that there are logging practices that can at least significantly reduce, if not eliminate, the gap between the needs of the State Forestry Company and those of the State Service of Protected Areas. The process of stakeholder consultation showed that the State Forestry Company is willing to engage in a dialogue with the State Service of Protected Areas aimed at finding alternatives that satisfy both parties. In general, the work in Viesvile would serve as part of a confidence building process between staff in the State Service of Protected Areas and staff involved in forestry activities. Because the problems affecting Viesvile are common to other areas, the lessons gained from this experience have a high replication potential.

The result of developing tools and systems for biodiversity friendly forestry would inform protected wetland areas practices and national forestry and environmental policy so that appropriate regulations and management regimes can be institutionalized and lead to replication in forest areas surrounding other wetland sites. Thus this project component should produce a set of lessons and policy guidance on improving forestry practices for wetland conservation.

A second threat to the conservation of globally significant habitats in Viesvile is disturbance from cranberry and mushroom harvesters. The groups responsible for disturbance are *local* communities. Viesvile is a relatively new reserve and its boundaries and regulations are still not fully accepted by local inhabitants. The origin of the group responsible for the disturbance and the level of acceptance of the reserve's boundaries and regulations significantly affect the choice of measures to address disturbance. These two factors, origin and acceptance, make Viesvile different from Cepkeliai even though both suffer from the same core problem (habitat disturbance from harvesters).

The project will facilitate establishment of a cranberry farm in formerly excavated Laukesa peatland outside the reserve as an alternative to cranberry picking inside the reserve. The main goal of such action would be to diminish pressure from disturbance. Local stakeholders would work the farm

under certain conditions, which will be defined through a consultation process during project implementation. In general terms, it would provide alternative work for the seasonally or partially employed population, which is mostly responsible for illegal cranberry picking in the reserve. GEF funding would provide support for preparation of the cranberry farm site, initial training for farm management, and linkage of communities with distributors and markets.– State institutions will provide long-term technical support, access to credit and business administration training.

The establishment of a cranberry farm in Viesvile as a way to divert pressure from the reserve has been a choice in direct response to the characteristics of the project site. The establishment of a system of tradable permits, as in Cepkeliai, would likely have little effect in Viesvile. It is local groups, not outsiders, who are causing disturbance, and thus the prospects for a successful permit trading system are very low. All factors considered, the project has chosen the establishment of a cranberry farm as the best alternative to reduce disturbance.

Establishment of the farm and provision of technical support to local stakeholders for its management will be combined with increased enforcement of reserve regulations and boundaries, support for diversification of local income sources, and programs for public support, education and awareness. The project expects that the combination of these activities will provide the necessary legitimacy for increased enforcement of reserve boundaries.

The project will provide technical and financial support for restoration activities, as a complement to the activities aimed at changing forestry practices and establishing a cranberry farm. These comprise the establishment of a fish passage for a species that is globally threatened, the reintroduction of capercaillies from Belarus and restoration of specific habitat that is important for species of global significance. Finally, local authorities will address the problem of water and solid waste pollution, which will be entirely financed by government.

Zuvintas

Threats to biodiversity at this site include changes to the hydraulic regime, water pollution from villages and agricultural runoff and overgrowth of fen, meadows and bog areas with trees (as a result of drainage and a lowered water table, and water pollution). Zuvintas represents the most complex characteristics of any site in this project. The site is currently being nominated as a UNESCO-MAB Biosphere Reserve. Its proposed buffer zone encompasses substantial farming activities and contains several villages.

Zuvintas reflects a situation that is common to other wetlands in Lithuania. It comprises an important habitat for species of global and national significance that is increasingly affected by extended (low intensity) development around it. The measures applied to counter threats at other sites do not fit the situation well in Zuvintas. Rather than applying alternatives in response to single or several well-defined threats, Zuvintas requires the implementation of a multisectoral approach to development planning around the reserve, based on an ecosystem management model.

Within the framework of a multisectoral approach to development planning, the project will provide incremental financing for several activities. First, it will assist in the establishment of Zuvintas as a Biosphere Reserve and in the design and initial implementation of its management plan. The change in status from a strictly protected area to a Biosphere Reserve provides the conceptual framework and entry point for harmonizing development activities and conservation of biodiversity. Second, it will support the development of a water management plan for the Dovine River basin, in which the Zuvintas Lake is located. A restored hydraulic regime in the Dovine River is seen as a solution to the problems of artificially regulated water inputs into the Zuvintas reserve. Once the water management plan for the Dovine River is agreed and approved, the project will undertake selected actions aimed at improving water circulation within the Zuvintas reserve. This will further help to reverse the process of eutrophication. Third, the project has leveraged SAPARD co-financing for the promotion of environmentally friendly agricultural practices[10]. The GEF contribution will be used to identify

[10] SAPARD is an EU pre-accession instrument which will close officially two years after formal accession – at that point it is agreed that funding for project-related commitments will come from Structural Funds available to the GoL under the same conditions.

and select those farms that are priority targets from a biodiversity point of view, for example, those that contribute the greatest nutrient load in agricultural runoff and/or those that contain habitat of global importance (e.g. meadows with high habitat value that are not currently being mowed). The GEF contribution would also be used to assist farmers to access these SAPARD funds for the purposes described above, mainly through a program of "train the trainers." Fourth, once the problems of water inputs to the Zuvintas reserve and water pollution have been successfully addressed, the project will finance actions aimed at restoring specific sections of the reserve that harbor globally significant habitat. As a fundamental support to these actions, the project will undertake a public information and educational campaign aimed at local communities, farmers, and tourists.

Tackling the problems derived from socio-economic activities around the reserve will demand a significant amount of co-financing to meet those needs ineligible for GEF financing, as well as to account for those that are eligible but still generate significant domestic benefits. The work carried out during the PDF-B stage was successful in ensuring all necessary co-financing to the GEF incremental support. The choice of the Lithuanian government to direct SAPARD and ISPA resources to Zuvintas was heavily influenced by the proponents' decision to choose it as a site. Due to the lobbying efforts of the PDF-B team, Zuvintas was included as one of the three pilot sites for the SAPARD program "Agri-environmental measures in Lithuania". SAPARD funds will be used to address the problem of agricultural runoff and habitat conservation through support for environmentally friendly agricultural practices. Local financing to tackle the problem of point source pollution will come from ISPA funds, which will finance the construction of a water treatment plant in the town of Simnas, the reconstruction of Azuoliniai village sewage treatment plant and the reconstruction of Mergalaukis settlement sewage treatment plant.

Girutiskis

Threats to the biodiversity of this site include disturbance from tourism, drainage of the bog, and overgrowth of open bog habitats with trees.

Habitat damage and disturbance in Girutiskis is caused by inflows of tourists that the reserve is unable to manage. The site is a popular tourist destination because of its water bodies and scenic beauty. Disturbance is caused not by subsistence activities, such as harvesting of mushrooms and cranberries, but by the impact of a group with enough disposable income to pay for the costs of recreation. This distinguishes Girutiskis from all other sites.

Girutiskis provides appropriate circumstances for the introduction of users fees, an alternative not yet implemented in Lithuania's system of reserves. The introduction of users fees is anticipated to result in significantly diminished levels of disturbance if combined with increased enforcement of reserve regulations and boundaries, the undertaking of awareness and education campaigns, and improvements to the reserve facilities to handle tourists.

The introduction of users fees will draw on previous experiences in other countries and adapt them to conditions in Lithuania. Increased enforcement of the reserve's boundaries would entail better demarcation of reserve limits and ensuring that access to the reserve takes place through selected roads. Information campaigns would be directed to tourists, and reserve facilities would be improved (e.g. trails, information stands, visitor center). The project expects that these actions together will increase the acceptance of introducing a fee for visiting the reserve and will diminish Trespassing in important habitats.

The project will also provide incremental financing to block two drainage channels that have changed the original hydraulic regime in part of the reserve and affected habitats of value for species of global and national significance. Having successfully blocked these two channels, the project will provide one-off limited assistance to restore selected areas of the bog. This action will improve the conditions of globally significant habitat, and secondarily, increase the scenic value of the site.

Finally, Table 5 below gives a summary of actions in each site:

Table 5: Summary of interventions in each project site

Reserve	Factors Affecting Biodiversity	Summary Alternative proposed
Cepkeliai (Area: 11,212 ha)	• It has proven difficult to control the number of visitors during the cranberry picking season. This factor causes disturbance of wildlife and has damaged a significant amount of raised bog vegetation cover. • Overgrowth of meadows in the Katra River valley	• Establish a system of collection permits; • Strengthen enforcement of reserve regulations; • Increase public awareness and support for conservation of Cepkeliai reserve; • Restore selected bogs, meadows and open sand areas
Kamanos (Area: 3,935 ha)	• Extensive drainage of the bog; • Overgrowth of bog areas with vegetation;	• Re-establish natural hydraulic regime by blocking channels after negotiations with local farmers • Restore selected open bog habitats; • Increase public awareness and support of local communities for wetland conservation.
Viesvile (Area: 3,216 ha)	• Intensive forestry activities around the reserve; • Obstacles to migration and spawning along the river. • Disturbance from cranberry picking and tourism; • Water, solid and pesticide pollution;	• Adopt forestry practices compatible with conservation of wetland biodiversity; • Establish cranberry pilot farm as alternative to local harvesting inside reserve; • Restore selected open fen and meadow habitats; • Restore sea trout and lamprey migration in Viesvile River; • Reduce water and solid waste pollution in Viesvile by applying ISPA funding; • Increase awareness and support for conservation of Viesvile Reserve; • Strengthen enforcement of reserve boundaries and regulations.
Zuvintas (Area: 18,490 ha)	• An altered hydraulic regime that has a negative impact on the preservation of wetland biodiversity • Water pollution; • Overgrowth of plant communities in the lake, bogs, meadows and fens;	• Establish Biosphere Reserve; • Restore hydraulic regime in the Dovine river and Zuvintas lake by altering water control infrastructure • Introduce environmentally friendly agricultural practices in buffer zone of biosphere reserve; • Reduce water and air pollution in Zuvintas by applying ISPA funding; • Restore selected meadow, fen, and bog habitats; • Increase public support and awareness for conservation of Zuvintas reserve;
Girutiskis (Area: 1,483 ha)	• Disturbance from tourism; • Drainage of the bog; • Overgrowth of open bog habitats with trees;	• Establish Girutiskis reserve as Ramsar site; • Establish and initiate system of entrance fees; • Restore original hydraulic regime by blocking channels; • Restore selected areas of open bogs, meadows and fens by removing woody vegetation; • Strengthen enforcement of reserve boundaries and regulations; • Increase public support and awareness for conservation of Girutiskis reserve;

*2.b.4.2. Institutionalization of best practices and lessons learned: (see Immediate Objective #2 and Output #6 in the **Logical Framework Matrix**).*

The work described above for the project sites of Cepkeliai, Kamanos, Viesvile, Zuvintas and Girutiskis will produce a wealth of lessons, information and experience regarding management of wetland biodiversity to counter a variety of threats and root causes. The best practices resulting from experience at five sites will be replicable to other areas of Lithuania, given the broad array of threats and the frequency with which they are found at wetland sites around the country. For replication to be a success, best practices should become part of standard institutional policy and practice and be supported by an enabling policy framework.

This second immediate objective of the project will establish a formal intersectoral mechanism - the Multisectoral Wetlands Working Group - for replication of best practices and lessons learned in conservation of inland wetland biodiversity, mainstreaming wetland management requirements into sectoral policy - primarily agriculture, forestry and tourism – to contribute to the conservation and sustainable use of wetlands and their biodiversity.

The outputs of this objective are (i) the formal establishment of the Multisectoral Wetlands Working Group and (ii) formulation of a binding work plan to include: analysis of lessons learned; identification of best practices; analysis of institutional requirements to adopt best practices (capacity needs, policy requirements, etc.); analysis of policy support measures to ensure effective adoption of best practices in the agricultural, forestry, tourism and nature conservation sectors; policy dialogue with Ministry of Finance, parliamentarians, NGOs and other actors; assistance in drafting of legislation; formulation of a dissemination plan to extend best practices to other wetland protected areas and buffer zones.

Lessons learned will be available for dissemination to other countries facing similar issues in the region.

While the precise composition of the **Multisectoral Wetlands Working Group** (MWWG) will be more carefully defined during project implementation, it is expected that it will include representatives of the state institutions as well as the NGOs involved in the sectors most closely affiliated with the issue of conservation and sustainable use of wetlands resources. The objective is to establish a group representatives of the main actors influencing wetland conservation in Lithuania, while simultaneously ensuring that the number of participants and their level within their respective agencies results in a group that is also operational and effective. The specific mandate, level and location of the working group, while agreed to in principle by the government, will be defined in more detail as part of full project implementation. This definition will build on feedback from project activities at each site and will include a consultation process longer than what the PDF-B has allowed for. In general terms, it is expected that the work of this group will include the codification of lessons, instruments and guidelines from experiences in the five pilot sites; the design of a multisectoral plan for replication of best lessons to other wetlands in Lithuania; the production of material on best lessons for widespread dissemination; and, as much as appropriate, information and capacity building programs for implementation of new practices by staff in different agencies and organizations. In more specific terms, the group will be tasked with exploring lessons, best practices and replication modalities in the following thematic areas:

Within the **agricultural sector**, the development of options for farmers within the watersheds of protected wetland areas to adopt new practices and technologies (types of crops, rotations, tillage systems, nutrients) to permit restoration of natural hydraulic systems feeding wetlands. These may include regulations and/or incentives to stimulate new management regimes for land and water use and respective compensation mechanisms. The multisectoral working group will explore whether systems and associated policies should be adopted at the national or regional level. The project will also explore additional ways to develop and secure a "horizontal" (i.e., sectoral) agri-environment scheme that would provide funding to farmers for a given period to compensate for the economic effects of changes to their farming practices in areas adjacent to wetlands.

Within the **forestry sector**, to codify lessons and best practices to ensure that the state and private forestry industry in designated forest sites (minimally those adjacent to wetland areas where important bird species are living and feeding) is operating in a biodiversity friendly manner. This means that forest enterprises would use and apply wetland biodiversity conservation principles and codes of conduct during their harvesting and reforestation operations and are operating monitoring and response systems. As part of a menu of potential option, this may entail FSC certification with additional biodiversity principles or alternative systems (as appropriate). This could include exploring the establishment of alternative legal systems and Ministerial responsibilities as well as improving capacity of forest enterprise managers to carry out these new responsibilities.

Within the area of **integrated land use planning**, the project will codify lessons, best practices and establish replication strategies for areas surrounding wetland sites and characterized by the existence of production systems (agriculture, forestry and urban development). The project would assess the effectiveness and replication potential of regulations, EIAs, public participation and incentives to

ensure the hydraulic needs of wetlands. This is likely to require changes to protected area buffer zone laws and regulations regarding the extension of buffer zones to follow hydraulic system boundaries

Within the area of **sustainable harvest of wetlands products**, the project will codify lessons, best practices and replication strategies for sustainable harvesting of berries and mushrooms within wetland areas based on the project experience with tradable harvest permits, enforcement, public awareness, and models for community off-site production systems.

Within the area of **tourism**, the project will gather and codify lessons, identify best practices and develop a replication strategy for effective management of wetland tourism through planning, public awareness, users fees, local participation and improved protected area management and enforcement.

Within the area of **wetland restoration**, the project will ensure that restoration and management practices within protected areas are systematized and operationalized in all wetland areas with appropriate funding and sustainable management practices for wetland meadows (including wet meadow maintenance by local farmers).

Other activities could be included at a later project stage in response to client needs and lessons learned from each site.

2.b.5. Institutional Context: a general description

Although the regulatory system for the protection of living natural resources and biodiversity is still incomplete, previously adopted laws and new legal acts are being revised in keeping with recent changes in social/economic circumstances. So far 32 laws, either directly or indirectly, govern environmental protection and the use of natural resources. Two of particular importance are the Law on Wildlife and the Law on Protected Plant and Animal Species and Communities. Both were adopted by the Parliament at the end of 1997. The Parliament also revised the Law on Protected Areas (1993) at the end of 2001.

The protection of biological resources in the territory of Lithuania is the primary responsibility of the Ministry of Environment. The mandate of the Ministry has evolved much in the last 5 years and adopted many of the responsibilities formerly assigned to other Ministries. It was first called Ministry of Environmental Protection until it was merged with the Ministry of Construction and Urban Development in 1998 to form the Ministry of Environment. Simultaneously, the former Ministry of Agriculture and Forestry was also reorganized and the forestry sector passed to the Ministry of Environment. The result is a comprehensive structure with mandate over protection of biological resources, environmental quality, and planning. More specifically, the Ministry of Environment:

- Drafts laws and other legal instruments for the protection of biodiversity and resources,
- Develops and approves rules, norms and standards for the use of biological resources,
- Develops plans for protected areas,
- Regulates the use of biological and other natural resources,
- Arranges for the compilation and maintenance of protected areas and biological diversity (habitat) records,
- Develops proposals for the establishment of protected areas,
- Compiles and revises the Red Data Book,
- Organizes and performs activities related with the conservation and increase of rare and declining plant, fungi and animals,
- Regulates the importation and export of plants, animals, and trophies, and the keeping of animals in captivity,
- Determines the procedures regarding environmental impact assessment and project approval,
- Organizes and coordinates integrated ecological monitoring,
- Organizes and coordinates applied research related to biological resources protection, formation of the protected areas network, etc.
- Controls the use, restoration and protection of Lithuanian forests,
- Arranges the inventory of forests and forest records,
- Organizes the inventory of forest genetic resources, selective seed farming and forest restoration.

- It coordinates the works of territorial planning and legal regulation of construction; prepares norms, rules and standards for territorial planning and construction;
- It takes part in the development planning of towns, villages and recreational territories; takes part in analyzing the problems of cultural heritage, economy and nature protection;
- It establishes the order of the structure of the general territorial planning documents and construction projects as well as the order of their preparation and changes.

A second ministry whose activities influence conservation of biodiversity is the Ministry of Agriculture through its policies on farming and rural development. For this project, the Ministry of Agriculture is an important partner for activities aimed at ensuring biodiversity-friendly activities around the project target sites. Finally, Lithuanian cities and districts have environmental units or offices that implement the regulations and norms as dictated by the Ministry of Environment and other units of the government. The environmental units of municipalities also coordinate and participate in organizing public environmental education, information and training in towns and districts.

2.b.6. Institutional Context for project implementation

The following section describes the institutions involved in the project and their relevance for and involvement in project activities.

1) The Ministry of Environment (MoE), which as described immediately above, is responsible for designing state policy on environmental protection, forestry, utilization of natural resources and territorial planning. It is also responsible for coordinating its implementation.
Relevance/involvement for project: overall supervision of the project; preparation and ratification of legal acts needed for achieving project goals; decision making on state budget allocations for implementation of specific project activities; assistance for involvement of other national and international contributors; provision of office space and other facilities.

2) The State Service of Protected Areas under the MoE administers the State Strict Nature Reserves, organizes and co-ordinates overall management of protected areas (PA), co-ordinates preparation and implementation of monitoring programs in the PA, provides information to land owners and public on status and management of PA.
Relevance/involvement: project site development policy; preparation of certain legal acts related to management of PA needed for project goals; contribution to project activities through annual allocations towards the management of project sites; assistance in involvement of other national and international contributors.

3) Protected Area Administrations (Cepkeliai, Kamanos, Viesvile, Zuvintas Strict Nature Reserves and Labanoras Regional Park) are responsible for the protection of natural values, restoration of damaged natural areas and objects, investigation and monitoring of sites, public awareness and education.
Relevance/involvement: contribution to the development of detailed project plans; direct implementation of nature management activities, monitoring, public involvement activities and public awareness campaigns.

4) Environmental Protection Agency.
It has been the result of joining the former Joint Research Centre and the Water Resources Department, both under the MoE. The Environmental Protection Agency (EPA) is responsible for sustainable use and protection of water resources and development of river basin management systems. It is also responsible for monitoring the state of environment and control of pollution sources. The EPA is responsible for keeping statistical data on the state of natural environment.
Relevance/involvement: co-ordination and direct supervision of activities related to management of site hydrology; methodological contribution to development of site monitoring programmes; supervision and implementation of certain monitoring activities foreseen in the project.

6) The ISPA (Instrument for Structural Policies for Pre-Accession) Implementation Agency co-ordinates the preparation and implementation of environmental projects co-funded by ISPA funds in

Lithuania; manages the pipeline of projects and confirms the full funding package, including grants, loans and private financing; supports the MoE in project identification and screening.
Relevance/involvement: initiation of pollution reduction projects, mainly reconstruction of wastewater treatment plants and waste management systems affecting project target sites.

7) Ministry of Agriculture (MoA) formulates agricultural policy and coordinates its implementation at national scale, manages the implementation of Government program in the area of agriculture and rural development. The MoA is charged with public administration of agriculture, food, fisheries and rural development and with the responsibility to implement state policy in this field.
Relevance/involvement: supervision and coordination of rural development activities associated with the GEF project.

8) The National Paying Agency under the MoA participates in selection and evaluation of projects financed from SAPARD funds; it is responsible for programme administration; implements measures under National Agricultural and Rural Development Policy.
Relevance/involvement: mainly through management of SAPARD funds for Zuvintas pilot area.

9) The Fisheries Department under the MoA implements state fishery policy, prepares strategies, drafts of legal and normative acts and development programs related to redevelopment of fish resources, regulation of fishing, fish breeding and growing, processing industries and trade in fish and fishery products; supervises the implementation of these programs.
Relevance/involvement: restoration of fish habitat at the project sites and surrounding areas.

10) The Lithuanian State Department of Tourism implements tourism policy, prepares strategies; co-ordinates regional programmes for tourism development, projects for tourism and recreation development; creates, publishes and disseminates information on tourism opportunities.
Relevance/involvement: supervises and co-ordinates tourism related actions foreseen in the project.

11) State Forestry Company (subsidiaries: Svencioneliai, Jurbarkas, Varena, Taurage, Mazeikiai, Marijampole) reproduce, manage and protect state forests; monitor forest productivity, protection and biological diversity; organise use of forest resources basing on sustainable and multi-purpose forest management principle.
Relevance/involvement: implementation of newly developed "green" forest management methods; contribution to sustainable tourism development in the forested areas.

The project also seeks co-operation with and involvement of **local municipalities** (Akmene, Jurbarkas, Lazdijai, Marijampole, Mazeikiai, Prienai, Svencionys, Taurage, Varena) as well as national and international **non-government organizations** (Lithuanian Fund for Nature, Lithuanian Green Movement, Lithuanian Ornithological Society, the Environmental Centre for Administration and Technology, Regional Environment Centre, Biota, Association of Cranberry Growers, OMPO (Migratory Birds of the Western Palearctic) etc.) in the implementation of the project.

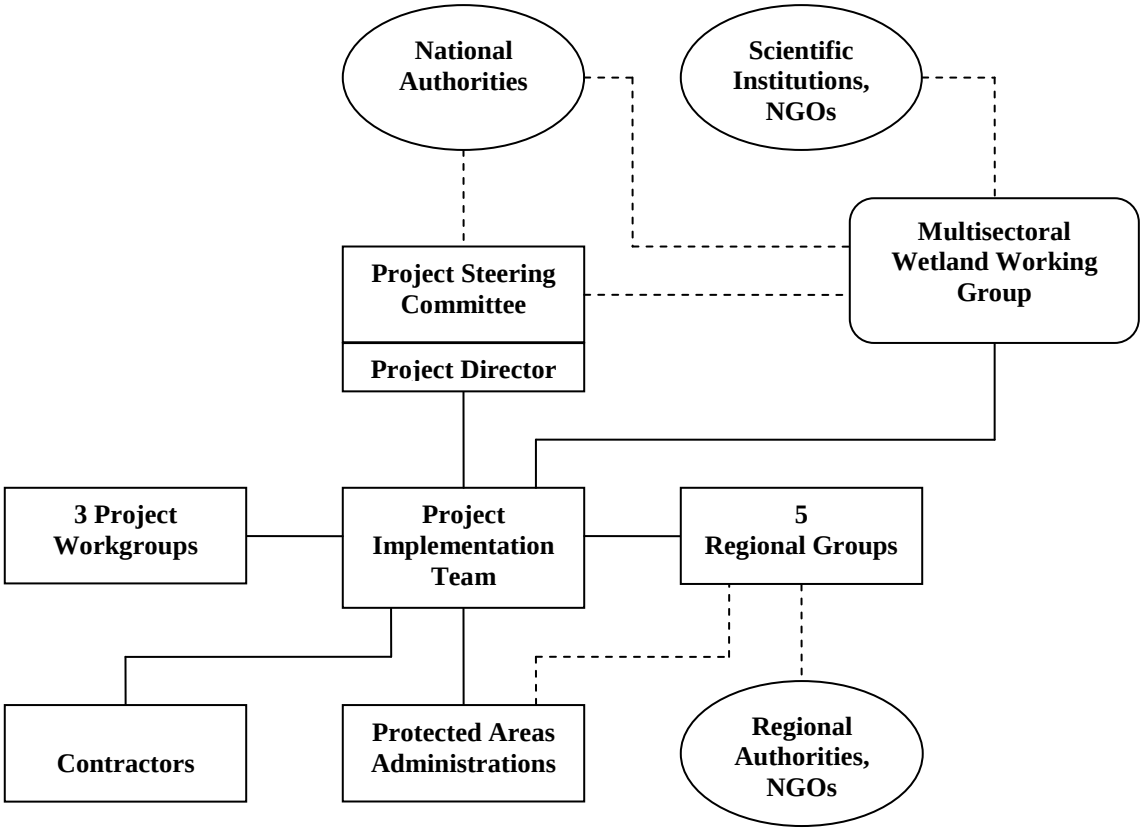
2.b.7. Project Implementation Arrangements

The project will be nationally executed as per standard UNDP procedures. The Executing Agency will be the Ministry of Environment. The Nature Heritage Fund, a public institution, will be the project Implementing Agency. The core project implementation team (PIT) will consist of a National Project Manager, and two project assistants (*for detailed TORs see Annex 2 I*). The PIT will be directly supported by the three Project Workgroups (PW) formed around the main areas of activities: Nature Management, Public Awareness and Education, and Socio-Economic Issues *(for more detailed description of PW see the paragraph below).*

A National Project Director (NPD) will be appointed by the Executing Agency (MoE) to serve as the main focal point between the project and the Government institutions and provide general oversight as well as guidance on project implementation.

A Project Steering Committee (PSC) will be established by the Executing Agency to advise and guide project implementation. It will include representatives from the Ministry of Environment (MoE), State Protected Areas Service, the Ministry of Agriculture, ISPA Implementing Agency, the Ministry of Education and Science, GEF Operational Focal Point, RAMSAR National Focal Point, and UNDP CO Lithuania (*for detailed PSC TOR see Annex 2 J*). It will meet twice a year to monitor project implementation, provide substantive guidance and advice, and facilitate communication, cooperation, and coordination among major stakeholders and project partners. The PSC will also delegate their relevant members to the Multisectoral Wetland Working Group, as the project's "lessons institutionalization" process starts.

Chart 1: Project Implementation Structure



Three Project Workgroups (Nature Management, Public Awareness/Education and Socio-economic) will be established to support the Project Implementation Team and ensure effective communication with governmental and other counterpart institutions. Project Workgroups (PW) will consist of delegated specialists from Ministries and other national authorities (listed in para 2.b.6) that are responsible for nature management and monitoring, tourism and recreation, rural development, legal issues, EU support co-ordination, spatial planning and land management, support to small and medium size enterprises, social schemes, agri-environment measures, eco-farming, public relations, etc., as well as hired experts from scientific institutions and NGOs of relevant fields. The hired experts will be financed under the 'Contracts' budget lines (see budget lines 021-023). It should be noted that co-funding will cover a big portion of required expertise and consultancies. Detailed PW TORs will be elaborated during the first months of project implementation.

Long-term project advisors will lead the PWs and will be in charge of generating their outputs. They will also provide information to Multisectoral Wetland Working Group meetings and participate in the corresponding institutionalization process. Long-term project advisors will be financed under the 'Contracts' budget lines (see budget lines 021-023), however, their detailed TORs will be elaborated during the first months of project implementation.

At the site level, Regional Groups (one per site) will be established to ensure local stakeholder involvement and to ensure that local co-funding obligations are met. Regional Groups (RG) will be formed of representatives from the local authorities and municipal enterprises (municipalities, forest enterprises, regional environmental protection agencies, etc.), private enterprises, and local NGO's/CBOs. Heads of administrations of Strict Nature Reserves (the five project sites) will lead the Regional Groups, facilitating communication as well as collaboration between local actors, co-ordinating their inputs, and feeding the Project Implementation Team with information on substantive matters. RGs will serve as advisory boards to Strict Nature Reserves and, by having representatives of local authorities, will ensure that necessary decisions are taken at municipal levels. Furthermore, heads of administrations of Strict Nature Reserves will be responsible for implementation of planned activities in their respective sites and exchanging experiences with counterparts of other protected areas. Annual workshops are planned to facilitate cross-site experience sharing, discuss lessons learned, and analyze best and worst practices.

As it is foreseen in the project strategy, a Multisectoral Wetlands Working Group will be established at the beginning of year three of project implementation, to institutionalize best practices and mainstream biodiversity conservation principles into sectoral policy and planning. The MWWG will evolve on the basis of the Project Steering Committee and will include representatives from the Ministry of Environment, the Ministry of Agriculture, the Ministry of Finance, Committee on Environment Protection of Parliament of Lithuania, Department of Tourism, research institutes, NGOs. Project Workgroups's representatives will also take part in the activities of MWWG. The PIT will propose detailed composition and prepare the TOR for MWWG. The project Steering Committee will approve the composition and TOR and secure inter-agency replication program.

PIT will be in charge of creating a functional project implementation system, while MoE will bear the primary responsibility for ensuring that objectives set for MWWG are achieved. More detailed division of responsibilities between the PIT, MWWG and the different national, concerned parties will be elaborated during the first period of project implementation, i.e. before establishment of the MWWG.

The project will be implemented in close co-ordination and collaboration with relevant national institutions and NGOs. Certain tasks and fieldwork will be carried out through official tenders. At the same time, a number of institutions are foreseen as possible partners to conduct specific studies or activities during the project implementation phase.

Table 6: Tentative but not limited list of partners for the implementation of project activities

Field	Possible Key Partners
Nature Management	Institute of Ecology Lithuanian Fund for Nature Association "Land reclamation and hydro-technical projects" Institute of Geology and Geography (*hydraulic issues*) "Gedilieta" Ltd. (*fish ways*) Protected Area Administrations
Sustainable Forest Use	Institute of Forest Management Institute of Botany Lithuanian Ornithological Society State forest enterprises
Agriculture and Rural Development	Land Reclamation Institute Agricultural University of Kaunas Water Management Institute Recreation and Tourism Department of Klaipeda University Association of Cranberry Growers (*cranberry farm*)
Environmental Education and Awareness	Regional Environment Centre (REC) Office in Lithuania Lithuanian Fund for Nature Environmental Centre for Administration and Technology (ECAT) Local municipalities and NGO's

2.b.8. Incremental Cost Estimation (see Annex 2F for a full description of the incremental cost analysis)

Development Objectives. The Government of Lithuania is committed to complete a successful transition from a planned economy to a market-based one. In this process, integration with the European Union is considered to be a fundamental cornerstone. The Government of Lithuania takes the transition process to a fully market based economy and integration with EU as a means to increase living standards of the population while respecting principles of sustainable development.

Baseline scenario. The government of Lithuania has identified wetland biodiversity as a top priority for conservation action in its National Biodiversity Strategy and Action Plan and other plans of action like "Protection of Wetland Ecosystems" and "Protection of Species". The activities covered by these plans are substantive and include a ban on new exploitation of wetlands, the restoration of excavated peat lands and the restoration of some selected wetlands. Other actions include the improvement of the legal framework, institutional strengthening, territorial planning/design, research and monitoring, information, training and education. Wetlands and their biodiversity protection have also high priority in the National Environmental Protection Strategy.

The government makes substantive efforts to secure enough funding for the system of Strict Nature Reserves, in particular, to ensure the maintenance of reserve infrastructure, the timely payment of salaries and the execution of primary research activities. These contributions are crucial for the success of this GEF initiative. In addition to its own resources, the government has also been active in tapping external sources of funding for the establishment of a solid baseline. These include allocations that helped to integrate local policies and procedures to EU requirements[11], the preparation of an Agri-environmental program for Lithuania[12], the execution of public educational and awareness campaigns[13] and the habitat inventories among others[14].

The baseline ensures a basic level of protection in the Strict Nature Reserves targeted by this project and basic coordinating functions with other government agencies with mandates affecting wetlands in one way or another. However, the baseline is neither enough to fully protect sites that are important habitats for species of global significance nor sufficient to carry out a long-term plan aimed at protecting the wider system of wetlands in Lithuania. Taking all contributions into account, the baseline has been estimated at **US$ 2,347,396** out of which **US$ 1,466,400** is devoted to running the reserves, an action considered as necessary for project objectives and therefore taken as co-financing.

The GEF Alternative. The alternative builds upon the existing baseline and provides technical and financial resources to ensure the protection of biodiversity at five pilot sites through the application of alternative approaches to wetland conservation in Lithuania, to institutionalise lessons learned and to ensure their replication to other wetlands in the country. Based on their socio-economic characteristics, each project site tests a different approach to wetland conservation and there is a project output specifically designed to take stock of these lessons and ensure their replication to other sites after project termination date (for further details see section "Brief description of project strategy at each site"). Taking into account all contributions, the GEF alternative amounts to **US$ 14,566,396**.

Incremental Cost of the GEF alternative. The difference between the GEF alternative and the baseline amounts to **US$ 12,219,000** which represents the incremental cost of achieving sustainable global environmental benefits. Of this amount, the contribution from non-GEF sources amounts to **US$ 8,958,000**. The GEF will provide **US$ 3,261,00**.

[11] "Harmonization of Lithuanian capacity, policies and procedures on nature protection to EU requirements, with particular focus on implementation of the EEC Habitats directive (92/43) and the EEC Birds directive (79/409)"; US$ 172,500. Danish Environmental Protection Agency.
[12] "Preparation of an Agro-environmental program for Lithuania"; US$ 40,635. Avalon Fund, Veen Ecology, Europe Environmental Policy Institute and the Ministry of Agriculture, Nature Management and Fisheries of the Netherland.
[13] "Education on wheels: European Union and Environmental Issues". Developed educational programs and exhibitions on biodiversity, eco-farming, water, waste management and energy saving; US$ 25,200. Phare ACCESS Program for EC.
[14] "Pilot Woodland Key Habitat Inventory in Lithuania"; US$ 188,330; Swedish Environmental Protection Agency.

A full description of the incremental cost analysis can be found in Annex 2F.

2.C. Risks and sustainability (including financial sustainability)

2.c.1. Risks

Project risks are considered to be low. The following are assumptions required to hold for the achievement of the project Immediate Objective #1:

- The combination of harvest permits combined with better enforcement and increased public awareness is sufficient to control disturbance in Cepkeliai, which constitutes the main threat in the reserve;
- The reconversion of up to 800 ha (at least 300 ha) of current farming and forest land combined with the closing of drainage channels eliminates the main threat to the Kamanos reserve;
- Habitat restoration activities in Kamanos are self-sustaining once drainage channels have been closed and original hydrological regime restored;
- Forest protocols that attain output needs and are compatible with biodiversity conservation in Viesvile are technically feasible;
- A cranberry farm combined with better enforcement and increased public local awareness is sufficient to eliminate disturbance in Viesvile;
- A restored hydrological regime and reduced pollution loads is sufficient to ensure conservation of wetland habitat in Zuvintas;
- A restored hydrological regime makes habitat restoration outputs self-sustainable in Zuvintas;
- The introduction of user fees combined with increased enforcement and public information campaigns is sufficient to control disturbance at Girutiskis;
- A restored hydrological regime makes habitat restoration outputs self-sustainable in Girutiskis;

The risk that these any of these assumptions will not hold is considered to be very low. The PDF-B undertook a process of consultation with local and international experts about the validity of these assumptions and related risks. The resulting assessment (low risk) has been based on best practice and best available knowledge.

In turn, the assumption required for the successful completion of immediate objective #2 is the following:

- Agencies and institutions whose actions can potentially affect wetland biodiversity are willing to assimilate lessons from project;

The assumption regarding other institutions' willingness to assimilate lessons from project is considered robust and originates in the round of consultations during PDF-B. These consultations indicated that actors from different background and sectors do not ignore the past impact of the Soviet development model on wetlands preservation in Lithuania and are willing to adapt practices so as to ensure conservation of the remaining ones. The PDF-B has also preliminary assessed that solutions agreeable to different stakeholders are feasible. In summary, provided that the Multisectoral Working Group defines alternatives in a truly participatory manner and pays genuine attention to the needs of other sectors, the risk of having institutions unwilling to assimilate lessons from the project is considered low.

2.c.2. Sustainability

Project activities have been designed to ensure sustainability after project termination date. For each project site, the strategy to ensure sustainability is the following:

Cepkeliai. The alternative system of permits is expected to bring benefits to the local population around the reserve, either in terms of rights to harvest or by selling the permits to non-locals. A greater level of benefits from the reserve and targeted public information campaigns are expected to increase support and participation by local stakeholders in activities aimed at protecting the reserve

(e.g. monitoring). The project will combine this alternative system of permits with better enforcement of the reserve boundaries and regulations, particularly during cranberry season.

The system of permits, once established by the project, is self-sustaining in the sense that it does not require external inputs to function save those needed for better enforcement of reserve boundaries and regulations. These costs will be covered by the Government of Lithuania, which has committed itself to maintain these increased levels of enforcement after project termination. Finally, follow up to restoration activities will be the responsibility of the Administration of Cepkeliai Reserve. All things considered, the sustainability prospects of project outputs in Cepkeliai are considered to be very good.

Kamanos. The project expects to generate a rich body of lessons and experiences from a process of negotiation with farmers on alternatives that ensure conservation of biodiversity. As a result of the project site strategy, the activities in Kamanos are considered to be self-sustainable after project termination. With GEF financial and technical support, the Ministry of Environment, in collaboration with the Frankfurt Zoological Society, will explore and negotiate solutions to the ongoing drainage of the bog with relevant farmers. As part of this negotiation, it is expected that the project will either purchase some tracts of land or compensate farmers for taking them out of production. The project counts with the required co-financing to do so.

The project will undertake some specific habitat restoration activities, for example, clearing vegetation in bog areas. These habitat restoration activities are one-off actions that will not have to be repeated. The overgrowth of bogs by vegetation is a result of changes to the hydraulic system (drier conditions) that favor colonization of bogs by trees. Thus, successful negotiations with farmers, resulting in the restoration of the original hydraulic regime, will cause wetter conditions, which will limit the growth of woody vegetation - a self sustaining output of the activity.

Finally, the project will undertake public awareness activities for the local population, responsible for disturbance within the reserve. Increased levels of enforcement of reserve boundaries and regulations will complement public awareness activities. The Ministry of Environment has committed to maintain these increased levels of enforcement after project termination. All factors considered, the sustainability prospects of project outputs in Kamanos are considered to be very good.

Viesvile. Project activities in Viesvile include negotiation with the State Forestry Company regarding a forest development scheme to achieve both production needs and conservation of biodiversity. In general, the work in Viesvile can be seen as part of a confidence building process between the staff in the State Service of Protected Areas and staff involved in forestry activities. Consultations with the staff at the MoE and at the State Forest Enterprises indicate that a solution agreeable to all parties is feasible for Viesvile. If so, the sustainability of the output would be ensured through a forest management plan approved by the MoE, which favors biodiversity conservation and sustainable production.

The second innovative element in Viesvile is the establishment of a cranberry farm. The objective is to test whether alternative employment at an off-site cranberry farm, combined with increased public awareness and better enforcement of reserve regulations, can reduce pressure from disturbance. The sustainability of this output depends primarily on the success of the farm and to a lesser extent on keeping increased levels of enforcement and information campaigns ongoing after project termination date. At present, no reason why the farm should not perform as expected has been identified. In turn, the Ministry of Environment has committed itself to maintain public information activities and increased enforcement levels after the end of the project. All factors considered, the sustainability prospects of project outputs in Viesvile is considered to be very good.

Zuvintas. Project activities in Zuvintas include the transformation of Zuvintas into a Biosphere Reserve and the subsequent multisectoral landscape planning/integrated ecosystem management approach to development in its buffer zone and boundaries. The project has selected Zuvintas not solely because of its high biodiversity value but also because of the presence of a solid co-financing

framework that ensures the success of GEF incremental funding. Landscape planning activities at this site include investments in water pollution control and solid waste management, the introduction of environmentally friendly agricultural practices overall and in specific strategically important areas, the development of a water management plan at the basin level, the restoration of the original water circulation pattern inside the biosphere reserve, changes in forest practices, selected habitat restoration actions and public awareness activities.

Some of these actions have significant up-front expenses, for example investments in water treatment infrastructure, financing of the transition to environmentally friendly agricultural practices and to a lesser extent habitat restoration. After the initial period, financial sustainability depends on obtaining annual allocations that are sufficient to support maintenance of water pollution and solid waste management infrastructure, basic functioning of the reserve and the continuation of public information activities. These allocations to Zuvintas are certain to continue after project termination date. First, the maintenance of the water treatment infrastructure is necessary to meet EU guidelines and standards. Second, the Ministry of Environment has committed the necessary allocations to ensure financing of the reserve after project termination.

Once secured the necessary co-financing for project activities, sustainability of the project's objectives in the medium and long run is dependent on how successful the project is in introducing concepts of integrated management and landscape planning into the management of the biosphere reserve. The process of consultations carried out during PDF-B stage indicates that these concepts are accepted and supported by local stakeholders and reserve staff. All factors considered, the sustainability prospects of project outputs in Zuvintas are considered to be very good.

Girutiskis. The strategy of the project to control disturbance from tourism is to introduce a system of users fees combined with increased enforcement of reserve boundaries and regulations, and public information campaigns for tourists and local stakeholders alike. The system of users fees will remain in place after project termination and will contribute to cover the costs of increased enforcement and regular public awareness campaigns. Although revenues can vary from expected levels, the system of users fees, once established, is self-sustaining, as it does not require external financial inputs to keep it running. As is the case for the other sites, the Ministry of Environment has committed to cover the financial gap, if any, between additional income from users fees and increased operational costs due to better enforcement and public awareness activities. Finally, habitat restoration activities in Girutiskis are self-sustained outputs once the restoration of the original hydraulic regime in Girutiskis has been accomplished. The latter simply involves permanently closing two drainage canals. All factors considered, the sustainability prospects of project outputs in Girutiskis are considered to be very good.

Summary conclusion. From an early phase, the project's activities were designed taking into full consideration their prospects for sustainability. First, for those outputs that need a high level of up-front investment, as in Zuvintas and Kamanos, the project has secured sufficient co-financing. These outputs are characterized by relatively low financial needs after project termination. Second, the sustainability of outputs such as the establishment of a system of users fees in Girutiskis or a system of permits in Cepkeliai is not dependent on a continuous stream of financial inputs but rather on whether these alternatives are successful in reducing disturbance in the reserves. The work performed during the PDF-B stage indicates that there are no reasons why these outputs should not perform as expected. Third, outputs whose sustainability depends on the success of collaborative efforts with other government agencies, such as the introduction of alternative forestry practices in Viesvile, do not depend on financial inputs after project termination date but rather on the institutionalization of lessons learned and the continuation of such collaboration at other sites. The second objective regarding institutionalization (Logical Framework Matrix) is specifically designed to ensure just that. Finally, the Ministry of Environment has committed itself to maintain increased levels of enforcement at the target sites, to continue the operations of the Multisectoral Wetlands Working Group as deemed appropriate as well as continuity of public awareness and information campaigns after project termination date. All factors considered, the sustainability of the project is considered as very good.

2.D. Replicability

The main objective of the project is to develop and implement an integrated, long-term approach to the protection of inland wetlands biodiversity of Lithuania. The first step in this long-term process is to test several approaches to conservation of inland wetlands in a reduced number of Strict Nature Reserves: Cepkeliai, Kamanos, Viesvile, Zuvintas, and Girutiskis. Taking into consideration the abundance of the mires (bogs, transition mires and fens) in Lithuania and especially in protected areas (the State Register of Peatlands contains data on 5,735 mires that are larger than 3 ha) the replication potential of lessons learned during this project is high.

The five sites selected in this project encompass the main threats to inland wetlands in Lithuania while simultaneously providing solid grounds for exploring the efficacy of different threat removal actions. Replicability has been explicitly incorporated into project design through Immediate Objective #2 and its outputs. The project includes specific outputs and activities to ensure that a formal multisectoral mechanism, and enough financial and technical resources for replication of lessons, will exist after project termination. The inclusion of the second objective in the project thus represents a formal agreement with the Government of Lithuania to replicate lessons learned to other wetlands facing similar conditions and threats. Indeed, the replication of lessons is at the core of the project strategy, which is to make this GEF intervention the first stage of a longer-term effort to protect inland wetlands in Lithuania.

Finally, and as part of its regular activities for each site, the project will organize technical workshops with experts and authorities to exchange information and results as the project advances. The project also plans to make full use of the UNDP Sub-regional Resource Facility –and the Environment Network of UNDP to exchange information with other projects, experts and institutions.

2.E. Stakeholder Involvement

The PDF-B that led to the preparation of this project document was designed to ensure the full participation of all relevant stakeholders. At the government level, the work undertaken during the PDF-B involved representatives from the Forestry Department, Joint Research Center, Department of Water Resources and State Service of Protected Areas (representatives from the central structure as well as the local staff in the selected Strict Nature Reserves) under the Ministry of Environment and representatives from the Ministry of Agriculture. At the academic and research level, the Institute of Botany, the Institute of Ecology, the Institute of Geology and Geography, Geological Survey of Lithuania and the Institute of Forest Management collaborated closely in the development of this project.

At the local and regional level, the process of project design received advice and inputs from communities around the reserves. Depending on the threats encountered at each site, specific inputs by particular groups were actively sought. The inputs of those groups involved in cranberry picking were of great importance in Cepkeliai and Viesvile where the project plans to introduce tradable permits and a cranberry farm respectively. The inputs of foresters were crucial in Viesvile, where the project will finance the beginning of a long-term collaborative effort with the State Forestry Company. The project involved the farming communities in the design of activities in Kamanos and Zuvintas, where the project plans to introduce land purchase, compensation and environmentally friendly land management practices. The definition of project activities aimed at improving enforcement of reserve regulations counted with the active collaboration of reserve staff. The selection of priority areas for restoration was a result of targeted research by the Institute of Botany and the Institute of Ecology and consultations with reserve staff at each site.

The project involved other international agencies and donors operating in Lithuania. It established close collaboration with the offices of the SAPARD and ISPA programs, which are directing their resources to sites selected by this project[15]. Representatives from the Ministries of Environment of

[15] The SAPARD program chose Zuvintas as one of its three pilot sites for agro-environmental measures because of the clear synergies between its objectives and the GEF objectives. The ISPA program also directed

Finland, Denmark, Sweden and the Dutch Ministry of Agriculture, Nature Management and Fisheries were consulted periodically during project preparation process. Local and international NGOs participated in regular discussions about project objectives and alternatives for achieving these objectives. One of the outputs of these consultations was the close collaboration established with the Frankfurt Zoological Society, which is financing land purchase in Kamanos strict nature reserve, and with OMPO (Migratory Birds of the Western Palearctic), which will assist in biodiversity conservation activities in Cepkeliai strict reserve.

In summary, the process of project development took the form of successive iterations with all relevant stakeholders placing emphasis on particular groups at each project site according to identified threats. Consultations were regularly conducted throughout the PDF-B and included workshops, interviews and open forums with a varied cross section of local and international stakeholders.

The project includes several mechanisms to ensure stakeholder participation in project activities. At the national level, the project cross-sectoral steering committee that guided project preparation will continue into project implementation though additional actors would be involved to reach a wider representation of organizations. At the project sites, specific groups will actively participate in further definition of project activities as well as in their implementation. Depending on the project site, different stakeholder groups will take the lead in further defining and implementing project activities. The project implementation unit and its associated experts will have the role of facilitating this process of participation and therefore contributing to increase local ownership of project goals. For a full description of implementation arrangement at each site, see Annex 2G.

2.F. Monitoring & Evaluation

2.f.1. Indicate how the project design has incorporated lessons from similar projects in the past

Numerous biodiversity conservation-related projects have been implemented in Lithuania during recent years. They have generated fresh ideas and solutions that have greatly contributed to the development of the national biodiversity conservation and sustainable development strategy. Several lessons have been taken into account in the preparation of this project. The most influential projects and lessons learned are listed below according to the project's focus.

Institutional strengthening and policy development

- "Harmonization of Lithuanian capacity, policies and procedures on nature protection with EU requirements, with particular focus on implementation of the EEC Habitats Directive (92/43) and the EEC Birds Directive (79/409)" (1999 – 2003). Its goal is to help the Lithuanian Ministry of Environment to fulfil EU nature conservation requirements, which encompass the EEC Habitats Directive (92/43) and EEC Birds Directive (79/409). Project activities focus on the selection and legal designation of areas to be included in the European network of conservation areas of special importance for Europe's biodiversity (the Natura 2000 network). Project supporters are the Lithuanian MoE and DANCEE (Danish Co-operation for the Environment of Eastern Europe). The project defined the legal context for development of the state Strict Nature Reserves as Natura 2000 territories and determined legal gaps. The elimination of some of these gaps to fulfil EU requirements is part of this GEF project. The project also greatly contributed to the development of preliminary management plans and monitoring programs for the 5 target sites.
- *State Park Institutional Development Project* (1998 – 2001). Its goal is to evaluate and strengthen policies, methodologies and institutions involved in state park planning. The project supporter is the Danish EPA. The GEF project studied the lessons learned in the field of institutional capacity and incorporated lessons into its capacity building activities.

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resources to Zuvintas and Viesvile in view of the clear synergies among GEF, SAPARD and ISPA activities. The PDF-B project team was responsible for securing this collaboration among agencies.

- *Local Agenda 21 for Small and Medium Sized Lithuanian Municipalities* (1999–2001). Its goal is to support Lithuanian municipalities in developing a Local Agenda 21 process and creating local action plans for sustainable development. Project supporters are the Finnish Ministry of Environment, ECAT-Lithuania, UNDP and Finnish municipalities. The project served as an example of the incorporation of nature conservation measures into the developmental plans of municipalities. It facilitated the overall coordination of activities foreseen in the GEF project sites.

Nature Management

- *Conservation and Management of Lithuanian Wetlands* (1995–1997). Its goal is to evaluate raised bogs damaged by peat production, natural raised bogs, fens and swamp forests; to prepare ecological evaluation criteria for wetlands and a protection strategy for wetlands. The project supporter is WWF-Sweden. The peat-land conservation strategy, which was drawn up by the project served as guidance during development of the GEF project document. Threat analysis and identification of solutions were also greatly facilitated.
- *Inventory of Lithuanian Wetlands* (1996 – 1999). Its goal is the inventory of the most valuable wetlands of Lithuania. The project supporter is OMPO. The project gave a baseline for situation analysis of the sites and facilitated identification of the main tendencies in changes to biodiversity.
- *Peatland Conservation in Central and East Europe (*2000). The project drew up conservation proposals for Central and East Europe peatlands, reviewed national and regional policies, existing threats and impediments to implement protection measures. The project supporter is Wetlands International. The project mainly contributed with provision of analysis of national and regional policies and main impediments to implement peat-land protection measures. These impediments are in-line with those determined through the GEF project preparation phase and are to be solved during project implementation phase.
- *Transfer of European Knowledge from the Area of Nature Management to Lithuanian Nature Protection Institutions and Environmental Non-governmental Organisations* (2000–2001). Its goal is to emphasize the importance of nature management in biodiversity conservation, to transfer knowledge and experience of EU countries in preparation of management plans and managing habitats to nature protection institutions and non-governmental organisations. The project provided a methodological background for nature management and preparation of management plans for protected areas. The GEF project has incorporated lessons learned from this project for the development of draft management plans and other planning activities for GEF project implementation.
- *Restoration of the Puscia Bog* (2000 – 2003). Its goal is to restore the Puscia raised bog (East Lithuania) damaged by peat excavation. The work includes restoration of the water level and monitoring of the outcome. The project supporter is WWF-Sweden. The project mainly contributed to the overall estimation of peat-land restoration works needed to be executed in the GEF project sites, as well as facilitated cost and time estimations.
- *Protection of Rusne Island* (started in 1994 and still in progress). It includes several individual short-term projects of 1-2 years. The overall goal is to manage abandoned grasslands on Rusne island in order to make them more suitable for breeding and migratory birds; to manage breeding habitats of the Aquatic Warbler on Rusne island and neighbouring areas; to encourage environmentally sound and sustainable agriculture; to promote ecological education among local people; to develop ecological tourism. The project supporters are the Coastal Union, EECONET Action Fund and the Rusne's Fund for Nature. This project, apart from the provision of a good methodological background for planning meadow and fen restoration works, served as an example for drafting programs dealing with involvement of local communities in nature restoration and conservation activities.

Sustainable Forest Use

- *Inventory of Forest Key-habitats in Lithuania* (2001–2003). Its goal is to develop a methodology and to execute an inventory of forest key-habitats. The project supporters are the Lithuanian MoE and Swedish EPA. The GEF project benefited from the analysis of current forestry management policy made by the project "*Inventory of Forest Key-habitats in Lithuania.*" It has

incorporated project experience in introducing more biodiversity-friendly forest management in planned GEF project activities.

- *Protection of Nests of Birds of Prey and Valuable Forest Habitats* (2001–2002). Its goal is to enforce logging regulations, to prohibit clear cutting at a certain distance around nesting sites of birds of prey, to inventory nests of birds of prey in selected forests and wetland complexes; to transfer the data gathered to those responsible for biodiversity protection, forest districts and forest enterprises; to start regular monitoring of birds of prey in the inventoried areas. The project supporters are the Whitley Awards Foundation and the Rufford's Small Grant Facility. The project provided an analysis of forest logging procedure and information for improving forestry methods compatible with biodiversity conservation. The GEF project has taken these lessons into account in the definition of activities in the forests surrounding the targeted protected areas.
- *Evaluation of the Forest Sector in Lithuania* (1999). Its goal is to identify weak and strong points of national forest policy and forest management. The project supporter is WWF-International. The GEF project mainly benefited from the analysis of forest policy. This information generated new ideas in the planning of GEF project activities for the elimination of the weaknesses identified in Kamanos, Viesvile and Zuvintas.
- *Afforestation of Abandoned Agricultural Land Based on Sustainable Planning and Environmentally Sound Forest Management* (1999–2001). Its goal is to develop proper land use planning procedures, to define criteria and methods for afforestation, to promote decentralisation of land use planning and mapping at the county and regional levels, to raise awareness of landowners and technical staff and to establish demonstration forest areas on selected sites in Lazdijai and Utena regions. The Danish Ministry of Environment and Energy supported the project. The project provided the basis and methodological background for planning and implementation of afforestation measures, which are being incorporated into the GEF project activities to reduce forest fragmentation in the areas containing highly valuable nature sites.

Agriculture and Rural Development

- *Preparation of the Agro-environmental Program for Lithuania* (1997–2000). Its goal is to prepare an environmentally sound agriculture program and a pilot scheme to be implemented according to the national SAPARD program. The project supporters are the Avalon Fund, Veen Ecology, Europe Environmental Policy Institute and the Ministry of Agriculture, Nature Management and Fisheries of the Netherlands. The planned GEF project activities related to agro-environmental issues are mainly based on the outputs of this project. The SAPARD programme agro-environmental measure was also prepared in accordance to the results of the project.
- *Sustainable Farming in Lithuania* (1998–1999). Its goal is to prepare the review of the Lithuanian agricultural sector and to provide recommendations regarding the development of sustainable farming in Lithuania. Project support comes from the Coalition Clean Baltic. The preliminary introduction to the proposals developed by the project allowed to include some initial activities (mainly awareness campaigns) focused on development of sustainable farming into the GEF project's work-plan. Benefits will be greater during the GEF project implementation phase, when the proposals of the project "*Sustainable Farming in Lithuania"* will be shared among the relevant stakeholders.

Environmental Education and Awareness

- *Nature Watch* (1995-ongoing). Its goal is to promote awareness on nature protection among schoolchildren through nature observation, workshops, and camps as well as by increasing the environmental skills of teachers. The project supporter is WWF-Sweden. The project has provided much information and lessons for the planning of environmental awareness campaigns at schools.
- *School Agenda 21* (2001–ongoing). Its goal is to raise awareness among students on sustainable development issues and Agenda 21, to develop an environmental action programme for schools, to foster democracy and promote citizen action, to establish partnerships with local NGOs, media, municipalities, industry, etc and to improve the local environment. The project supporter is UNDP. The GEF project actually directly adapted proposals prepared by this project into the plans as both projects complement each other well.

2.f.2. Describe approach for project M&E system

This project has a comprehensive M&E program included in its overall design, as described below. Project progress will be monitored using annual reviews and implementation milestones. Monitoring will be *ongoing*, involving data collection and assessment of the project's field implementation and will involve key project staff meeting periodically to review operations and field implementation and assess whether new priorities require a shift in the project's implementation.

The Project Steering Committee will meet twice a year to assess the project's progress against planned outputs, to give strategic directions to the implementation of the project and to ensure the necessary inter-agency coordination. Implementing agency staff, the National Project Director and UNDP, will undertake regular field visits to the five sites. Quarterly Progress Reports reflecting all aspects of project implementation will be prepared by the Project Manager (PM), submitted to the Project Steering Committee and UNDP for review and recommendations and shared with GEF. Financial reports will be prepared on a quarterly basis and submitted for clearance to UNDP and the Project Steering Committee.

Annual Project Reports (APR) together with Project Implementation reports (PIR) will be prepared by the PM, discussed and approved by TPR meetings and submitted to the Steering Committee as well as UNDP through the implementing agency. UNDP will submit APR/PIR reports and TPR minutes to GEF. The APRs/PIRs (prepared in harmonized UNDP/GEF format) shall assess the performance of the project and the status of achievement of project outputs and their contribution to the relevant UNDP Strategic Results Framework Outcomes.

The project shall be subject to independent external evaluations (Mid-term and Final Evaluations) according to UNDP/GEF rules.

The project will be subject to annual external audit to be conducted by a government authority or an independent auditor engaged by UNDP in consultation with the Executing Agency.

The project presents indicators for immediate objectives and project outputs, which are described and discussed in the following section. The list of indicators for immediate objectives and outputs can be found in the project's log frame in Annex 2A.

The project presents indicators for immediate objectives and project outputs, which are described and discussed in this section. The list of indicators for immediate objectives and outputs can be found in the project's log frame in Annex 2A.

Indicators of project outputs
The project will evaluate success in delivering outputs by tracking indicators grouped in the following categories:

1. Implementation of alternative approaches to conservation in pilot sites;
2. Habitat restoration activities;
3. Restoration of hydraulic regimes;
4. Changes in awareness and support of target groups for each site;
5. Effect of project activities on enforcement of reserve regulations;
6. Establishment/upgrade of pollution reduction infrastructure;
7. Institutionalization of lessons learned.

1. Indicators to measure implementation of alternative approaches to conservation in pilot sites.
This group comprises indicators to track the implementation of new approaches to inland wetland conservation at each site. In Cepkeliai, the indicator is: a system of tradable permits approved and in

operation by the 4th year of the project. The degree of adherence to the workplan constitutes the intermediate indicator. That is, significant deviations from the workplan would provide the project with an early warning. The annual tripartite project reviews will assess whether deviations from the workplan are considered as "significant"[16].

In Kamanos, the indicator constitutes the reconversion by the 3rd year of between 300 and 800 hectares of agricultural/forest land whereas the term "reconversion" includes land purchasing for the purposes of taking it out of production, or changes in its use through, for example, the application of incentive/compensatory mechanisms. The use of this indicator carries some implicit assumptions. Since the objective of the project is to reconvert those farming hectares whose impact on the reserve is the greatest, it follows that not all hectares will be of the same conservation value. It is not possible at this time, however, to specify which hectares should be targeted in order to declare the reconversion a "success". Specification will form part of the activities envisaged for the full project implementation. Because of this limitation, the assumption in the use of this indicator is that the project will correctly choose the hectares to reconvert, which is why the indicator measures only the number of hectares. The degree of adherence to the workplan constitutes the intermediate indicator.

In Viesvile, where the GEF project will facilitate a joint collaborative effort between the State Service of Protected Areas and the State Forestry Company, the indicator is: the elaboration by the 4th year of a program for forestry development around the reserve. Because it is not possible to specify at this time the characteristics of a program that meets output needs as well as biodiversity conservation, the success indicator is simply the existence of a forest management plan that incorporates biodiversity concerns and wins the approval of the MoE and the State Forestry Company. The assumption inherent to the use of this indicator is that the forest management plan will have met the concerns of both parties (Viesvile Reserve and the State Forestry Company) and if so, it will have achieved the objectives of the project (compatibility of forest practices with biodiversity conservation). Therefore, the indicator does not assess the "quality" of the document but only the existence of it. The degree of adherence to the workplan constitutes the intermediate indicator.

A second indicator in Viesvile is the existence by the 3rd year of a cranberry farm, which by the 4th year should be in production. The farm, in combination with increased enforcement and increased public awareness, constitutes a yet untested strategy to diminish disturbance pressure on the reserve. The indicator is not intended to measure success in diminishing disturbance. This will be assessed by a different set of indicators described later in this section.

In Zuvintas, one of the success indicators is the designation of the site as a biosphere reserve by the 1st year. The establishment of a biosphere reserve will provide an appropriate framework for introducing concepts of integrated management and landscape planning.

Finally, in Girutiskis, the indicator is: the existence of a system of user and entrance fees that is operational by the 3rd year of the project. The system of users fees in combination with increased public awareness and increased enforcement of reserve regulations is expected to diminish disturbance in the reserve. Note, however, that the indicator is not intended to measure success in diminishing disturbance. This will be assessed by a different set of indicators described later in this section.

2. Indicators to measure success in habitat restoration activities

These indicators measure success in terms of adherence to the specifications of the workplan. For example, indicators of habitat restoration for Viesvile include the cutting of shrubs and mowing of seven hectares of already identified meadows and fens, and the building of fish ladders on two specific small dams. Clearly, these are indirect indicators of success in habitat restoration activities if and when the objective is to regain these habitats for species of global significance. The assumption inherent to the use of these indicators is that the habitat restoration activities specified in the

[16] This also holds for other indicators unless stated otherwise.

workplan, which have been developed by local and international experts, are sufficient to ensure restoration of habitats.

The application of direct indicators, like the rate of utilization of these habitats by targeted species, would be a natural complement to indirect indicators. The difficulty, however, is that a longer period for data collection than the one allowed in this project might be needed. Because of that, the management plans of the five reserves targeted in this project will include the monitoring of restored habitats in terms of their utilization by species of global and national significance. This monitoring will start during the project lifetime and continue after project termination as part of the regular activities of the reserves. Even though by the end of the project there will not be direct conclusive evidence of success due to habitat restoration activities, the data will be available for evaluations conducted after project termination.

3. Indicators to measure restoration of hydraulic regimes.
Because the root causes of disturbed hydraulic regimes in Kamanos and Girutiskis are known and relatively simple to tackle, the project applies indicators that only measure removal of root causes. In both sites, addressing the root cause of disturbed hydraulic regimes requires eliminating specific drainage channels that have already been identified as part of PDF-B fieldwork. Since these are both *necessary and sufficient* actions for restoring the hydraulic regime, their execution as specified in the workplan will be taken as indicators of success.

In the case of Zuvintas, the restoration of a hydraulic regime compatible with wetland conservation requires working in the wider Dovine River Basin. The project will support the elaboration of a water management plan and the implementation of its first priority measures. Those priority measures have been already identified during PDF-B work and comprise three activities crucial to the restoration of the hydraulic regime in Zuvintas. These are the modification of water regulatory structures around Zuvintas Lake by year 4th, the renaturalization of Amalvas wetland by year 4th, and the removal of sediments from Spernia rivulet by the 3rd year. Success in restoring the hydraulic regime will be measured by the formal approval of the water management plan for the Dovine River at the end of the 2nd year of the project and by the implementation of the three priority measures as described.

Project indicators for the restoration of hydraulic regimes (Zuvintas, Kamanos and Girutiskis) are of an indirect nature. A direct indicator would be changes in the water balance of the reserves. However, a longer time frame for data collection than the one in this project would be needed to indicate definite changes in the water balances of the project sites. Therefore, the management plans of Kamanos, Girutiskis and Zuvintas will include monitoring of the hydraulic regime. This monitoring will begin during the project lifetime and continue after project termination as part of the regular activities of the reserves. The data will be available for evaluations conducted after project termination.

4. Indicators for changes in awareness of target groups.
All project sites include activities aimed at increasing awareness and support of particular groups. The project will evaluate the effectiveness of these actions by measuring changes in perception/awareness/support of target groups. In Cepkeliai, the objective is to increase awareness about the benefits of the alternative system of permits and therefore public support for it. In Kamanos, the objective is to increase support for the reconversion of farms located around the reserve boundaries. In Viesvile, public awareness and information campaigns concentrate on the benefits of cranberry farming both as an alternative income source and as a way of reducing damage to the reserve. In Zuvintas public awareness and information campaigns are directed to tourists and local communities on aspects related to the biodiversity value of Zuvintas and support for changes in development activities within the buffer zone of the reserve. In Girutiskis, public awareness campaigns also target tourists but the emphasis is on ensuring acceptance of the user and entrance fee system. For all sites, public awareness also includes the regular dissemination of information on project activities, status and level of accomplishments as well as support to educational campaigns in local schools. While the former will comprise activities carried out during the project lifetime,

support to educational programs on wetland values and conservation will continue after project termination.

Success in these public awareness actions will be measured by successive surveys and opinion polls in each target site. There will be a first survey in year 1 that will determine the status of the baseline situation. A second survey will be undertaken by year 3, with a final one at the end of project activities previous to the project's final evaluation. As demonstrated in the log frame, indicators will take the form of statistically significant changes over the baseline. A more exact quantitative definition of the indicator will be done in year 1, at the time the public awareness campaigns are defined in detail.

5. Indicators for measuring the effect of project activities on enforcement of reserve regulations.
The project includes activities aimed at increasing enforcement of reserve regulations in all five sites. Success on these actions will be measured by decreased rates of Trespassing and infringement of reserve regulations. The project will quantify the baseline situation in year 1 based on existing records in each reserve and complement this data with field surveys. The project will assess changes in the rate of Trespassing of reserve's boundaries and infringement of regulations in year 3 and 5. As it shows in the log frame, indicators take the general form of a given percentage decrease over the baseline. A more exact quantitative definition of the indicator for each site will be done in year 1, at the time the baseline has been quantitatively defined.

6. Indicators for measuring success in pollution reduction.
The project will apply direct and indirect indicators of success. Indirect indicators will track the establishment of pollution reduction infrastructure in Viesvile and Zuvintas as specified in the project's workplan. In Viesvile, direct indicators will be the concentration of pollutants in water bodies and solid waste loads. For Zuvintas, direct indicators will be changes in the concentration of pollutants in the Dovine River and Zuvintas Lake. As demonstrated in the log frame, direct indicators will take the general form of a given percentage decrease in pollution loads (over the baseline) by the 4th year of the project. A more exact quantitative definition of the indicator for each site will be done in the 1st year, at the time the baseline has been quantitatively defined. For both sites, an indirect indicator will be adherence to the schedule of investment in pollution reduction infrastructure, as specified in the workplan.

7. Indicators for measuring institutionalization of lessons learned.
At the level of output, the indicator are (i) the existence by the 4th year of a multisectoral working group with a mandate to codify lessons learned and replicate these lessons to other wetlands in Lithuania, and (ii) the approval of the replication plan by the institutions participating in the multisectoral working group.

Indicators for project's immediate objectives
The evaluation of success in terms of the project's immediate objectives will be done in the last year of the project prior to its final evaluation. The method chosen for Immediate Objective 1 (ensuring inland wetland conservation in each site) is an evaluation of threat reduction by an independent expert(s). Inputs to this evaluation will comprise an assessment of overall project performance measured in terms of its output indicators and adherence to workplan. The precise TORs of the evaluation exercise will be discussed and agreed by the Steering Committee at the beginning of the last year of the project. The evaluation will take place at least 6 months prior to the project termination date. The PDF-B team has chosen an evaluation of threat reduction by an independent expert(s) as the method for measuring success in biodiversity conservation because the timeframe of the project does not allow for the application of direct indicators.

In terms of institutionalization of lessons learned, which is Immediate Objective 2, the indicators are a) the identification of at least 5 additional sites for replication and adaptation of lessons learned and an agreed schedule for implementation of those lessons/practices; b) a SAPARD horizontal fund for wetlands management in agricultural areas has been secured; c) the State Forestry Company and private forestry companies have assessed options for certification and at least three pilot schemes for certifying forests near wetlands is underway; d) models for land purchase or decommissioning are

being replicated in Lithuania; and e) tourism action plans and user fees are being developed in at least three other wetland protected areas in Lithuania.

Success for these indicators are dependent on success in delivering Output 6 ("Formal intersectoral mechanism for replication of best lessons learned in conservation of inland wetland biodiversity established and operational"), for which an indicator has already been presented in the section immediately above.

2.f.3. Outline organizational arrangement for implementing M&E

Organizational arrangements for indicators of project outputs

- Implementation of alternative approaches to conservation in pilot sites. The project implementation unit will be in charge of data collection, analysis and reporting. Sources of data will be field trips.
- Results from habitat restoration activities. The project implementation unit will be responsible for data collection and reporting for indirect indicators. Data collection for direct indicators and analysis will be the responsibility of the reserves. Sources of data will be field trips.
- Restoration of hydraulic regimes. The project implementation unit will be responsible for data collection and reporting for indirect indicators. Data collection for direct indicators and analysis will be the responsibility of the reserves. Sources of data will be field trips for indirect indicators and readings of the network of water monitoring stations in the reserves for direct ones.
- Changes in awareness of target groups for each site. A local company with a proven track record will be contracted to assist the project in the definition of survey instruments and data analysis. The data collection and/or data analysis can be a responsibility of the company or be subcontracted to a different group of local experts. As mentioned in the section above, this will be defined in the 1st year of the project. Sources of data will be the survey instruments.
- Effect of project activities on enforcement of reserve regulations. Data collection will be the responsibility of the reserves, which will receive technical assistance if deemed necessary. Reporting will be the responsibility of the project implementation unit. Sources of data will be field trips and each reserve's records.
- Establishment/upgrade of pollution reduction infrastructure. The project implementation unit will be responsible for data collection and reporting for indirect indicators. Sources of data will be field trips. Data collection for direct indicators and analysis will be the responsibility of the reserves. Data for direct indicators will come from a network of measurement stations.
- Institutionalization of lessons learned. The project implementation unit will be responsible for data collection, analysis and reporting. Sources of data will be Steering Committee Meetings, interviews with representatives of other stakeholder groups/agencies, minutes of project meetings and other sources as appropriate.

Organizational arrangements for indicators of project immediate objectives

For immediate objective 1 (conservation of biodiversity in five pilot sites). The project implementation unit will be responsible for all organizational arrangements necessary for the contracting of an independent expert(s) for evaluations of threat reduction. The project implementation unit, with the assistance from UNDP/GEF, will present the Steering Committee with draft TORs for the assignment and a shortlist of candidates. The Steering Committee will approve the TORs and select the candidate(s).

For immediate objective 2 (institutionalization of lessons learned). The project implementation unit will be responsible for data collection, analysis and reporting. Sources of data will be the minutes of the multisectoral working group, Steering Committee, documents produced by the multisectoral working groups, plans agreed by the MoE and other relevant agencies, and other sources as appropriate.

3. FINANCING

Total project costs: US$ 13,865,400

Of which

PDF B contribution US$ 180,000
GEF contribution: US$ 3,261,000
Others: US$ 10,424,400

Contributions by co-financiers

Source	Amount
MoE	2,239,400
Land cadaster	28,600
Public Agency Soil Remediation Technologies	270,000
Phare	108,000
Municipalities	829,400
ECAT	15,600
Eco-clubs	10,300
OMPO	19,700
State Road Fund	199,700
Biota (NGO), private	137,100
Dzukija National Park	46,700
SAPARD, municipality	815,000
State Forestry Enterprise	85,000
State Fishery Centre	62,900
Private individual (JSC Labanoro turas, JSC Alga in Zuvintas)	382,400
Atgaja (NGO)	10,400
Frankfurt Zoological Society/EU funds	450,000
State Forest Fund	121,400
Wild Nature Support Fund	5,700
Key Habitat Project	5,700
ISPA	4,443,300
Lithuanian Cranberry Growers Association with Canadian partners	12,000
EPA - Monitoring	31,100
MATRA project	95,000
Total	**10,424,400**

For detailed explanation of co-financing, description of its type and purpose see Annex 2H.

Project budget

Sbln	Description	Implementing		Total	2003	2004	2005	2006	2007	2008
010	PERSONNEL									
011	International Consultants									
011.01	Experts for technical support	LITHUANIA	Net Amount	183,000	9,000	36,600	36,600	36,600	36,600	27,600
			Total	183,000	9,000	36,600	36,600	36,600	36,600	27,600
011.99	Line Total	----------	Net Amount	183,000	9,000	36,600	36,600	36,600	36,600	27,600
			Total	183,000	9,000	36,600	36,600	36,600	36,600	27,600
013	Administrative Support									
013.01	Administrative assistant 2	LITHUANIA	Net Amount	163,000	13,600	32,600	32,600	32,600	32,600	19,000
			Total	163,000	13,600	32,600	32,600	32,600	32,600	19,000
013.99	Line Total	----------	Net Amount	163,000	13,600	32,600	32,600	32,600	32,600	19,000
			Total	163,000	13,600	32,600	32,600	32,600	32,600	19,000
015	Monitoring and Evaluation									
015.01	Monitoring of project results	LITHUANIA	Net Amount	25,701		8,567		8,567	8,567	
			Total	25,701		8,567		8,567	8,567	

015.02	Expert official travel	LITHUANIA	Net Amount	24,700	2,500	4,940	4,940	4,940	4,940	2,440
			Total	24,700	2,500	4,940	4,940	4,940	4,940	2,440
015.99	Line Total	----------	Net Amount	50,401	2,500	13,507	4,940	13,507	13,507	2,440
			Total	50,401	2,500	13,507	4,940	13,507	13,507	2,440
016	Mission Costs									
016.01	Mission costs	LITHUANIA	Net Amount	112,000	9,300	22,400	22,400	22,400	22,400	13,100
			Total	112,000	9,300	22,400	22,400	22,400	22,400	13,100
016.99	Line Total	----------	Net Amount	112,000	9,300	22,400	22,400	22,400	22,400	13,100
			Total	112,000	9,300	22,400	22,400	22,400	22,400	13,100
017	National Consultants									
017.01	National project manager	LITHUANIA	Net Amount	131,000	10,900	26,200	26,200	26,200	26,200	15,300
			Total	131,000	10,900	26,200	26,200	26,200	26,200	15,300
017.02	National experts	LITHUANIA	Net Amount	25,000		5,000	5,000	5,000	5,000	5,000
			Total	25,000		5,000	5,000	5,000	5,000	5,000
017.99	Line Total	----------	Net Amount	156,000	10,900	31,200	31,200	31,200	31,200	20,300
			Total	156,000	10,900	31,200	31,200	31,200	31,200	20,300
019	PROJECT PERSONNEL TOTAL	----------	Net Amount	664,401	45,300	136,307	127,740	136,307	136,307	82,440
			Total	664,401	45,300	136,307	127,740	136,307	136,307	82,440
020	CONTRACTS									
021	Contract A									
021.01	Nature management activities	LITHUANIA	Net Amount	782,198	15,500	204,766	312,266	204,616	45,050	
			Total	782,198	15,500	204,766	312,266	204,616	45,050	
021.99	Line Total	----------	Net Amount	782,198	15,500	204,766	312,266	204,616	45,050	
			Total	782,198	15,500	204,766	312,266	204,616	45,050	
022	Contract B									
022.01	Public awareness and education	LITHUANIA	Net Amount	442,100	20,000	197,875	112,375	40,000	39,675	32,175
			Total	442,100	20,000	197,875	112,375	40,000	39,675	32,175
022.99	Line Total	----------	Net Amount	442,100	20,000	197,875	112,375	40,000	39,675	32,175
			Total	442,100	20,000	197,875	112,375	40,000	39,675	32,175
023	Contract C									
023.01	Economic incentive/barrier removal activities	LITHUANIA	Net Amount	212,501	10,000	62,642	64,442	45,025	30,392	
			Total	212,501	10,000	62,642	64,442	45,025	30,392	
023.99	Line Total	----------	Net Amount	212,501	10,000	62,642	64,442	45,025	30,392	
			Total	212,501	10,000	62,642	64,442	45,025	30,392	
024	Contract D									
024.01	Preparation of methodol. materials	LITHUANIA	Net Amount	161,400	10,000	80,700	70,700			
			Total	161,400	10,000	80,700	70,700			
024.99	Line Total	----------	Net Amount	161,400	10,000	80,700	70,700			
			Total	161,400	10,000	80,700	70,700			
029	SUBCONTRACTS TOTAL	----------	Net Amount	1,598,199	55,500	545,983	559,783	289,641	115,117	32,175
			Total	1,598,199	55,500	545,983	559,783	289,641	115,117	32,175
030	TRAINING									
032	Other Training									
032.01	Training seminars	LITHUANIA	Net Amount	191,900		81,700	44,150	43,450	7,000	15,600
			Total	191,900		81,700	44,150	43,450	7,000	15,600
032.02	Study tours	LITHUANIA	Net Amount	44,000	10,250	10,250	10,250	10,250	3,000	
			Total	44,000	10,250	10,250	10,250	10,250	3,000	
032.03	Local information campaigns	LITHUANIA	Net Amount	148,600	10,000	38,325	44,625	27,892	27,758	
			Total	148,600	10,000	38,325	44,625	27,892	27,758	
032.99	Line Total	----------	Net Amount	384,500	20,250	130,275	99,025	81,592	37,758	15,600
			Total	384,500	20,250	130,275	99,025	81,592	37,758	15,600
039	TRAINING TOTAL	----------	Net Amount	384,500	20,250	130,275	99,025	81,592	37,758	15,600
			Total	384,500	20,250	130,275	99,025	81,592	37,758	15,600
040	EQUIPMENT									

045	Equipment									
045.01	Monitoring	LITHUANIA	Net Amount	173,270		153,870	19,400			
			Total	173,270		153,870	19,400			
045.02	Nature management	LITHUANIA	Net Amount	365,830		264,200	101,630			
			Total	365,830		264,200	101,630			
045.03	Ecological education	LITHUANIA	Net Amount	9,000			9,000			
			Total	9,000			9,000			
045.04	Project management	LITHUANIA	Net Amount	15,000		15,000				
			Total	15,000		15,000				
045.99	Line Total	----------	Net Amount	563,100		433,070	130,030			
			Total	563,100		433,070	130,030			
049	EQUIPMENT TOTAL	----------	Net Amount	563,100		433,070	130,030			
			Total	563,100		433,070	130,030			
050	MISCELLANEOUS									
052	Reporting Costs									
052.01	Audit	LITHUANIA	Net Amount	35,000		7,000	7,000	7,000	7,000	7,000
			Total	35,000		7,000	7,000	7,000	7,000	7,000
052.99	Line Total	----------	Net Amount	35,000		7,000	7,000	7,000	7,000	7,000
			Total	35,000		7,000	7,000	7,000	7,000	7,000
053	Sundries									
053.01	Sundry costs	LITHUANIA	Net Amount	16,000	1,300	3,200	3,200	3,200	3,200	1,900
			Total	16,000	1,300	3,200	3,200	3,200	3,200	1,900
053.99	Line Total	----------	Net Amount	16,000	1,300	3,200	3,200	3,200	3,200	1,900
			Total	16,000	1,300	3,200	3,200	3,200	3,200	1,900
059	MISCELLANEOUS TOTAL	----------	Net Amount	50,800	1,300	3,200	18,200	3,200	23,000	1,900
			Total	50,800	1,300	3,200	18,200	3,200	23,000	1,900
080	MISCELLANEOUS									
085	Exchange Differential									
085.01	Exchange differential	LITHUANIA	Net Amount							
085.99	Line Total	----------	Net Amount							
089	MISCELLANEOUS TOTAL	----------	Net Amount							
099	BUDGET TOTAL	----------	Net Amount	3,261,000	122,350	1,255,835	941,778	502,740	319,182	119,115
			Total	3,261,000	122,350	1,255,835	941,778	502,740	319,182	119,115

4. INSTITUTIONAL COORDINATION & SUPPORT

4.a. Core commitments & Linkages

4.a.1. Describe how the proposed project is located within the IA's Country/regional/global/sector programs.

Based on UNDP policy document "Integrating Human Rights with Sustainable Human Development" (1998), Lithuania has been applying a rights based approach in preparing its Country Cooperation Framework for 2001-2003. The Country Cooperation Framework for Lithuania has based its main programme areas on promotion of civil rights and good governance, promotion of economic and social rights, as well as promotion of environmental rights.

As was stated in the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, adequate protection of the environment is essential to human well being and the enjoyment of basic human rights, including the right to life itself. It further recognized that every person has the right to live in an environment adequate to his or her health and well-being, and the duty, both individually and in association with others, to protect and improve the environment for the benefit of present and future generations,

In support of these rights and responsibilities, UNDP is targeting those areas which best enable citizens to enjoy their rights to a healthy, well managed and sustainable natural environment. With GEF support, it is assisting the Government to meet its obligations under different conventions, including the Convention on Biological Diversity. In this respect, UNDP assistance is of vital importance. To achieve results, support is directed towards institutional capacity building, environmental education and awareness raising, while ensuring partnerships and public participation. The GEF Small Grants Programme and the project on Conservation of Inland Wetlands Biodiversity in Lithuania, among others, are specifically identified in Lithuania's CCF.

4.a.2. GEF activities with potential influence on the proposed project (design and implementation).

UNEP/GEF is undertaking activities in the Nemunas delta near the Baltic Coast. These activities are part of an 11-country regional project entitled "Enhancing Conservation of the Critical Network of Wetlands Required by Migratory Waterbirds on the African/Eurasian Flyways" [17]. As it is shown in the Lithuanian Biodiversity Strategy and Action Plan, UNEP's activities target a different type of environment than those sites selected in this UNDP project. The two projects complement each other and show potential for exchange of information and best lessons learned.

In addition, there exist the GEF Baltic Sea Regional Project (BSRP) of which Lithuania is a participant state. The project's objective is to increase sustainable biological productivity, improve coastal zone management and reduce agricultural non-point source pollution through the introduction of ecosystem-based approaches for land, coastal and marine environmental management. The Project's long-term goal is to provide the three Baltic Sea cooperating international bodies, HELCOM, IBSFC, ICES, and the recipient countries with management tools for sustainable agricultural, coastal and marine management, while improving social and economic benefits for the farming, coastal and fishing communities. The GEF Baltic Sea project has had its first phase (2003-2006) recently approved. The total size of the GEF grant is US$ 5.85 million with a co-financing estimated at US$ 12, 450 million. The objectives of the GEF Baltic Sea project and the GEF project Conservation of Inland Wetland Biodiversity in Lithuania are different and no overlapping exists. The GEF project Conservation of Inland Wetland Biodiversity in Lithuania will maintain regular contacts and updates with the Lithuanian counterparts involved in the Baltic Sea Initiative.

4.b. Consultation, Coordination and Collaboration between IAs, and IAs and EAs, if appropriate.

Same as point 4.a.2.

5. LEGAL CONTEXT

This Programme document shall be the instrument referred to as such in Article 1 of the Standard Basic Agreement (SBA) between the Government of Lithuania and the United Nations Development Programme of 12 July 1993.

Equipment purchased from programme funds from the moment of acquisition shall be the property of the programme.

The following types of revisions may be made to this Programme document with the signature of the UNDP Resident Representative only, provided that she/he is assured that the other directly concerned parties have no objections to the proposed changes:

(a) Revisions in, or additions to, the document which do not involve significant changes in the immediate objectives, outputs or activities of the programme, but are caused by the re-arrangement of inputs already agreed to or by increases in costs due to inflation, and

(b) Mandatory annual revisions which re-phase the delivery of agreed inputs, or which increase experts and other costs due to inflation or take into account agency expenditure flexibility.

[17] In this same area, the Nemunas delta, the GTZ is currently developing a management plan aimed at protection of the delta ecosystem.

6. RESPONSE TO REVIEWS

6.a. Council

No comments received from Council Members

6.b. Convention Secretariat

No comments received from CBD Secretariat

6.c. GEF Secretariat

No further comments after May 2003 Council Meeting.

6.d. Other IAs and relevant EAs

No comments received from other IAs or EAs .

6.e. STAP

See Annex 2Ci and Annex 2Cii.

Annexes to Section 2

ANNEX 2A: LOG FRAME MATRIX

Project Strategy	Funding	Indicators	Sources of Verification	Assumptions
Development Objective To preserve inland wetland biodiversity in Lithuania				
Immediate objective **1.** To conserve inland wetland biodiversity in five sites through the application of alternatives approaches to wetland conservation in Lithuania. **2.** To institutionalize lessons learned from alternatives approaches for replication in other wetlands in Lithuania and elsewhere.	*(see funding for respective outputs below)* *(see funding for respective outputs below)*	• Independent evaluation of threats reduction at each site, including disturbance by trespassing or visitor use, over harvest of NTFP, continued overgrowth of woody vegetation, on-going drainage, nutrient loading, etc. • Evaluation of (i) rate of utilization of restored habitats and wetlands by targeted species and (ii) restoration of wetland-friendly hydraulic regimes); • At least five additional sites identified for replication of lessons learned and schedule of replication of best practices formally agreed; • Legislation or policy reforms adopted • SAPARD horizontal fund for wetlands management in agricultural areas has been secured. • State Forestry Company and private forestry companies have assessed options for certification and at least pilot schemes for certifying forests near wetlands is underway, • Models for land purchase or decommissioning are being replicated in Lithuania • Tourism action plans and user fees are being developed in at least three other wetland protected areas in Lithuania.	A report by independent experts Minutes of Steering Committee and multisectoral working group	The combination of (i) a pool of lessons in inland wetland conservation, (ii) a functioning mechanism for replication, (iii) continued commitment from the MoE and the GoL towards wetland conservation, and (iv) appropriate budget eliminates or significantly reduces threats in other wetlands of Lithuania
Outputs **1.** Wetland biodiversity protected in **Cepkeliai** Strict Nature Reserve**.** **1.1.** Alternative system of permits established; **1.2.** Management plan developed and under implementation; **1.3.** Enforcement of reserve regulations strengthened; **1.4.** Increased public awareness and support for conservation of Cepkeliai reserve from local people, cranberry gatherers, occasional tourists and public; **1.5.** Selected bogs, meadows and open sand areas restored;	MoE L. Cadastre Phare Municipal. ECAT Eco-Clubs OMPO SRF Biota Dzukija National Park SAPARD/Municipal. PARST	*For output 1* • A system of tradable permits in place by year 4 of the project; • Management plan approved by the MoE; • Cutting of vegetation in bogs, meadows and open sands as instructed in work plan; • By year 4, a decrease of 80 % in reserve trespassing over the baseline; • Statistically significant increase over the baseline in awareness and public support from target groups;	• Reserve documents; • Field visits • Reserve records; • Local surveys;	• The combination of harvest permits combined with better enforcement and increased public awareness is sufficient to control disturbance in **Cepkeliai,** which constitutes the main threat in the reserve;

2. Wetland biodiversity protected at **Kamanos** Strict Nature Reserve **2.1.** Management plan developed and under implementation; **2.2.** Natural hydrological regime re-established; **2.2.** Selected open bog habitats restored; **2.3.** Increased public awareness and support of local communities for wetland conservation.	MoE L. Cadastre PARST Phare Municip. ECAT Eco-clubs SRF FZS	*For output 2;* • Management plan approved by the MoE • By year 3, there is between 300-800 ha taken out of agriculture/forestry or reconverted to enable restoration of hydrological regime of the Kamanos raised bog; • Closing selected ditches inside and outside the reserve by year 4; • Cutting of vegetation in bogs as instructed in workplan; • Statistically significant increase over the baseline in awareness and public support from target groups;	• Field visits; • Local surveys;	• The reconversion of up to 800 ha (at least 300 ha) of current farming and forest land combined with the closing of drainage channels eliminates the main threat to the **Kamanos** reserve;
3. Wetland biodiversity protected at **Viesvile** Strict Nature Reserve **3.1.** Management plan developed and under implementation; **3.2.** Forestry protocols around Viesvile reserve are compatible with conservation of wetland biodiversity; **3.3.** Cranberry pilot farm established and managed by local community; **3.4.** Selected open fen and meadow habitats restored; **3.5.** Sea trout and lamprey migration restored in Viesvile River and Capercaillies successfully reintroduced in Karsuva Forest; **3.6.** Water and solid waste pollution reduced in Viesvile; **3.7.** Increased awareness and support for conservation of Viesvile Reserve among forester staff, local communities engaged in mushroom and cranberry picking and occasional tourists; **3.8.** Enforcement of reserve boundaries and regulation strengthened.	MoE L. Cadastre PARST Phare Municip. ECAT Eco-clubs SRF SFE SFC SFF WNSF KHP ISPA Lithuanian Cranberry Growers Association with Canadian partners	*For output 3* • By year 4, 50% decrease over baseline in solid and other water pollutants; • A decrease of 80% in reserve trespassing over the baseline; • Statistically significant increase over the baseline in awareness and public support from target groups; • Management plan approved by the MoE; • Program for biodiversity friendly forestry use around Viesvile reserve in operation by year 4; • Restoration activities carried out in bogs, fens and meadows as instructed in workplan; • The existence by year 3 of a pilot cranberry growing farm of 0,5 ha in the Laukesos peat-land, which by year 4 is producing at capacity; • Overgrowth of fens and meadows halted 100%; • Investments in anti-pollution infrastructure undertaken as shown in workplan 100%; • Fish bypasses installed in two dams in the Viesvile river; • Independent evaluation of pilot program for reintroduction of capercaillies	• Official agreements between the reserve and State Forestry Company; • Field visits • Reserve records; • Local surveys;	• Habitat restoration activities in **Kamanos** are self-sustaining once drainage channels have been closed and original hydrological regime restored; • Forest protocols that attain output needs and are compatible with biodiversity conservation in **Viesvile** are technically feasible; • A cranberry farm combined with better enforcement and increased public local awareness is sufficient to eliminate disturbance in **Viesvile**;
4. Wetland biodiversity protected at **Zuvintas** Reserve **4.1.** Biosphere Reserve established and management plan under implementation; **4.2.** Restored hydrological regime in the Dovine river and Zuvintas lake; **4.3.** Environmentally friendly agricultural practices introduced in buffer zone of biosphere reserve; **4.4.** Water and air pollution reduced in Zuvintas; **4.5.** Selected meadow, fen, and bog habitats restored;	MoE L. Cadastre PARST Phare Municip. ECAT Eco-clubs SAPARD/Municipal. SFC SFF ISPA EPA	*For output 4* • By year 4, 50% decrease over baseline in pollutants loads in Zuvintas Lake and Dovine River; • 20 % of farms over the baseline have adopted environmentally friendly agricultural practices; • Documentation establishing the Biosphere Reserve approved; • Water management plan for Dovine river approved by year 2 of the project; • Implementation of first priority measures of water management plan in Zuvintas as specified in work plan; • Investments in water and air pollution undertaken as specified in the work plan 100%; • Overgrowth of critical meadow, fen, and bog habitats	• MoE documentation • Field visits • Trend estimations by independent experts; • Local surveys;	• A restored hydrological regime and reduced pollution loads is sufficient to ensure conservation of wetland habitat in **Zuvintas**; • A restored hydrological regime makes habitat restoration outputs self-sustainable in **Zuvintas**

4.6. Public support and awareness for conservation of Zuvintas reserve increased; **5.** Wetland biodiversity protected in **Girutiskis** Strict Nature Reserve. **5.1.** Girutiskis reserve established as Ramsar site and management plan under implementation; **5.2.** System of entrance fees established and operational; **5.3.** Original hydrological regime restored; **5.4.** Selected tracks of open bogs, meadows and fens restored; **5.5.** Enforcement of reserve boundaries and regulations strengthened; **5.6.** Increased public support and awareness from local communities and tourists on wetland biodiversity in Girutiskis; **6.** Formal intersectoral mechanism for replication of best lessons learned in conservation of inland wetland biodiversity established and operational. **6.1.** Multisectoral working group established **6.2.** Lessons codified - instruments and guidelines from experiences in the five pilot sites **6.3** Production of demo and guides on best lessons to outsiders; **6.4** Plan for replication of lessons to other wetlands in Lithuania developed and agreed **6.5** Analyses of potential policy reforms in agriculture, forestry, tourism, nature conservation; produce draft legislation for submission to appropriate bodies/authorities **6.6** Seminars/workshops for policy makers, legislators;	MATRA, Private MoE L. Cadastre PARST Phare Municip. ECAT Eco-clubs SRF SFE SFC Private Atgaja MoE	halted 100%; • Statistically significant increase over the baseline in awareness and public support from target groups; *For output 5* • A decrease of 80 percent in reserve trespassing over the baseline; • Statistically significant increase in awareness of target groups over the baseline; • Girutiskis officially listed as Ramsar site; • User fees approved and in operation; • Two critical drainage canals (in Balinės and Aisputiškio raised bogs) closed (proxy for long-term restoration of hydraulic regime) • Overgrowth of critical meadow, fen, and bog habitats halted 100%; *For output 6* • A plan for replication of best lessons developed and an executing unit formally established; • Plan for replication of best lessons approved by the institutions participating in the multisectoral working group; • Draft sectoral policies and legislation prepared and submitted; • Ministerial policies and strategies reflect lessons learned from five sites	• MoE documents; • Field visits • Reserve records; • Local surveys; • Project reports; • MoE reports;	• The introduction of user fees combined with increased enforcement and public information campaigns is sufficient to control disturbance at **Girutiskis**; • A restored hydrological regime makes habitat restoration outputs self-sustainable in **Girutiskis**; • Agencies and institutions whose actions can potentially affect wetland biodiversity are willing to assimilate lessons from project;

ANNEX 2B: ENDORSEMENT LETTER

LIETUVOS RESPUBLIKOS APLINKOS MINISTERIJA
THE MINISTRY OF ENVIRONMENT OF THE REPUBLIC OF LITHUANIA
A. Jakšto St 4/9, LT-2600 Vilnius Tel. (+370 5) 2 66 35 39 Fax (+370 5) 2 66 35 63 E-mail: info@am.lt URL: www.am.lt

Ms. Cihan Sultanoglu
Resident Coordinator of the UN,
Resident Representative of the UNDP
J. Tumo - Vaižganto 2
Vilnius LT - 2600

2003-02-24 No. 1-1-1160

Re: Project "Conservation of Inland Wetland Biodiversity in Lithuania"

Dear Ms. Sultanoglu,

Taking this opportunity we would like to express the gratitude for UNDP and your personal assistance in supervision of the project development phase of the UNDP/GEF project "Conservation of Inland Wetland Biodiversity in Lithuania" and participation of GEF experts in the development of the project itself.

The successful outcome of the project PDF-B phase is the full size project brief ready to be presented to GEF. Five most important Lithuanian wetlands: Čepkeliai, Kamanos, Viešvilė State Strict Nature Reserves, Žuvintas Biosphere Reserve as well as Girutiškis Strict Nature Reserve within the Labanoras Regional Park are finally nominated to be the Project sites. Selected project sites play very important role in the protection of inland wetland biodiversity in the country. Being located in the different geographical districts they represent the diverse mosaic of wetlands and wide spectrum of problems to be solved. All project sites are designated strict nature reserves, nevertheless lots of negative factors still affect the biodiversity and should be eliminated. Acting in wider than site scale, the project should fight the problems more efficiently and should bring more sustainability in wetlands management. Having highest protection status in the national scale the sites are also proposed Natura 2000 territories and listed among the sites protected under the Convention on Wetlands (Ramsar, Iran 1971).

The Ministry supports this project very much. Soundly tuned with other ongoing activities the project should bring new perspectives in wetland biodiversity protection strengthening socio-economic, public awareness public involvement, capacity building and other measures. It should build a basement for sustainable development of the sites and serve as a pilot for application in other areas.

The Ministry of Environment will do its best to raise all possible funds to contribute to the implementation of the project. According to our early estimates, we intend to allocate up to 13.794.000 LTL (3.941.000 USD), but taking into consideration the new tendencies in nature protection, actual contribution to reaching project goals through the project period might be bigger. The basic constituents of the contribution for the foreseen project implementation period are presented bellow:

- Improvement of legal basis (revision, preparation and initiation of approval of different legal documents (regulations, rules for strict nature reserve management planning, boundary delimitation etc.) - 187.000 LTL

- Daily maintenance of strict nature reserves - project sites - 5.372.000 LTL
- Forest inventory for Žuvintas and Viešvilė sites and preparation of the Karšuva Forest management plan including newly developed biodiversity approach - 425.000 LTL
- Office space, internet, premises for meetings etc. (in-kind contribution) - 175.000 LTL
- Connection of Dzūkija National Park Visitor Centre to the Marcinkonys village heating plant - 140.000 LTL
- Obtaining of detailed information on land ownership - 100.000 LTL
- Improvement of roads needed for management of the sites - 672.000 LTL
- Environmental monitoring (overall supervision of monitoring of biota, co-ordination and implementation of state environmental monitoring programme, Žuvintas Lake water chemistry monitoring) - 109.000 LTL

There is also a number of upcoming projects/programmes, which will be linked with the UNDP/GEF project and will highly facilitate achievement of goals:

- The Phare 2002 project "Development of the management plans in protected areas of Lithuania" is starting in Lithuania at the beginning of 2003 and will be focused on the preparation of management plans for Natura 2000 areas (total budget 4.485.000 LTL). It is already agreed to prepare the final management plans for the UNDP/GEF project sites (all of them are proposed for Natura 2000 network) during this project. This will approximately cost 280.000 LTL.
- Phare 2003 project "Institutional strengthening and modernization of state protected areas service administrations" will give its input in development of integrated site border marking and out-door information provision system. The approximate input to the GEF project is 98.000 LTL.
- EU Environmental funds will be used for reconstruction of wastewater treatment plants. Reconstruction of sewage treatment plants affecting the project sites is ranked top priority and at least 6.2 million LTL will be allocated for this activity.

Very modest, but nevertheless important to mention, is the contribution to the reserves from the local communities in terms of voluntary campaigns. There is a tendency of increasing willingness to contribute to the nature conservation and wide spectrum of awareness and education campaigns foreseen in the project should really facilitate the process. Support by local communities provided to the administrations of strict nature reserves in terms of voluntary campaigns we calculate 36.000 LTL (in-kind contribution).

Very much looking forward to our fruitful cooperation and significant results from the project.

Yours sincerely,

Arūnas Kundrotas
Minister

GEF Operational Focal Point - I.Venckūnaitė, (+370 5) 2663532
e-mail: i.venckunaite@aplinkuma.lt

I. Venckūnaitė

Dokumento pavadinimas nuotraukai: Biodiversity Letter of support 05.02.19.doc

ANNEX 2CI: STAP REVIEW

Project Title:	Conservation of Inland Wetland Biodiversity in Lithuania
Reviewer:	Wim Giesen, Mezenpad 164, 7071 JT Ulft, The Netherlands Email: 100765.3312@compuserve.com; or w.giesen@arcadis.nl
Date:	3rd March 2003
UNDP contact:	Nick Remple, Regional GEF Coordinator for Biodiversity and International Waters, UNDP, Bratislava, Slovak Republic, nick.remple@undp.org

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Review of the:

FSP PROJECT DOCUMENT ON:
CONSERVATION OF INLAND WETLAND BIODIVERSITY IN LITHUANIA

- DATED 16 FEBRUARY 2003

CONTENTS:

D. Minor changes suggested for improvement of the Project Brief

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A. GENERAL COMMENTS

The Proposal is well written and presents a coherent, balanced package of interventions targeting the conservation of globally significant biodiversity. It is well-embedded in ongoing activities and builds logically upon past initiatives. It would be useful to provide a table of contents and a list of abbreviations.

A.i Global priority in the area of biodiversity

The five targeted sites contain or seasonally provide a habitat for regularly rare, endemic and endangered species, including 1-8 (depending on the site) species listed as Vulnerable or Endangered by IUCN, 27-70 species listed in the EU Bird Directive, and 23-64 migratory species listed in the AEWA Annexes. They are include 3-7 habitats prioritized by the EU.

As illustrated by the AEWA listed species, the five targeted sites are of significance for migratory birds, and are located along two major flyways extending across Lithuania. On the whole, a good case is made for the global significance of these sites. In table 3, it is suggested that a distinction is made between national and international priority status.

A.ii Cost-effectiveness in achieving focal area objective(s)

The Inland Wetlands Biodiversity project is budgeted at US$3.26 million for the GEF contribution – a significant amount, considering the size of the five targeted sites (1,500 – 15,000 ha). Significantly, the Project leverages a total of more than US$7.7 million in co-financing, and in this sense it may be regarded as cost effective.

The presentation of the Project financing is somewhat confusing. The GEF alternative amounts to US$11.9 million (2.B.8 p.21), of which US$2.35 is baseline – therefore the incremental cost of the alternative is US$9.6 million. In Section 3 on Financing, the total project costs are presented as US$9.6 million, of which GEF is to contribute US$3.26 million and US$6.29 is to come from other sources. The table on contribution by co-financiers, however, indicates a total of US$7.76 million – this is confusing, as this also includes part of the baseline (which is per definition *not* co-financing).

The Project Budget provided in the main document follows the UNDP format. This may be useful for internal UNDP use, but is not of much use (e.g. for the GEF Council) in assessing if budgets are well distributed between objectives, outputs and locations, and if these are adequate. It is recommended that budget is included that provided an overview of input per output (see below).

In the Incremental Cost Analysis (Annex 2F), three tables with financial inputs are provided:

- inputs for restoration efforts per site (i.e. primarily for global benefits),
- inputs for a wide range of conservation efforts per site (i.e. for combined domestic and global benefits), and
- inputs for pollution controls efforts (i.e. mainly of domestic benefit).

It is recommended that these are combined in one table, as this clearly shows the total investment per site. Of the total amount invested in the project, an overwhelming 98% goes towards Objective 1: improved wetland management *in situ*, while less than 2% goes towards Objective 2: institutionalizing best practices. This would seem far too skewed towards objective 1 (see below, A.iii).

A.iii Adequacy of project design

The design of the Inland Wetland Biodiversity project is generally solid and quite adequate. The two main objectives – Objective 1: improved wetland management *in situ,* and Objective 2: institutionalizing best practices – are logical and present a coherent sequence. The five wetland sites selected for interventions under objective 1 appear well-selected: the sites are of global significance for biodiversity, and the issues faced form a good cross-section of issues facing most wetlands in Lithuania. Several aspects of project design that should be addressed during finalization of the project document are:

1. It would be useful to provide a table of contents and a list of abbreviations.
2. Table 4: threats and root causes of biodiversity loss in the five selected sites. Not all identified causes of biodiversity loss are root causes. E.g. A Kamanos, issue 1: excessive drainage of the bog. "Root cause" indicated in table 4 are the drainage canals that extend into the reserve from adjacent farming areas. The root cause is more likely to be the underlying cause that lead to the excavation of drainage canals in the reserve from the farming area – this may, for example, be due to a lack of awareness/appreciation of wetland values, coupled with inappropriate or inadequate land use planning. E.g. B. Zuvintas, issue 2, water pollution. The "root cause" indicated in table 4 is nutrient runoff from active farms – the actual root cause is more likely to be a lack of awareness, lack of regulations re non-point-source pollution, and/or a lack of enforcement of existing regulations.
3. Table 4, ctd. Viesvile, issue 2: dams were built without EIAs. Was this compulsory at the time of construction? When were they constructed?
4. 2.B.3 Sections of text presented here are repeated again in 2.B.4.1 – this can be streamlined.
5. 2.B.4.1 Cepkeliai. Non-locals account for the bulk of disturbance. It should be indicated here that most of these non-locals harvest cranberries illegally, without valid permits. Beekeeping? Is there a history of beekeeping in the area? Have other alternative sources of income been investigated together with local stakeholders?
6. 2.B.4.1 Viesvile. Negotiating changing in forestry practices with the State Forestry Company (paragraph 2). Is this a potential solution? Elsewhere (paragraph 3) it is stated that the reserve has little leverage with the SFC, so this may be a theoretical option only. Establishment of a cranberry farm outside the reserve to provide local stakeholders with income, in the form of alternative work for the seasonally or partially employed. What about ownership of the cranberry farm? Who is ultimately responsible? Reintroduction of capercaillies from Belarus (last paragraph): isn't this a very sensitive issue? What are the procedures that are to be followed for the reintroduction?
7. 2.B.4.1 Zuvintas. Third paragraph, development of a water management plan for the Dovine River basin. With Lithuania's accession to the EU, it will also need to adhere to the requirements of the EU's Water Framework Directive, which specifies the recognition of river basin units, and the production of river basin management plans according to a fixed format and by a given date. How does this activity relate to the requirements of the WFD? Will there be an opportunity to couple the two, if this has not yet occurred?
8. 2.B.4.1 Girutiskis. Which improvements to the reserve facilities to handle tourists are envisaged, apart from increased awareness and education (visitors center + info stands), trails, and increased enforcement? Are you also considering other physical improvements, such as rest rooms, guides, simple cottages for paying guests?
9. An extra output for each of the interventions at the five sites should be the production of a "best practices / lessons learned" manual, that should be drafted at an early stage, and modified as a working document throughout the project. This can automatically feed into achieving Objective 2: institutionalization of best practices, and be used for drawing up

guidelines, and for codification of lessons. If this does not happen, there is a danger that the wealth of lessons, information and experience regarding wetland management learnt at the five sites is dissipated.

10. 2.B.4.2 Objective 2. Much appears to hinge upon the success achieved with establishing an effective "Multisectoral Wetlands Working Group" (MWWG). Are there precedents with establishing such multisectoral working groups, e.g. in areas other than conservation? If so, can you refer to this experience, and draw upon lessons learned? If there is no precedence, what guarantees do you have that the various sectors will actively participate? Is the concept one that evolved out of a consensus-seeking exercise involving major stakeholders?
11. 2.B.4.2. For each sector, the approach is one of codification of lessons, provision of guidelines for best practice, and establishing strategies for replication. However, in order to properly institutionalize best practice and lessons learned, this should be developed together with the stakeholders. As it reads now, it is possible that the MWWG, lead by a well-intending NGO, may draft a wide range of best practice manuals and strategies, that are not absorbed or implemented by the intended targeted sectors. As a result, there will not be institutionalization. Various capacity building exercises or programs will be required to institutionalize 'best practice'. This may be intended by the Project proponent, but is not adequately addressed or described in 2.B.4.2.
12. 2.B.7 (should be 2.B.6, as 2.B.5 is missing): institutional context for implementation. Many formal/government institutions are described, but what about local organizations? E.g. NGOs, CBOs? At present the proposal states that the project also seeks cooperation with and involvement of a number of listed (inter-) national NGOs. Does this mean that there have not been any agreements made with the listed NGOs? A paragraph should perhaps be devoted to those NGOs with which agreements have been made already.
13. 2.C Sustainability (including financial sustainability). Expand this to include "Risks and Sustainability", addressing the risks/assumptions outlined in the Logframe. Risks are already partially covered, but not explicitly so, and need to be addressed.
14. 2.C Viesvile cranberry farm. The success of this innovation may also depend on ownership and site management, which is not clarified in the proposal.
15. 2.D Replicability. The Government of Lithuania would like to replicate lessons learned at the five demonstration sites, but if this can actually be achieved may depend on available funding. At the Kamanos site, for example, (parts of) adjacent farms are to be purchased for inclusion in the (buffer zone of the) reserve, with financial support from the Frankfurt Zoological Society. Can this model be replicated in other areas? In other words, will such funds be forthcoming in the future, from FZS or other agencies? Similarly for other costs that are currently incremental.
16. 2.F.i Monitoring and evaluation. The list of projects and lessons learned is lengthy (3 pages) given the nature of the document – it is recommended that this is summarized and the bulk text be moved to an annex.
17. 2.F.ii 1. Indicators to measure implementation of alternative approaches to conservation in pilot sites. Viesvile: the success indicator is simply the existence of a forest management plan that incorporates biodiversity concerns and wins the approval of the MoE. Add: … and wins the approval of MoE *and the State Forestry Company*. Zuvintas: designation of the site as a biosphere reserve by the 1st year. MoE can do the groundwork and the Government of Lithuania can propose that Zuvintas be designated a Biosphere Reserve, but final designation depends on UNESCO.
18. 2.F.ii4. Indicators for changes in awareness of target groups. Can you measure changes in tourist behavior, e.g. at Girutiskis, where tourism is a main cause of disturbance?
19. 2.F.ii5. Indicators for measuring the effect of project activities on enforcement of reserve regulations. An indicator listed is "assess changes in the rate of trespassing of reserve's boundaries…". With increased patrolling / enforcement, there may be an increase in

registered trespasses because of an increase in the likelihood of getting caught, but an overall decline in trespassing. It may be difficult to record a decline in trespassing, at least in the short- to medium term.

20. 3. Financing. See A.ii. Rather than presenting a budget in UNDP format (which is for internal UNDP use), it would be more useful to present a budget that provides an overview of funding per project component or output, listing both GEF and co-financing (see example, below).

Project Activities	GEF Total	Co-financing	Total
Component 1: Sustainable management of wetland biodiversity at five important sites			
Outcome 1.1. Sustainable management of Cepkeliai			
Outcome 1.2. Sustainable management of Kamanos			
Outcome 1.3 etc…..			
Subtotal Component 1			
Component 2: Institutionalization of best practices and lessons learned			
Outcome 2.1. Establishing of the Multisectoral Wetlands Working Group			
Outcome 2.2 etc….			
Subtotal Component 2			
Project "Coordination Unit"			
Project Steering Committee			
Overhead Costs (8%)			
Contingency (5%)			
Project Total	3,261,700	7,758,100	11,019,800
PDF-B Phase	180,000	0	
Grand Total	3,441,700	7,758,100	11,199,800

21. Institutional arrangements for project implementation should be included in section 4 – these are currently missing (or are at least not clearly described). This should include the Steering Committee and its composition, implementation and/or co-ordination units, etc…. If these arrangements are fairly intricate, this should be bolstered by including a diagram.

A.iv Feasibility of implementation, operation and maintenance.

There are a number of risks outlined in the proposal (including the Logframe in Annex 2A) that are indicated by the following assumptions:

- The combination of permits and increased enforcement will be sufficient to control disturbance in Cepkeliai.
- Restoration of hydrology and 300-800 ha of farm- and forest land will be sufficient to eliminate the main threats to Kamanos.
- Forestry practices compatible with biodiversity conservation at Viesvile will be technically feasible.
- A cranberry farm combined with better enforcement will eliminate disturbance at Viesvile.
- Restored hydrology and reduced pollution loads will be sufficient to ensure conservation of wetlands at Zuvintas.
- The combination of user fees, increased enforcement and public awareness campaigns will be sufficient to control disturbance at Girutiskis.
- Restored hydrology will be self-sustaining and sufficient at Kamanos, Girutiskis and Zuvintas.
- Agencies whose actions potentially affect wetland biodiversity are willing to assimilate lessons from the project.
- Draft policy reforms and legislation will be taken up by appropriate authorities.
- A combination of lessons learned/best practice examples, policy formulation and an available budget will ensure replication in other Lithuanian inland wetlands.

To these you may add the following:

- Continued commitment of the MoE and the Government of Lithuania towards conservation of wetlands.
- Budgets available for replication need to expand – this can probably only occur if the Lithuanian economy continues to perform well.

On the whole, the Conservation of Inland Wetland Biodiversity project provides ample mechanisms for addressing potential pitfalls, and mitigates their impacts on the Project (see section on sustainability). This is especially the case for project activities at the five pilot wetland sites. However, for the institutionalization component of the project (achieving Objective 2), this could be expanded. As listed above (and in the Logframe), are agencies whose actions potentially affect wetland biodiversity willing to assimilate lessons from the Project? How can this be guaranteed? What degree of commitment is there to the MWWG and to application of best practices in wetland areas?

B. KEY ISSUES

B.i Scientific and technical soundness of the project

Generally, the project brief is technically and scientifically sound; areas of possible deficiency or where some improvements may be made are mentioned under A.ii and A.iii, above. Key areas that need to be addressed are: i) further elaboration of component 2, institutionalization of best practices and lessons learned; and ii) institutional arrangements for project implementation. Minor points of deficiency are mentioned at the end of this review (under D).

B.ii Identification of the global environmental benefits and/or drawbacks of the Project

The potential global environmental benefits of the *Conservation of Inland Wetland Biodiversity in Lithuania* project are significant. Lithuanian inland wetlands are strategically located along two major bird migration routes and play an important role in the survival of many migratory species. In addition, these wetlands represent important examples of priority habitat types (as recognized by the EU) that have disappeared or are threatened and/or heavily degraded. There are no foreseeable drawbacks for the global environment.

B.iii How the Project fits within the context of the goals of the GEF, as well as its operational strategies, program priorities, Council guidance and the provisions of the relevant conventions

Lithuania signed the CBD on 1st February 1996 and is therefore eligible for GEF assistance. The Conservation of Inland Wetland Biodiversity in Lithuania project meets GEF eligibility criteria under Operational Program #2 "Coastal Marine and Freshwater Ecosystems", as it promotes conservation and sustainable use of biodiversity of freshwater ecosystems. The approach outlined is also fully in accordance with the GEF-OP2 Criteria (see footnotes on page 2 of the proposal).

B.iv Regional context

Although focused on wetlands within Lithuania, the *Conservation of Inland Wetland Biodiversity in Lithuania* project is of regional importance because of the importance of the country's wetlands in supporting two major bird migration routes. Also, many of the lessons learned, such as addressing:

- conservation issues in a post-*kolkhoz* agricultural environment;
- drainage and conversion of peatlands;
- intensive forestry activity in adjacent areas;

- disturbance due to harvesting activities (of non-timber forest products) in wetland areas; and
- water pollution,

are applicable to other countries in a wider region – not only in the Baltic states, but also apply to Belarus, northern Ukraine and Poland. The Project should therefore strive to formulate its lessons learned in a formalized way, i.e. as a concrete output (i.e. a document) of each of the five pilot site interventions.

B.v Replicability of the Project

Project replication is one of the main objectives of the Project, and is formalized under Objective 2. However, as was mentioned under A.iii (bullet 10), much appears to hinge upon the success achieved with establishing an effective "Multisectoral Wetlands Working Group" (MWWG), and the Reviewer queries is there are precedents for this. Also, if there is no precedence, what guarantees does the proponent have that the various sectors will actively participate in applying the lessons learned? The section on project replication (2.D) should be expanded to reflect clarifications added to 2.B.4.2.

B.vi Sustainability of the Project

Significant attention is paid by the Proponent to Project sustainability (see section 2.C), and the Reviewer believes that the mechanisms put in place are sufficient and adequate for success and sustainability of the Project at all five pilot sites. The Reviewer queries sustainability of Component 2 (Objective 2), for which clarification has been requested in A.iii (bullet 10) and B.v.

C. SECONDARY ISSUES

C.iLinkages to other focal areas

Of the other focal areas (mitigation of greenhouse gas emission/climate change, international waters, ozone depletion, POPs), the Project is weakly linked to:

Climate change

- in a positive way, by slowing/preventing habitat conversion and maintaining plant biomass (carbon sequestration in natural vegetation), and
- in a slightly negative way, by means of methane emissions from wetlands.

International waters

- in a positive way, as these inland wetland areas are (regionally) linked via the migration of waterbirds.

C.ii Linkages to other programs and action plans at regional or sub-regional level

The Project is well-linked with regional programs and action plans, including:

- commitments and actions related to the Ramsar Convention (which Lithuania formally signed on 4 October 1993);
- the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA);
- in the European context, the project will be linked with the EU's Natura 2000 network.

In addition, the Project will take on board elements from the National Biodiversity Strategy and Action Plan (NBSAP), especially as indicated in the general action plans "Protection of Wetland Ecosystems" and "Protection of species." The five sites targeted have been identified in the

NBSAP as priority sites, and all sites are also designated Ramsar sites (with the exception of Girutiskis, which is awaiting formal designation. Wetlands and protection of their biodiversity have high priority in the Lithuanian National Environmental Protection Strategy.

C.iii Other beneficial or damaging environmental effects

The Conservation of Inland Wetland Biodiversity in Lithuania project should have favorable to highly favorable overall environmental impacts if its key outputs are achieved. In the case of the five pilot sites, improved conservation of wetland biodiversity on-site may have beneficial effects on biodiversity over a larger area, as these sites may provide areas of refuge, or serve as sources of dispersal. Increased water retention capacity of these wetlands by means of restoration of hydrology (e.g. in Kamanos, Zuvintas and Girutiskis) may have a beneficial effect on water levels in nearby surface waters. Other sites in the two migration routes that extend across Lithuania may benefit from implementation of the Project, due to the beneficial effects on migrating birds, and possibly due to replication of the five pilot projects.

C.iv Degree of involvement of stakeholders in the Project

The Project Proponent has liaised closely with all major stakeholders, both at central level and at the local level of the five pilot sites. This includes involvement of government agencies and institutes, international agencies and donors operating in Lithuania, national and international NGOs, and local communities. This involvement has mainly been consultative, and included meetings, workshops and open forums. The Project includes mechanisms to ensure stakeholder participation in project activities – at the five pilot sites, stakeholder groups are to take the lead in further defining and implementing project activities. This should increase local ownership and ensure sustainability of the Project.

C.v Capacity building aspects

Under Objective 2: Institutionalization of best practices and lessons learned, information and capacity building programs for implementation of new practices are to be provided for staff in different agencies and organizations, so that they can take on board the lessons learned. Capacity building will also be provided for the implementation of the SAPARD Program Agro-environmental Measures at Zuvintas. The establishment of a cranberry farm in Viesvile will also include training of local community members in farm management. The Project will include training seminars, study tours, local information campaigns, etc.. On the whole, capacity building program seems adequate, although there may be scope for expanding the this in the program of "institutionalization of lessons learned" within agencies and organizations that are to be involved in the replication process. Where the lessons learned are indeed new to the agencies involved, this will not automatically be assimilated unless a mechanism is provided. In some cases, exchanges or study tours may be the best option, while in other cases formal training may be more appropriate. A training needs assessment should therefore be considered, to provide the basis for a strategic approach to capacity building, rather than providing this on an *ad hoc* basis.

C.vi Innovativeness of the Project

The Project as a whole is innovative in the Lithuanian context, and certain project elements such:

- establishing an alternative permitting system,
- establishing a cranberry farm near Viesvile to reduce pressures on the resources in the reserve,
- restoring hydrology in three reserves,
- establishing and initiating a system of entrance fees (at Girutiskis),

are definitely innovative, new and worthy of support. These new approaches are not without risk, but the approach should be flexible so that it can respond to new challenges. In the end, the lessons learned will provide a sound basis for continuation of these activities (if proven successful) elsewhere in Lithuania.

D. Minor changes suggested for improvement of the Flyways proposal

- 2.B.1 Fourth paragraph. Semi-shrub? Better would be dwarf shrub.
- 2.B.4.1 Cepkeliai. Second sentence: Cepkeliai counts with a system…. This should read Cepkeliai uses a system… . Paragraph 5: Better enforcement is deemed as necessary because to the contrary there would be few incentives to obtain a permit. Replace with: Better enforcement is deemed necessary, because otherwise there would be few incentives to obtain a permit.
- There is no 2.B.5 – 2.B.6, 2.B.7 and 2.B.8 should therefore all move up one notch in the numbering sequence.

Ulft, the Netherlands,
3rd March 2003

Wim Giesen

ANNEX 2CII: RESPONSE TO STAP REVIEW

The project team is thankful to the STAP reviewer for comments that have strengthened the contents and presentation of this proposal. Below, there is a description of specific actions taken in response to the STAP comments (answers in red italic following the original STAP comment).

A. GENERAL COMMENTS

It would be useful to provide a table of contents and a list of abbreviations.
It has been added to the revised Project Document.

A.i Global priority in the area of biodiversity

In table 3, it is suggested that a distinction is made between national and international priority status.
This has been addressed in a revised Table 3 on page 10.

A.ii Cost-effectiveness in achieving focal area objective(s)

The presentation of the Project financing is somewhat confusing. The GEF alternative amounts to US$11.9 million (2.B.8 p.21), of which US$2.35 is baseline – therefore the incremental cost of the alternative is US$9.6 million. In Section 3 on Financing, the total project costs are presented as US$9.6 million, of which GEF is to contribute US$3.26 million and US$6.29 is to come from other sources. The table on contribution by co-financiers, however, indicates a total of US$7.76 million – this is confusing, as this also includes part of the baseline (which is per definition *not* co-financing).
Following the latest GEF policy on IC reporting, baseline contributions deemed crucial for achieving project objectives are to be considered as co-financing (see GEF/C.20/6; 2002). In the revised version of the project, the baseline is US$2,347,396 out of which US$ 1,466,400 has been considered as co-financing under this definition. In addition, there is co-financing for the GEF alternative in the amount of US$ 8,958,000. Thus the total co-financing is US$10,424,400 (8,958,000+1,466,400). In turn, the GEF contribution is US$3,261,000. It follows that the GEF alternative is US$ 12,219,000 (3,261,000+8,958,000).

In the Incremental Cost Analysis (Annex 2F), three tables with financial inputs are provided:

- inputs for restoration efforts per site (i.e. primarily for global benefits),
- inputs for a wide range of conservation efforts per site (i.e. for combined domestic and global benefits), and
- inputs for pollution controls efforts (i.e. mainly of domestic benefit).

It is recommended that these are combined in one table, as this clearly shows the total investment per site. Of the total amount invested in the project, an overwhelming 98% goes towards Objective 1: improved wetland management *in situ*, while less than 2% goes towards Objective 2: institutionalizing best practices. This would seem far too skewed towards objective 1 (see below, A.iii).
This has been corrected. The IC table shows the resources allocated to all outputs, plus the co-financing by source. The distribution of resources between objectives has been improved with an additional US$ 100,000 allocated to Output 6 (Immediate Objective 2) for technical assistance.

A.iii Adequacy of project design

1. It would be useful to provide a table of contents and a list of abbreviations.

It has been added.

2. Table 4: threats and root causes of biodiversity loss in the five selected sites. Not all identified causes of biodiversity loss are root causes. E.g. A Kamanos, issue 1: excessive drainage of the bog. "Root cause" indicated in table 4 are the drainage canals that extend into the reserve from adjacent farming areas. The root cause is more likely to be the underlying cause that lead to the excavation of drainage canals in the reserve from the farming area – this may, for example, be due to a lack of awareness/appreciation of wetland values, coupled with inappropriate or inadequate land use planning. E.g. B. Zuvintas, issue 2, water pollution. The "root cause" indicated in table 4 is nutrient runoff from

active farms – the actual root cause is more likely to be a lack of awareness, lack of regulations re non-point-source pollution, and/or a lack of enforcement of existing regulations.

In the case of Kamanos, the channels were excavated during Soviet times, when there was little concern about environmental impact. The PDF B process demonstrated that there is greater awareness of wetland values and definite trends towards more appropriate land-use planning. In this sense, the channels reflect an originating context that no longer exists. In the case of Zuvintas, the root cause has been adjusted following the STAP comment. It reads now "Farmers have an insufficient technical and financial capacity to adopt techniques that minimize impact on wetlands". The project activities are directed to provide for those missing technical and financial capacities.

3. Table 4, ctd. Viesvile, issue 2: dams were built without EIAs. Was this compulsory at the time of construction? When were they constructed?

The dams were constructed during the Soviet era – EIAs were not compulsory.

4. 2.B.3 Sections of text presented here are repeated again in 2.B.4.1 – this can be streamlined.

True. The repetition originates in having the description of the alternative in each site opened with a paragraph summarizing the main threats. We believed that in view of the range of threats being tackled, a brief summary might facilitate understanding.

5. 2.B.4.1 Cepkeliai. Non-locals account for the bulk of disturbance. It should be indicated here that most of these non-locals harvest cranberries illegally, without valid permits. Beekeeping? Is there a history of beekeeping in the area? Have other alternative sources of income been investigated together with local stakeholders?

Yes, many collect cranberries illegally, which is why we believe greater enforcement is necessary. In regard to beekeeping, this was an alternative identified by local people and one that appears feasible given both local technical and financial capacities.

6. 2.B.4.1 Viesvile. Negotiating changing in forestry practices with the State Forestry Company (paragraph 2). Is this a potential solution? Elsewhere (paragraph 3) it is stated that the reserve has little leverage with the SFC, so this may be a theoretical option only.

The term "little leverage" is meant to indicate that the present status quo (regulatory framework) favors the State Forestry Company. However, the PDF-B showed that there is genuine interest and willingness to cooperate with the Protected Areas authorities to find a solution agreeable to both parties. Our assessment is that a successful outcome is more than a theoretical option and that, in fact, finding a common ground with the State Forestry Company is a real possibility.

Establishment of a cranberry farm outside the reserve to provide local stakeholders with income, in the form of alternative work for the seasonally or partially employed. What about ownership of the cranberry farm? Who is ultimately responsible?

The farm will be located on state land. Originally, the project idea was for communal ownership of the farm, but local people opposed this for reasons related to memories of Soviet collective farming. Local people prefer private ownership, including for example, shares in a hypothetical company entrusted with running the farm. Ownership options will need to be further discussed during project implementation when additional time for consultations will be available.

Reintroduction of capercaillies from Belarus (last paragraph): isn't this a very sensitive issue? What are the procedures that are to be followed for the reintroduction?

Capercaillies were originally found in Viesvile. The Institute of Ecology with the support of international experts will define the procedures for re-introduction. These will follow accepted international standards..

7. 2.B.4.1 Zuvintas. Third paragraph, development of a water management plan for the Dovine River basin. With Lithuania's accession to the EU, it will also need to adhere to the requirements of the EU's Water Framework Directive, which specifies the recognition of river basin units, and the production of river basin management plans according to a fixed format and by a given date. How does this activity relate to the requirements of the WFD? Will there be an opportunity to couple the two, if this has not yet occurred?

Yes, the project team will elaborate the Dovine Basin water management plan in concordance with the WFD.

8. 2.B.4.1 Girutiskis. Which improvements to the reserve facilities to handle tourists are envisaged, apart from increased awareness and education (visitors center + info stands), trails, and increased enforcement? Are you also considering other physical improvements, such as rest rooms, guides, simple cottages for paying guests?

Yes, there is co-financing for the construction of a guesthouse, an increase in fish game population in three selected lakes, and the provision of basic services for visitors including guides and infrastructure.

9. An extra output for each of the interventions at the five sites should be the production of a "best practices / lessons learned" manual, that should be drafted at an early stage, and modified as a working document throughout the project. This can automatically feed into achieving Objective 2: institutionalization of best practices, and be used for drawing up guidelines, and for codification of lessons. If this does not happen, there is a danger that the wealth of lessons, information and experience regarding wetland management learnt at the five sites is dissipated.

Yes, we agree. A project evaluation from UNDP/GEF also highlighted this important point. The revised document (the version after the one reviewed) included the preparation of these "best practices/lessons" manuals as a sub-output within objective #2. See the Log-frame matrix.

10. 2.B.4.2 Objective 2. Much appears to hinge upon the success achieved with establishing an effective "Multisectoral Wetlands Working Group" (MWWG). Are there precedents with establishing such multisectoral working groups, e.g. in areas other than conservation? If so, can you refer to this experience, and draw upon lessons learned? If there is no precedence, what guarantees do you have that the various sectors will actively participate? Is the concept one that evolved out of a consensus-seeking exercise involving major stakeholders?

We have studied the experience and lessons gathered from the implementation of the Local Agenda 21 for Small and Medium Size Municipalities. To a great extent, the development of these local agendas required stakeholders from different backgrounds and sectors to negotiate solutions agreeable to all parties. The good results obtained by the project suggest that stakeholders can successfully explore alternatives and accommodate sectoral interests. A necessary, though not sufficient, condition for success is that the discussion of options is done in a truly participatory manner and that concerns and interests from all stakeholders are genuinely taken into account. A second condition is that differences among stakeholders' interests are bridgeable within the available menu of options. The results of the PDF-B indicate that both conditions will be met in this project. The commitment to this component and project by the principal sectoral Ministries provides a good foundation for inter-sectoral cooperation.

11. 2.B.4.2. For each sector, the approach is one of codification of lessons, provision of guidelines for best practice, and establishing strategies for replication. However, in order to properly institutionalize best practice and lessons learned, this should be developed together with the stakeholders. As it reads now, it is possible that the MWWG, lead by a well-intending NGO, may draft a wide range of best practice manuals and strategies, that are not absorbed or implemented by the intended targeted sectors. As a result, there will not be institutionalization. Various capacity building exercises or programs will be required to institutionalize 'best practice'. This may be intended by the Project proponent, but is not adequately addressed or described in 2.B.4.2.

We have expanded this section following comments from STAP, as well as a UNDP project evaluation. See section 2.B.4.2 again, starting on page 20.

12. 2.B.7 (should be 2.B.6, as 2.B.5 is missing): institutional context for implementation. Many formal/government institutions are described, but what about local organizations? E.g. NGOs, CBOs? At present the proposal states that the project also seeks cooperation with and involvement of a number of listed (inter-) national NGOs. Does this mean that there have not been any agreements made with the listed NGOs? A paragraph should perhaps be devoted to those NGOs with which agreements have been made already.

The project would like to outsource the execution of several components to NGOs because of their expertise and cost-efficiency. We have added a table with that information. However, though the project team has established strong links with local NGOs, it has not been able to formally sign agreements for the

implementation of specific activities (UNDP contractual rules require open tenders for execution of project components).

13. 2.C Sustainability (including financial sustainability). Expand this to include "Risks and Sustainability", addressing the risks/assumptions outlined in the Logframe. Risks are already partially covered, but not explicitly so, and need to be addressed.

The revised project document includes a section on "Risks" (page 26).

14. 2.D Replicability. The Government of Lithuania would like to replicate lessons learned at the five demonstration sites, but if this can actually be achieved may depend on available funding. At the Kamanos site, for example, (parts of) adjacent farms are to be purchased for inclusion in the (buffer zone of the) reserve, with financial support from the Frankfurt Zoological Society. Can this model be replicated in other areas? In other words, will such funds be forthcoming in the future, from FZS or other agencies? Similarly for other costs that are currently incremental.

This is an important aspect of project sustainability. We expect that funding from NGOs, local Government institutions and EU funds will be available for a second phase of replication of best lessons learned, including purchase of land.

15. 2.F.ii 1. Indicators to measure implementation of alternative approaches to conservation in pilot sites. Viesvile: the success indicator is simply the existence of a forest management plan that incorporates biodiversity concerns and wins the approval of the MoE. Add: … and wins the approval of MoE *and the State Forestry Company*.

It has been changed.

Zuvintas: designation of the site as a biosphere reserve by the 1st year. MoE can do the groundwork and the Government of Lithuania can propose that Zuvintas be designated a Biosphere Reserve, but final designation depends on UNESCO.

Yes, the final decision depends on UNESCO. However, the project considers this designation as important and therefore chose to have it as a specific indicator. Proponents are confident that the submission will receive a positive response, given current indications.

16. 2.F.ii 4. Indicators for changes in awareness of target groups. Can you measure changes in tourist behavior, e.g. at Girutiskis, where tourism is a main cause of disturbance?

We believe that changes in attitudes like willingly trespassing a closed area or littering can be measured by regular, well designed surveys. We also believe that the contribution of project activities to change in attitudes can also be measured by means of regular surveys.

17. 2.F.ii 5. Indicators for measuring the effect of project activities on enforcement of reserve regulations. An indicator listed is "assess changes in the rate of trespassing of reserve's boundaries…". With increased patrolling / enforcement, there may be an increase in *registered* trespasses because of an increase in the likelihood of getting caught, but an overall decline in trespassing. It may be difficult to record a decline in trespassing, at least in the short- to medium term.

We take note of this comment. Yes, the project will likely have to estimate the current rate of trespassing and measures changes in relation to that estimated figure.

18. 3. Financing. See A.ii. Rather than presenting a budget in UNDP format (which is for internal UNDP use), it would be more useful to present a budget that provides an overview of funding per project component or output, listing both GEF and co-financing (see example, below).

Project Activities	**GEF Total**	**Co-financing**	**Total**
Component 1: Sustainable management of wetland biodiversity at five important sites			
Outcome 1.1. Sustainable management of Cepkeliai			
Outcome 1.2. Sustainable management of Kamanos			
Outcome 1.3 etc…..			
Subtotal Component 1			
Component 2: Institutionalization of best practices and			

Project Activities	GEF Total	Co-financing	Total
lessons learned			
Outcome 2.1. Establishing of the Multisectoral Wetlands Working Group			
Outcome 2.2 etc….			
Subtotal Component 2			
Project "Coordination Unit"			
Project Steering Committee			
Overhead Costs (8%)			
Contingency (5%)			
Project Total	3,261,700	7,758,100	11,019,800
PDF-B Phase	180,000	0	
Grand Total	3,441,700	7,758,100	11,199,800

Page: 61
In a slightly different format, this information is now available in the IC table (we included the co-financing by source). The information not included in this table is the cost of the PIU (staff, etc.), which is 9.7% of the GEF contribution and 2.6% of the total cost of the GEF alternative (GEF + co-financing)

19. Institutional arrangements for project implementation should be included in section 4 – these are currently missing (or are at least not clearly described). This should include the Steering Committee and its composition, implementation and/or co-ordination units, etc…. If these arrangements are fairly intricate, this should be bolstered by including a diagram.

Implementation arrangements have been added (see page 24).

A.iv Feasibility of implementation, operation and maintenance.

There are a number of risks outlined in the proposal (including the Logframe in Annex 2A) that are indicated by the following assumptions:

- The combination of permits and increased enforcement will be sufficient to control disturbance in Cepkeliai.
- Restoration of hydrology and 300-800 ha of farm- and forest land will be sufficient to eliminate the main threats to Kamanos.
- Forestry practices compatible with biodiversity conservation at Viesvile will be technically feasible.
- A cranberry farm combined with better enforcement will eliminate disturbance at Viesvile.
- Restored hydrology and reduced pollution loads will be sufficient to ensure conservation of wetlands at Zuvintas.
- The combination of user fees, increased enforcement and public awareness campaigns will be sufficient to control disturbance at Girutiskis.
- Restored hydrology will be self-sustaining and sufficient at Kamanos, Girutiskis and Zuvintas.
- Agencies whose actions potentially affect wetland biodiversity are willing to assimilate lessons from the project.
- Draft policy reforms and legislation will be taken up by appropriate authorities.
- A combination of lessons learned/best practice examples, policy formulation and an available budget will ensure replication in other Lithuanian inland wetlands.

To these you may add the following:

- Continued commitment of the MoE and the Government of Lithuania towards conservation of wetlands.
- Budgets available for replication need to expand – this can probably only occur if the Lithuanian economy continues to perform well.

These two assumptions have been added (see assumptions for project development objective in Log Frame).

On the whole, the Conservation of Inland Wetland Biodiversity project provides ample mechanisms for addressing potential pitfalls, and mitigates their impacts on the Project (see section on sustainability). This is especially the case for project activities at the five pilot wetland sites. However, for the institutionalization component of the project (achieving Objective 2), this could be expanded. As listed above (and in the Logframe), are agencies whose actions potentially affect wetland biodiversity willing to assimilate lessons

from the Project? How can this be guaranteed? What degree of commitment is there to the MWWG and to application of best practices in wetland areas?
As mentioned before, the consultations carried out during PDF-B as well as past experiences indicate that the Multisectoral Working Group has good chances of achieving its goals provided it operates in a truly participatory manner and pays genuine attention to the interests of other sectors and parties. Commitment to this project from the various public sector bodies augurs well for intersectoral cooperation in the MWWG during implementation.

B. KEY ISSUES

B.i Scientific and technical soundness of the project
Generally, the project brief is technically and scientifically sound; areas of possible deficiency or where some improvements may be made are mentioned under A.ii and A.iii, above. Key areas that need to be addressed are: i) further elaboration of component 2, institutionalization of best practices and lessons learned;
The description of the component has been expanded and additional financing added.

and ii) institutional arrangements for project implementation. Minor points of deficiency are mentioned at the end of this review (under D).
It has been added to the project document.

B.iv Regional context
Although focused on wetlands within Lithuania, the *Conservation of Inland Wetland Biodiversity in Lithuania* project is of regional importance because of the importance of the country's wetlands in supporting two major bird migration routes. Also, many of the lessons learned, such as addressing:

- conservation issues in a post-*kolkhoz* agricultural environment;
- drainage and conversion of peatlands;
- intensive forestry activity in adjacent areas;
- disturbance due to harvesting activities (of non-timber forest products) in wetland areas; and
- water pollution,

are applicable to other countries in a wider region – not only in the Baltic states, but also apply to Belarus, northern Ukraine and Poland. The Project should therefore strive to formulate its lessons learned in a formalized way, i.e. as a concrete output (i.e. a document) of each of the five pilot site interventions.
We have re-formulated output 6 to address this comment.

B.vReplicability of the Project
Project replication is one of the main objectives of the Project, and is formalized under Objective 2. However, as was mentioned under A.iii (bullet 10), much appears to hinge upon the success achieved with establishing an effective "Multisectoral Wetlands Working Group" (MWWG), and the Reviewer queries is there are precedents for this. Also, if there is no precedence, what guarantees does the proponent have that the various sectors will actively participate in applying the lessons learned? The section on project replication (2.D) should be expanded to reflect clarifications added to 2.B.4.2.
Page: 62
As mentioned above, consultations carried out during PDF-B implementation and past experiences (Local Agendas 21; development of agro-environmental programs) indicates that processes carried out in a participatory manner and that build on the interests of stakeholders can deliver the expected results in Lithuania.

C. SECONDARY ISSUES

C.i Linkages to other focal areas

C.v Capacity building aspects
Under **Objective** 2: Institutionalization of best practices and lessons learned, information and capacity building programs for implementation of new practices are to be provided for staff in different agencies and organizations, so that they can take on board the lessons learned. Capacity building will also be provided for

the implementation of the SAPARD Program Agro-environmental Measures at Zuvintas. The establishment of a cranberry farm in Viesvile will also include training of local community members in farm management. The Project will include training seminars, study tours, local information campaigns, etc.. On the whole, capacity building program seems adequate, although there may be scope for expanding the this in the program of "institutionalization of lessons learned" within agencies and organizations that are to be involved in the replication process. Where the lessons learned are indeed new to the agencies involved, this will not automatically be assimilated unless a mechanism is provided. In some cases, exchanges or study tours may be the best option, while in other cases formal training may be more appropriate. A training needs assessment should therefore be considered, to provide the basis for a strategic approach to capacity building, rather than providing this on an *ad hoc* basis.

The project takes note of this comment and a training need assessment will be included as part of the work within Immediate Objective #2.

E. MINOR CHANGES SUGGESTED FOR IMPROVEMENT OF THE FLYWAYS PROPOSAL

- 2.B.1 Fourth paragraph. Semi-shrub? Better would be dwarf shrub.
- 2.B.4.1 Cepkeliai. Second sentence: Cepkeliai counts with a system…. This should read Cepkeliai uses a system… . Paragraph 5: Better enforcement is deemed as necessary because to the contrary there would be few incentives to obtain a permit. Replace with: Better enforcement is deemed necessary, because otherwise there would be few incentives to obtain a permit.
- There is no 2.B.5 – 2.B.6, 2.B.7 and 2.B.8 should therefore all move up one notch in the numbering sequence.

All changes suggested have been introduced.

ANNEX 2D: MAPS OF PROJECT SITES

Map 1: Selected five Strict Nature Reserves
Map 2: Cepkeliai Strict Nature Reserve
Map 3: Kamanos Strict Nature Reserve
Map 4: Viesvile Strict Nature Reserve
Map 5: Zuvintas Biosphere Reserve (proposed area)
Map 6: Girutiskis Strict Nature Reserve

All maps are available as separate attachment to the project document.

ANNEX 2E: PROJECT WORKPLAN

PROJECT WORKPLAN

Cepkeliai	2003	2004				2005				2006				2007				2008		
	4 qr.	1qr.	2 qr.	3 qr.	4qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.
Preparation and initiation of approval of the management plan for the project site																				
Initiation of approval of optimized area of the reserve																				
Revision of Cepkeliai strict nature reserve regulations regarding cranberry and mushroom picking permits																				
Determination of maximum allowable load of cranberry picking																				
Preparation of the program for establishment of system of transferable permits																				
Establishment of the new permit system (e.g. printing of permits; distribution, etc)																				
Cutting of shrubs in 90 ha of meadows and fens																				
Hay mowing in 40 ha of meadows and fens																				
Cutting of small pine trees in 300 ha of the bog																				
Cutting of thin pinewood in 25 ha of continental dunes																				
Protection, monitoring, etc. daily running																				
Improvement of 38 km of roads for monitoring and management of the reserve																				
Renovation of fire-watching tower																				
Setting of border marking signs																				
Building of road-blocks on the entrance roads to the reserve																				
Litter management																				
Reconstruction of four local homesteads for eco-tourism																				
Adaptation of Grybaulios fish ponds to bird-watching and fishing tourism																				
Establishment of traditional beekeeping farmstead in Musteika village																				
Establishment of traditional farmstead–tourism centre in Zervynos village																				
Reconstruction of recreational facilities by the Kastinis lake (Marcinkonys village)																				
Reconstruction/outfitting of the lecture/ hall and museum																				
Reconstruction of the nature trail leading to the bog																				
Provision of targeted information on newly developed system of transferable permits																				
Provision of targeted information (seminars and publications) on eco-tourism																				
Modernization of the environmental education classroom in Dzukija National Park																				
Provision of Marcinkonys village school with basic field work/nature studying equipment																				

Kamanos	2003	2004				2005				2006				2007				2008		
	4 qr.	1qr.	2 qr.	3 qr.	4qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.
Preparation and initiation of approval of the management plan for the project site																				
Initiation of approval of optimized area of the reserve																				
Preparation and approval of legal acts introducing compensation mechanisms																				
Preparation of hydraulic regime restoration plan																				
Preparation of compensation methodology and procedures																				
Negotiations with land owners (meetings, consultations, etc)																				
Preparation of land purchase and compensation agreements																				

Purchase or compensation of 300-800 ha of land from land owners																				
Damming up of the network of drainage ditches																				
Cutting of small pine trees in 80 ha of the bog																				
Reconstruction of refuge in the reserve for staff and storage of monitoring equipment																				
Protection, monitoring, etc. daily running																				
Improvement of 8 km of roads needed for monitoring and management of the area																				
Closure of Juciai village dumping site and clearing out of the area																				
Demounting of the former collective farm buildings and clearing out of the area																				
Reconstruction of VC/Administration building																				
Establishment of exposition and outfitting of lecture hall																				
Establishment/reparation of information stands																				
Provision of information on wetland conservation and alternative income sources																				
Provision of Akmene schools with basic field-work/nature studying equipment																				
Viesvile	2003	2004				2005				2006				2007				2008		
	4 qr.	1qr.	2 qr.	3 qr.	4qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.
Preparation and initiation of approval of the management plan for the project site																				
Initiation of approval of optimized area of the reserve																				
Development of program for sustainable use of forest basing on Karsuva Forest																				
Revision of rules for preparation of forest management plans																				
Preparation of the Karsuva Forest biodiversity-friendly management plan																				
Cooperation with State Forest Enterprises on implementation of management plan																				
Cutting of shrubs in 7 ha of meadows and fens																				
Hay mowing in 7 ha of meadows and fens																				
Introduction of capercaillies																				
Building of fish bypasses on two dams																				
Restoration of sea trout population in Viesvile river																				
Forest inventory																				
Key-habitat inventory																				
Protection, monitoring, etc. daily running																				
Reparation of Administrative building																				
Improvement of 30 km of roads needed for monitoring and management of the area																				
Setting of border marking signs																				
Building of road-blocks on the entrance roads to the reserve																				
Reconstruction of Eiciai heating plant																				
Determine type of pesticides and repair storehouse																				
Reconstruction of Eiciai sewage treatment plant and expansion of sewerage																				
Construction of reserve administration /VC sewage treatment plant																				
Reclamation of dumping site in Eiciai village																				
Clearing-up of Viesvile dumping site																				
Litter management																				
Establishment of pilot cranberry farm																				
Cooperation with State Forest enterprises on establishment of alternative recreational campsites further from the reserve																				
Establishment of recreational facilities in Viesvile village																				
Establishment of the Panemuniai bicycle trail nearby Viesvile village																				
Establishment of the pier for tourists in Viesvile village																				
Reconstruction of local homesteads for eco-tourism																				

Building of seasonal Visitor Centre																				
Outfitting of seasonal Visitor Centre																				
Establishment/reparation of information stands																				
Establishment of nature trails																				
Provision of targeted information on biodiversity protection and nature management																				
Provision of targeted information (seminar and publications) on cranberry farming																				
Provision of Viesvile school and Club of young foresters with basic field-work/nature studying equipment																				
Education of nature guides																				
Zuvintas	2003	2004				2005				2006				2007				2008		
	4 qr.	1qr.	2 qr.	3 qr.	4qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.
Preparation of regulations for the biosphere reserve																				
Establishment of Zuvintas biosphere reserve																				
Preparation and initiation of approval of the management plan for the project site																				
Preparation of water management plan for the Dovine River basin																				
Implementation of the first priority measures for renaturalization of Zuvintas lake water regime																				
Implementation of the first priority measures for renaturalization of Amalvas wetland																				
Removal of sediments from Spernia rivulet																				
Removal of floating vegetation in selected sectors of the Zuvintas lake																				
Cutting of shrubs in 150 ha of meadows and fens																				
Hay mowing in 250 ha of meadows and fens																				
Cutting of small pine trees in 200 ha of the bog																				
Preparation of contracts with local people for meadow, fen and reed-bed management																				
Forest inventory																				
Chemical monitoring of the Zuvintas Lake																				
Protection, monitoring, etc. daily running																				
Establishment and maintenance of two new positions in the reserve																				
Building of machinery shed																				
Improvement of water supply system																				
Improvement of the surrounding area of Visitor Centre																				
Reconstruction of heating plant and heating system in Simnas town																				
Establishment of sedimentation pond in Simnas fish ponds																				
Reconstruction of Simnas town sewage treatment plant and expansion of sewerage																				
Reconstruction of Azuoliniai village sewage treatment plant																				
Reconstruction/ establishment of Mergalaukis settlement sewage treatment plant																				
Closure of the Simnas dumping site																				
Facilitation of SAPARD Programme Agro-environmental Measure																				
Establishment of protective shore belts of water bodies; environmentally friendly agriculture; Management of landscape and protection of biodiversity																				
Capacity building for the implementation of the SAPARD Programme Agro-environmental Measure																				
Establishment of NGO/fund for eco-farming promotion																				
Transformation of former water pumping station in Zaltytis Lake into a guest-house																				
Reconstruction/outfitting of the museum and lecture hall/nature school																				
Establishment of the nature trails																				
Establishment/reparation of information stands																				
Provision of targeted information on wetland conservation and ecological farming																				

Modernization of the Ecological Education Division in Marijampole municipality																				
Provision of local schools with basic field work/ nature studying equipment																				
Girutiskis	2003	2004				2005				2006				2007				2008		
	4 qr.	1qr.	2 qr.	3 qr.	4qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.
Preparation and initiation of approval of the management plan for the project site																				
Initiation of assigning of Girutiskis land to Labanoras regional park administration																				
Preparation of documentation for Ramsar designation																				
Damming up of two drainage ditches (in Balinės and Aisputiškio raised bogs)																				
Cutting of shrubs in 5 ha of the most valuable fens and meadows																				
Cutting of small pine trees in the selected area (60 ha) of former open bog																				
Monitoring of number of visitors in the Labanoras ward of the regional park																				
Protection, monitoring, etc. daily running																				
Establishment of two new positions in the Labanoras regional park administration																				
Setting of border marking signs																				
Building of road-blocks on the entrance roads to the reserve																				
Planning and reconstruction of bypass																				
Forest management and maintenance of recreational facilities																				
Improvement of roads needed for monitoring, fire protection and management of the area																				
Implementation of fire protection measures																				
Closure of Labanoras dumping site and restoration of the area																				
Litter management, improvement of water body protection belts etc.																				
Increase of fish populations in Liedis, Liedaitis and Persoksnai lakes																				
Transformation of local homestead in Labanoras village into eco-tourism homestead																				
Establishment of recreational water - route in Persoksna River																				
Determination of maximum allowable tourist load for the reserve																				
Development of the system of visitor fees																				
Reconstruction/adjustment of storehouse in Januliškis into seasonal Visitor centre																				
Establishment of the new nature trail and reconstruction of the existing (Persoksna) one																				
Provision of targeted information (seminars and publications) on eco-tourism																				
Introduction of new liter management system																				
Provision of local schools with basic field work/ nature studying equipment																				
Common	2003	2004				2005				2006				2007				2008		
	4 qr.	1qr.	2 qr.	3 qr.	4qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.
Purchase of equipment and machinery for nature management and monitoring																				
Training of the project sites staff																				
Public awareness (information campaign)																				
Institutionalization of lessons learned	2003	2004				2005				2006				2007				2008		
	4 qr.	1qr.	2 qr.	3 qr.	4qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.	4 qr.	1 qr.	2 qr.	3 qr.
Confirm best composition, mandate and goals for the multisectoral working group in charge of ensuring																				

replication of best lessons learned in inland wetland conservation in Lithuania																			
Codify lessons and best practices from wetland-friendly agricultural activities particularly the effectiveness of regulations/incentives, new management regimes and financing mechanisms;																			
Codify lessons and best practices from wetland-friendly forestry activities particularly the adoption of FSC, alternative legal systems and ministerial responsibilities;																			
Codify lessons and best practices from integrated land use planning particularly the effectiveness of current regulations, EIAs, public participation and other incentives;																			
Codify lessons and best practices from sustainable harvest of wetland products based on the effectiveness of project experience with tradable permits, enforcement, public awareness, and models for community off-site production systems;																			
Codify lessons and best practices from tourism management based on the effectiveness of user fees, local participation and increased enforcement;																			
Codify lessons and best practices from the area of wetland restoration particularly sustainable management practices for wetland meadows;																			
Undertake analyses of potential policy reforms in agriculture, forestry, tourism, nature conservation; produce draft legislation for submission to appropriate bodies/authorities																			
Seminars/workshops for policy makers, legislators																			
Design multisectoral plan for replication of best lessons to other wetlands in Lithuania																			
Production of demo, guides and other material for sharing of best lessons to outsiders																			
Approval of plan for replication of lessons by MoE																			

ANNEX 2F: INCREMENTAL COST ANALYSIS

2.b.5.i. Describe project outputs (and related activities and costs) that result in *global* environmental benefits.

The restoration of selected bogs, fens and meadows are the project's sub-outputs (and related activities) that provide mainly global benefits. This is because among the many areas in need of restoration activities, the ones targeted by this project have been selected primarily in terms of the habitat needs of species of global significance. Restoration of selected habitats takes place in all five sites and the cost distribution is as follows

Project Sites	Global Benefits	
	GEF Contribution (US$)	Other Contribution (US$)
Cepkeliai	101,101	54,350
Kamanos	48,474	54,285
Viesvile	74,670	54,275
Zuvintas	287,902	54,217
Girutiskis	48,110	54,302
TOTAL	**560,257**	**271,429**

The activities financed include the cutting of vegetation such as trees and shrubs in bogs, fens and meadows. Overgrowth of these habitats by vegetation is a consequence of changes in the hydraulic regimes at the sites – as the water table falls, soils become drier, a factor favoring colonization of wetland habitats by trees and shrubs. Therefore, should original hydraulic regimes be restored within reserves, the habitat restoration activities constitute a one-time expense.

2.b.5.ii. Describe project outputs (and related activities and costs) that result in joint global and national environmental benefits.

The majority of project's sub-outputs produce global and national benefits. The list for each site and contributions from parties is as follows:

Outputs by project Sites	Joint Benefits	
	GEF Contribution	Other Contribution
Output 1: Wetland biodiversity protected in **Cepkeliai** Strict Nature Reserve; *Of which*	**362,297**	**447,419**
Alternative system of permits established	21,373	2,919
Management plan developed and under implementation	102,311	55,497
Enforcement of reserve regulations strengthened	46,802	43,681
Increased public awareness and support for conservation of Cepkeliai reserve;	191,811	345,322
Output 2: Wetland biodiversity protected at **Kamanos** Strict Nature Reserve *Of which*	345,751	640,398
Management plan developed and under implementation	83,918	57,743
Former hydraulic regime re-established	149,247	458,102
Increased public awareness and support of local communities for wetland conservation	112,586	124,553
Output 3: Wetland biodiversity protected at **Viesvile** Strict Nature Reserve *Of which*	**395,424**	**523,696**
Management plan developed and under implementation	59,271	65,673
Forestry practices around Viesvile reserve are compatible with conservation of wetland biodiversity	42,675	106,038
Cranberry pilot farm established and managed by local communities	10,269	12,061
Sea trout and lamprey migration restored in the Viesvile River, and Capercaillies successfully reintroduced in Karsuva Forest	99,614	20,102
Increased awareness and support for conservation of Viesvile Reserve among forester staff, local communities engaged in mushroom and cranberry picking and occasional tourists	165,795	285,347
Enforcement of reserve boundaries and regulation strengthened	17,800	34,475
Output 4: Wetland biodiversity protected at **Zuvintas** Reserve *Of which*	**898,131**	**1,360,476**
Biosphere Reserve established and management plan under implementation	126,807	222,730
Restored hydraulic regime in the Dovine river and Zuvintas lake	485,364	22,992
Environmentally friendly agricultural practices introduced in buffer zone of biosphere reserve	69,299	843,370
Public support and awareness for conservation of Zuvintas reserve increased	216,661	271,384
Output 5: Wetland biodiversity protected in **Girutiskis** Strict Nature Reserve *Of which*	**448,340**	**692,496**
Girutiskis reserve established as Ramsar site and management plan under implementation	58,063	125,640
System of entrance fees established and operational	22,356	0
Original hydraulic regime restored	12,743	0
Enforcement of reserve boundaries and regulations strengthened	30,180	114,940
Increased public awareness and support from local communities and tourists on wetland biodiversity in Girutiskis	324,998	451,917
Output 6: Formal intersectoral mechanism for replication of best lessons learned in conservation of inland wetland biodiversity established and operational *Of which*	250,800	10,000
Multisectoral working group established	0	0
Plan for replication of lessons to other wetlands in Lithuania developed and agreed; policy analyses, draft legislation, seminars, guidelines, etc.	250,800	10,000
TOTAL	**2,700,743**	**3,674,485**

The sub-outputs expected from each site contribute to ensure protection of biodiversity of global significance but at the same time show spillovers in terms of national benefits. For example, the successful implementation of alternative approaches to wetland conservation (e.g. harvesting permits in Cepkeliai; users fees in Girutiskis; etc.) is dependent on having in place a number of accompanying measures like increased public support and awareness for wetland conservation, increased enforcement of reserve regulations and the timely implementation of approved management plans for each site.

While the ultimate objective of these alternative approaches is the conservation of biodiversity of global significance, increased public support for wetland conservation extends its benefits not only to the conservation of species of global significance but to all wetland species present in the target sites, including, of course, species of national significance. The same argument holds for increased enforcement of reserve regulations and boundaries. Trespassing causes damages not only to habitat of globally significant species but also habitat that is important for species of national and/or local interest. Similarly, the implementation of management plans for reserves - which include components of monitoring and improvement of technical capacity of their staff - benefits both species of global and national significance.

The restoration of original hydraulic regimes in several reserves is primarily intended to ensure the long-term conservation of the sites as well as to make restoration of globally important bogs and fens a one-time investment. The latter is an objective closely related to the GEF sub-outputs that were considered to show overwhelmingly global benefits (see previous sub-section). The restoration of a hydraulic regime, however, favors the long-term conservation of bogs and fens in general, not only those that are important for species of global significance.

The establishment of an alternative cranberry farm at Viesvile has also been identified as an output that provide benefits both to the national and global levels. At the national level, benefits take the form of a modest income supplement to local individuals that were picking cranberries inside the reserve and that now choose to participate in establishing and running the farm. The ultimate objective of the farm, however, is not the provision of an alternative income source but to divert disturbance pressure outside of the reserve. The existence of the farm, the provision of technical support to maximize output from the farm, and increased enforcement of reserve regulations and boundaries are expected to reduce damage to habitat of global and national significance from Trespassing and disturbance. Thus benefits exist both at the national and global levels.

In Zuvintas, the project co-finances activities aimed at promoting the adoption of environmentally friendly agricultural practices. In general, these activities show clear national benefits in terms of reduced pollution and sustainable development. For this project's sub-output, the GEF contribution is aimed at identifying those farms whose reconversion presents the most benefits in terms of conservation of globally significant biodiversity, or in other words, for defining a priority list of farms for re-conversion from a global point of interest. Thus benefits exist both at the national and global levels.

Finally, the institutionalization of best lessons and practices learned from this project has also been considered as an output that provides global and national benefits. From a global perspective, the five sites selected by this project constitute a first step in a long-term effort to conserve wetlands of global significance in Lithuania. The replication of these lessons to other areas in Lithuania that host biodiversity of international importance will benefit the global community. In addition, lessons learned from the project can be replicated in other countries, not only in Lithuania. From a national perspective, lessons learned are valid to protect wetlands in general, not only those that may show international significance, and therefore national benefits also occur.

2.b.5.iii. Describe project outputs (and related activities and costs) that result in *national* environmental benefits.

The project sub-outputs that have been considered to provide overwhelmingly national benefits are those related to diminished levels of water and solid waste pollution. Yet, these sub-outputs are still necessary to ensure the long-term success of project objectives. Water pollution contributes to increased eutrophication in Zuvintas and Viesvile and indirectly to the overgrowth of water bodies by vegetation. Some of these water bodies, the Zuvintas Lake for example, are important habitats for species of global significance. Benefits from these activities are mainly local though there are some benefits for the global community in terms of eliminating sources of smoke that may affect the reserves. Finally, the project includes activities aimed at improving the management of solid waste in Viesvile. These activities show overwhelmingly national benefits though there are some benefits for

the global community, mainly in terms of helping to maintain the reserves free of solid waste. The distribution of costs for activities is as follows:

Outputs by project sites	National Benefits	
	GEF Contribution	**Other Contribution**
Output 3: Wetland biodiversity protected at **Viesvile** Strict Nature Reserve	**0**	**332,888**
Of which		
Water and solid waste pollution reduced at Viesvile	0	332,888
Output 4: Wetland biodiversity protected at **Zuvintas** Reserve	**0**	**4,679,198**
Of which		
Water pollution reduced in Zuvintas	0	4,679,198
TOTAL	**0**	**5,012,086**

2.b.5.iv. Describe the process used to jointly estimate incremental cost with in-country project partner.
The estimation of the incremental cost of the project flowed from the threat analysis and the development of the logical framework matrix. The first threat analysis was undertaken during the development of the PDF-B document and later revalidated at FSP preparation stage. Based on this analysis, the local team of experts, with the assistance of UNDP/GEF, took the lead in defining the project's immediate objectives, outputs, activities and their associated costs. The next step was to categorize activities and outputs in terms of their potential for generating global and/or national benefits. Almost all activities were considered to provide at least some minimal benefits in either category. The project team, however, agreed that activities that showed overwhelming national or global benefits should be subsequently classified as such even if providing some benefits in the other category. For example, activities aimed at reducing water pollution were classified as within those providing exclusively "national benefits" even though positive spillovers do happen for species of global significance. Similarly, the restoration of selected habitats that are important mainly for species of global significance were activities considered as providing "global benefits" even though these same habitats can, and will be, used by other local species.

The majority of project sub-outputs were considered to provide both global and national benefits. For these sub-outputs, neither category (global/national) showed benefits in a magnitude overwhelmingly greater or superior to the other. In fact, one could argue that for these sub-outputs, the realization of global benefits is at least partially dependent on the realisation of national benefits. The distribution of costs between the GEF and local sources for outputs showing global and national benefits was a subject of several discussions among the local team, government counterparts and UNDP/GEF. It was agreed to take the document GEF/C.20/6 "Co-financing" (2002) as a guiding framework for distribution of project costs.

After the categorization of activities was done and agreed, the project team undertook a sustained effort to ensure the financing of project activities. A dialogue with potential co-financiers had begun early during the PDF-B stage and this proved to be highly beneficial. The project team had been in close contact with local officials in charge of the SAPARD and ISPA programs. This process of consultation resulted in an agreement with the Ministry of Agriculture and the Ministry of Environment to nominate Zuvintas as a pilot site for SAPARD and ISPA programs. The early and sustained effort of the project team to obtain co-financing also resulted in having water and solid waste pollution in Viesvile tackled through the ISPA program. The government of Lithuania and the local municipalities also constituted an important financing source and ensured the feasibility of activities like increasing the enforcement of reserve regulations, ensuring public support for conservation of the reserves, undertaking public awareness and educational programs and others. Foreign organizations and institutions, like the Frankfurt Zoological Society, also greatly helped to bridge financing gaps in activities that were considered to provide national and global benefits.

2.b.5.v. Present the incremental cost estimate. If presented as a range, then a brief explanation of challenges and constraints and how these would be addressed by the time of CEO endorsement.

Development Objectives. The Government of Lithuania is committed to complete a successful transition from a planned economy to a market-based one. In this process, the integration with the European Community is considered as a fundamental cornerstone. The Government of Lithuania takes the transition process to a fully market based economy and integration with EU as a mean to increase living standards of the population while respecting principles of sustainable development.

Baseline scenario. The government of Lithuania has identified wetland biodiversity as a top priority for conservation action in its National Biodiversity Strategy and Action Plan and other plans of action like "Protection of Wetland Ecosystems" and "Protection of Species". The activities covered by these plans are substantive and include a ban on new exploitation of wetlands, the restoration of excavated peat lands and the restoration of some selected wetlands. Other actions include the improvement of the legal framework, institutional strengthening, territorial planning/design, research and monitoring, information, training and education. Wetlands and their biodiversity protection have also high priority in the National Environmental Protection Strategy.

The government makes substantive efforts to secure enough funding for the system of Strict Nature Reserves, in particular, to ensure the maintenance of reserve infrastructure, the timely payment of salaries and the execution of primary research activities. These contributions are crucial for the success of this GEF initiative. In addition to its own resources, the government has also been active in tapping external sources of funding for the establishment of a solid baseline. These include allocations that helped to integrate local policies and procedures to EU requirements[18], the preparation of an Agro-environmental program for Lithuania[19], the execution of public educational and awareness campaigns[20] and the habitat inventories among others[21].

The baseline ensures a basic level of protection in the Strict Nature Reserves targeted by this project and basic coordinating functions with other government agencies with mandates affecting wetlands in one way or another. However, the baseline is neither enough to fully protect sites that are important habitats for species of global significance nor sufficient to carry out a long-term plan aimed at protecting the wider system of wetlands in Lithuania. Taking all contributions into account, the baseline has been estimated at **US$ 2,347,396** out of which **US$ 1,466,400** is devoted to running the reserves, an action considered as necessary for project objectives and therefore taken as co-financing.

The GEF Alternative. The alternative builds upon the existing baseline and provides technical and financial resources to ensure the protection of biodiversity in 5 pilot sites through the application of alternative approaches to wetland conservation in Lithuania, to institutionalise lessons learned and to ensure their replication to other wetlands in the country. Based on their socio-economic characteristics, each project site tests a different approach to wetland conservation and there is a project output specifically designed to take stock of these lessons and ensure their replication to other sites after project termination date (for further details see section "Brief description of project strategy at each site"). Taking into account all contribution, the GEF alternative amounts to **US$ 14,566,396**.

Incremental Cost of the GEF alternative. The difference between the GEF alternative and the baseline amounts to **US$ 12,219,000** which represents the incremental cost of achieving sustainable global environmental benefits. Of this amount, the contribution from non-GEF sources amount to **US$ 8,958,000**. The GEF will provide **US$ 3,261,000**.

[18] "Harmonization of Lithuanian capacity, policies and procedures on nature protection to EU requirements, with particular focus on implementation of the EEC Habitats directive (92/43) and the EEC Birds directive (79/409)"; US$ 172,500. Danish Environmental Protection Agency.
[19] "Preparation of an Agro-environmental program for Lithuania"; US$ 40,635. Avalon Fund, Veen Ecology, Europe Environmental Policy Institute and the Ministry of Agriculture, Nature Management and Fisheries of the Netherland.
[20] "Education on wheels: European Union and Environmental Issues". Developed educational programs and exhibitions on biodiversity, eco-farming, water, waste management and energy saving; US$ 25,200. Phare ACCESS Program for EC.
[21] "Pilot Woodland Key Habitat Inventory in Lithuania"; US$ 188,330; Swedish Environmental Protection Agency.

Incremental Cost Matrix

Output	Cost Category	US$ million	Domestic Benefit	Global Benefit
1. Wetland biodiversity protected in **Cepkeliai** Strict Nature Reserve	Baseline (MoE; Phare/Access; SEPA; RSGF; DEPA; LEF; Avalon; Municipal.)	552,922	The baseline allocation is able to ensure basic functioning of the reserve though damage from disturbance continues to occur	
	Alternative	1,518,089	Damage from disturbance is eliminated or reduced to a minimum through the establishment of a system of permits and associated activities. Lessons in wetland conservation are learned for application in other wetlands in Lithuania and elsewhere.	Globally significant habitat is preserved and lessons are learned for application in other wetland in Lithuania.
	Increment *Of which*: MoE L. Cadastre Phare Municipal. ECAT Eco-Clubs OMPO SRF Dzukija National Park Biota SAPARD/ Municipal. PASRT EPA **Non-GEF** **GEF**	965,167 71,948 5,720 19,900 22,320 3,120 2,060 19,700 43,400 46,700 137,000 70,000 54,000 5,800 **501,768** **463,398**		
2. Wetland biodiversity protected at **Kamanos** Strict Nature Reserve	Baseline (MoE; FSZ; Phare/Access; SEPA; RSGF; DEPA; LEF; Avalon; Municipal.)	472,621	The baseline allocation is able to ensure basic functioning of the reserve though habitat damage from drainage of the bog for agricultural purposes continues to occur.	
	Alternative	1,561,528	Damage from drainage of the bog for agricultural purposes is eliminated through the reconversion of farming area adjacent to the reserve and the closing of drainage channels. Lessons in wetland conservation are learned for application in other wetland in Lithuania.	Globally significant habitat is preserved and lessons are learned for application in other wetland in Lithuania and elsewhere.

	Increment *Of which*: MoE L. Cadastre PASRT Phare Municip. ECAT Eco-clubs SRF FZS EPA **Non-GEF** **GEF**	1,088,908 124,062 5,720 54,000 19,900 22,320 3120 2,060 7,700 450,000 5,800 **694,682** **394,225**		
3. Wetland biodiversity protected at **Viesvile** Strict Nature Reserve	Baseline (MoE; Phare/Access; SEPA; RSGF; DEPA; LEF; Avalon; Municipal.)	349,939	The baseline allocation is able to ensure basic functioning of the reserve but disturbance from forestry practices around the reserve and habitat damage from disturbance continue to occur.	
	Alternative	1,730,893	Disturbance from forestry practices around the reserve and habitat damage from Trespassing of reserve boundaries is eliminated or reduced to a minimum. Lessons in wetland conservation are learned for application in other wetland in Lithuania.	Globally significant habitat is preserved and lessons are learned for application in other wetland in Lithuania and elsewhere.
	Increment *Of which*: MoE L. Cadastre PARST Phare Municip. ECAT Eco-clubs SRF SFE SFC SFF WNSF KHP ISPA EPA Lithuanian Cranberry Growers Association with Canadian partners **Non-GEF** **GEF**	1,380,954 93,339 5,720 54,000 17,000 490,920 3,120 2,060 34,300 27,000 14,300 82,800 5,700 5,700 57,100 5,800 12,000 **910,859** **470,094**		

4. Wetland biodiversity protected at **Zuvintas** Reserve	Baseline (USEPA; MoE; FmoE; Phare/Access; SEPA; RSGF; DEPA; LEF; Avalon; Municipal.)	397,339	The baseline allocation ensures basic functioning of the reserve but Zuvintas lake and other significant wetland habitats continue to be overgrown by vegetation, which in turn is a result of a dysfunctional hydraulic regime and pollution from point and non-point sources.	
	Alternative	7,677,263	A biosphere reserve is established at Zuvintas and an integrated management plan for the area is under implementation. There are reduced pollution loads and several farms are reconverted to environmentally friendly and sustainable agriculture. Income sources are diversified. Lessons in wetland conservation are learned for application in other wetland in Lithuania.	Globally significant habitat is preserved and lessons are learned for application in other wetland in Lithuania and elsewhere.
	Increment *Of which*: MoE L. Cadastre PARST Phare Municip. ECAT Eco-clubs SAPARD/ Municipal. SFC SFF ISPA EPA MATRA Private **Non-GEF** **GEF**	7,279,924 200,471 5,720 54,000 37,000 273,820 3,120 2,060 745,000 40,000 38,600 4,386,200 7900 95,000 205,000 **6,093,891** **1,186,033**		
5. Wetland biodiversity protected in **Girutiskis** Strict Nature Reserve	Baseline (State Budget; MoE; Phare/Access; SEPA; RSGF; DEPA; LEF; Avalon; Municipal.)	539,052	The baseline allocation is able to ensure basic functioning of the reserve but disturbance from tourism continues to occur.	
	Alternative	1,782,300	Disturbance from tourism is eliminated through the introduction of user fees, improved enforcement of reserve regulations and increased capacity to manage tourists loads. Additional income source from fees is available for conservation activities.	Globally significant habitat is preserved and lessons are learned for application in other wetland in Lithuania and elsewhere.

	Increment *Of which*: MoE L. Cadastre PARST Phare Municip. ECAT Eco-clubs SRF SFE SFC Private Atgaja EPA **Non-GEF** **GEF**	1,243,248 273,179 5,720 54,000 14,200 20,020 3,120 2,060 114,300 58,000 8,600 177,400 10,400 5,800 **746,799** **496,450**		
6. Formal intersectoral mechanism for replication of best lessons learned in conservation of inland wetland biodiversity established and operational	Baseline (MoE)	35,523	Basic coordination among relevant units and institutions with mandates and/or responsibilities related to wetland management and conservation.	
	Alternative	296,323	Greater integration and coordination. Savings from greater efficiency of government resources directed to wetland conservation and management.	Globally significant habitat is preserved in other wetlands of Lithuania
	Increment *Of which*: **MoE** **GEF**	260,800 **10,000** **250,800**		
Total	Baseline	2,347,396		
	Alternative	14,566,396		
	Increment Of which: **Non-GEF** **GEF**	12,219,000 **8,958,000** **3,261,700**		

ANNEX 2G: STAKEHOLDER PARTICIPATION

Involvement of stakeholders in project preparation

The PDF-B that led to the preparation of this project document was designed to ensure the full participation of all relevant stakeholders. At the government level, the work undertaken during the PDF-B involved representatives from the Forestry Department, Joint Research Center, Department of Water Resources and State Service of Protected Areas (representatives from the central structure as well as the local staff in the selected Strict Nature Reserves) under the Ministry of Environment and representatives from the Ministry of Agriculture. At the academic and research level, the Institute of Botany, the Institute of Ecology, the Institute of Geology and Geography, Geological Survey of Lithuania and the Institute of Forest Management collaborated closely in the development of this project.

At the local and regional level, the process of project design received advice and inputs from communities around the reserves. Depending on the threats encountered at each site, specific inputs by particular groups were actively sought. The inputs of those groups involved in cranberry picking were of great importance in Cepkeliai and Viesvile where the project plans to introduce tradable permits and a cranberry farm respectively. The inputs of foresters were crucial in Viesvile, where the project will finance the beginning of a long-term collaborative effort with the State Forestry Company. The project involved the farming communities in the design of activities in Kamanos and Zuvintas, where the project plans to introduce land purchase, compensation and environmentally friendly land management practices. The definition of project activities aimed at improving enforcement of reserve regulations counted with the active collaboration of reserve staff. The selection of priority areas for restoration was a result of targeted research by the Institute of Botany and the Institute of Ecology and consultations with reserve staff at each site.

The project involved other international agencies and donors operating in Lithuania. It established close collaboration with the offices of the SAPARD and ISPA programs, which are directing their resources to sites selected by this project[22]. Representatives from the Ministries of Environment of Finland, Denmark, Sweden and the Dutch Ministry of Agriculture, Nature Management and Fisheries were consulted periodically during project preparation process. Local and international NGOs participated in regular discussions about project objectives and alternatives for achieving these objectives. One of the outputs of these consultations was the close collaboration established with the Frankfurt Zoological Society, which is financing land purchase in Kamanos strict nature reserve, and with OMPO (Migratory Birds of the Western Palearctic), which will assist in biodiversity conservation activities in Cepkeliai strict reserve.

In summary, the process of project development took the form of successive iterations with all relevant stakeholders placing emphasis on particular groups at each project site according to identified threats. Consultations were regularly conducted throughout the PDF-B and included workshops, interviews and open forums with a varied cross section of local and international stakeholders.

Involvement of stakeholders in project implementation

The project includes several mechanisms to ensure stakeholder participation. At the national level, the project cross-sectoral steering committee that guided project preparation will continue into project implementation. Moreover, additional actors will be involved to reach a wider representation of organizations. At the project sites, specific groups will actively participate in further definition of project activities as well as in their implementation. Below there is a summary of expected stakeholder participation at each site and proposed mechanisms.

[22] The SAPARD program chose Zuvintas as one of its three pilot sites for agro-environmental measures because of the clear synergies between its objectives and the GEF objectives. The ISPA program also directed resources to Zuvintas and Viesvile in view of the clear synergies among GEF, SAPARD and ISPA activities. The PDF-B project team was responsible for securing this collaboration among agencies.

Cepkeliai. Through a regular process of consultations, surveys and open forums, the local community will participate in the design of the alternative system of permits. This participation will complement the inputs from the authorities of the reserve, staff from the Ministry of Environment and other technical experts as deemed appropriate. Local communities will continue to be consulted on best avenues for their role/participation in protection activities in the reserve. The design of activities aimed at improving enforcement of regulations and executing public information campaigns has already received the input of the public, reserve authorities and technical experts. A rapid process of re-validation with stakeholders will be done prior to their execution.

Kamanos. Because of the nature of project activities, activities in Kamanos cannot be carried out without the direct involvement of targeted stakeholders. In collaboration with the Frankfurt Zoological Society, the project will facilitate negotiations between the reserve and farmers regarding alternatives that ensure conservation of biodiversity in the strict nature reserve. This participation will take the form of open forums, workshops, and individual consultations as different alternatives are explored.

Project activities aimed at decreasing disturbance in the reserve from local people and public information campaigns have been widely discussed and their content agreed with the general public, authorities of the reserve and technical experts. Nevertheless, design and execution arrangements will undergo a rapid process of re-validation with stakeholders prior to their implementation.

Viesvile. The participation of local communities in project implementation will concentrate on the design and management of the cranberry farm, which is the chosen project strategy to diminish disturbance in the reserve. The establishment of the farm will test whether the income from an alternative supply of cranberries combined with better enforcement of reserve regulations and increased public awareness can significantly diminish the rate of trespass in the reserve and hence disturbance to habitat of global significance. Local communities will take the leading role in establishing and overall management/maintenance of the farm installations.

Project activities aimed at introducing alternative forestry practices have been jointly developed with the State Service of Protected Areas, State Forestry Department and the local State Forestry Company. Implementation of project activities will continue along the present collaborative arrangements, that is, joint design and implementation of activities. The implementation of project activities aimed at reducing pollution loads have been agreed with the authorities of the local communes and the co-financiers. Local authorities will take the lead role in coordinating the technical and financial inputs of co-financiers and government. Finally, the design of activities aimed at improving enforcement of regulations and the implementation of public awareness campaigns has already received inputs from the public, reserve authorities and technical experts. All things being equal, local groups will be given priority in contracting to implement local public awareness campaigns.

Zuvintas. Direct participation by local communities will take place mainly in regard to three project outputs. One is the restoration of meadows and fens, in which the reserve will contract local stakeholders to maintain and manage them. The nature of these contracts and benefit sharing between the reserve and locals will be discussed and agreed during project implementation. The second will be the participation in facilitating access by local farmers to SAPARD funds (mainly through a program of "train the trainers"). The characteristics of the program will be agreed and jointly implemented by locals, reserve authorities, staff from the MoE and staff from SAPARD. The third will be the establishment of a local association for promotion of agri-environmental activities in Zuvintas, which is an avenue of work suggested by local stakeholders during the PDF B.

The authorities of the local communities have already been working with the project team and the SAPARD and ISPA programs in defining the scope and nature of investments in Zuvintas. This collaboration is expected to continue during project implementation. Finally, the design of public information activities has already received inputs from the public, reserve authorities and technical experts. Implementation arrangements will be further discussed with stakeholders before start-up. All

things being equal, local groups and associations will be given priority in contracting to implement local public awareness campaigns.

Girutiskis. The experts from the MoE will take the lead in defining the characteristics of the system of users fees. This process will receive technical inputs from reserve authorities, staff from the Ministry of Finance and other local or foreign technical expertise, as appropriate. There will be regular forums with local communities to discuss alternative designs for the system of user fees. There will also be several surveys of visitors to the site to determine the level of acceptance of potential fee schedules and other issues as necessary. All things being equal, local groups will have priority in contracting to execute project activities aimed at restoring globally significant habitats (e.g. clearing of vegetation in bogs) and the original water regime (e.g. closing drainage channels).

Summary. From an early stage, the project's activities have been designed taking into account inputs from a wide range of stakeholders from each target site. Implementation of the project will continue with this process of consultation as activities are implemented. Depending on the project site, different stakeholder groups will take the lead in further defining and implementing project activities. The project implementation unit and its associated experts will have the role of facilitating this process of participation and therefore contributing to increase local ownership of project goals.

ANNEX 2H: COFINANCING TYPE AND PURPOSES

Source	Amount	Type	Purpose
MoE	2,239,400	Cash/In kind	• Running and maintenance of reserves (all sites); • Reconstruction/adjustment of storehouse in Januliškis into seasonal Visitor Centre (Girutiskis); • Reconstruction of VC/Administration building (Kamanos); • Reparation of Administrative building (Viesvile); • Reconstruction of Eiciai sewage treatment plant and expansion of sewerage (Viesvile); • Construction of reserve administration / VC sewage treatment plant)(Viesvile); • Building of seasonal Visitor Centre (Viesvile); • Improvement of reserve installations (Zuvintas); • Training of protected area staff (all sites)
Public Agency Soil Remediation Technologies	270,000	Cash	• Purchase of equipment (all sites);
Land cadaster	28,600	In kind	• Development of cartographical material on land ownership (all sites);
Phare	108,000	Cash	• Establishment of protected area border marking and information provision system (all sites) • Preparation of management plans for reserves (all sites);
Municipalities	829,400	Cash/In-kind	• Environmental Awareness Campaigns; • Reconstruction of four local homesteads and adaptation for eco-tourism (Cepkeliai); • Provision of local schools (in Švenčionėliai and Kaltanėnai) with basic field work/ nature studying equipment (Girutiskis); • Damming up of the network of drainage ditches (Kamanos); • Reconstruction of Eiciai heating plant (Viesvile); • Reclamation of dumping site in Eiciai village (Viesvile); • Cleaning-up of Viesvile dumping site (Viesvile); • Litter management, improvement of water body protection belts etc. (Viesvile); • Establishment of recreational facilities in Viesvile townlet further from the reserve (Viesvile); • Establishment of the Panemuniai bicycle trail (Viesvile); • Establishment of the pier for tourists (Viesvile); • Reconstruction of local homesteads and adaptation for eco-tourism (Viesvile); • Provision of Viesvile school and Club of young foresters with basic field-work/nature studying equipment (Viesvile); • Closure of the Simnas dumping site (Zuvintas); • Reconstruction of heating plant and heating system in Simnas town (Zuvintas);
ECAT	15,600	In-kind	• Equipment (all sites)
Eco-clubs	10,300	In-kind	• Voluntary campaigns (biodiversity management and monitoring elements, cleaning up campaigns, etc.) (all sites)
OMPO	19,700	In-kind	• Arrangement of international meetings in transboundary area (Cepkeliai)
State Road Fund	199,700	Cash	• Improvement of 38 km of roads needed for monitoring, fire protection and management of the area (Cepkeliai); • Planning and reconstruction of bypass (Girutiskis); • Improvement of 8 km of roads needed for monitoring and management of the area (Kamanos); • Improvement of 30 km of roads needed for monitoring and management of the area (Viesvile);
Biota (NGO), private	137,100	Cash/In-kind	• Adaptation of Grybaulios fish ponds to bird-watching and fishing tourism (Cepkeliai).
Dzukija National Park	46,700	In-kind	• Establishment of traditional beekeeping farmstead in Musteika village (Cepkeliai); • Establishment of traditional farmstead – tourism centre in Zervynos village (Cepkeliai);

SAPARD, municipality	815,000	Cash	• Reconstruction of recreational facilities by the Kastinis lake (Marcinkonys village) (Cepkeliai); • Establishment of protective shore belts of water bodies; environmentally friendly agriculture; management of landscape and enhancement of biodiversity (Zuvintas);
State Forestry Company	85,000	Cash	• Forest management, maintenance of recreational facilities (Girutiskis); • Improvement of roads needed for monitoring, fire protection and management of the area (Girutiskis); • Implementation of fire protection measures (Girutiskis); • Establishment of alternative recreational campsites further from the reserve (Viesvile);
State Fishery Centre	62,900	Cash	• Increase of fish populations in Liedis, Liedaitis and Persoksnai lakes located in the surroundings of the reserve (Girutiskis); • Restoration of sea trout population in Viesvile river (Viesvile); • Removal of sediments from Spernia rivulet (Zuvintas); • Establishment of sedimentation pond in Simnas fish ponds (Zuvintas)
Private individual	382,400	Cash	• Transformation of local homestead in Labanoras village into eco-tourism homestead (Girutiskis) (JSC Labanoro turas) • Transformation of former water pumping station nearby the Zaltytis Lake into the guest-house (Zuvintas) (JSC Alga);
Atgaja (NGO)	10,400	In-kind	• Litter management in recreational sites (Girutiskis)
Frankfurt Zoological Society/EU funds	450,000	Cash/in-kind	• Purchase or compensation of 800 ha of land from land owners (Kamanos)
State Forest Fund	121,400	Cash	• Preparation of the Karsuva Forest management plan including newly developed biodiversity approach (Viesvile); • Forest inventory (Viesvile; Zuvintas);
Wild Nature Support Fund	5,700	Cash	• Building of fish bypasses on two dams (Viesvile)
Key Habitat Project	5,700	In-kind	• Inventory of key-habitats in the Karsuva Forest (Viesvile)
ISPA	4,443,300	Cash	• Determine type of pesticides, treat them and repair storehouse (Viesvile); • Reconstruction of Simnas town sewage treatment plant and expansion of sewerage (Zuvintas); • Reconstruction of Azuoliniai village sewage treatment plant (Zuvintas); • Reconstruction/ establishment of Mergalaukis settlement sewage treatment plant (Zuvintas)
Lithuanian Cranberry Growers Association with Canadian partners	12,000	Cash	• Establishment of pilot cranberry growing farm (0,5 ha) in the exploited Laukesos peat-land near by the reserve (Viesvile)
EPA	31,100	Cash	• Monitoring of the project results (reduced pollution) (Viesvile, Zuvintas) • Chemical monitoring of the Zuvintas Lake (Zuvintas);
MATRA project	95,000	In-kind	• Capacity building for the implementation of the SAPARD programme Agri-environmental Measure (Zuvintas);
Total	**10,424,400**		

Detailed explanation of project's co-financing and amounts stated in co-financing letters

Source	Amount indicated in proposal	Amount indicated in Co fin letter	Amount in LTL indicated in the letters	Amount in USD	Remarks
MoE	2,239,400	See table 2 bellow			
Land cadaster	28,600	MoE letter	100,000	28,571	Obtaining of detailed information on land ownership
Public Agency Soil Remediation Technologies	270,000	Public Agency Soil Remediation Technologies		356,430	This company decided to allocate more money than it was planned
Phare	108,000	MoE letter	280,000	80,000	The Phare 2002 project "Development of management plans in protected areas of Lithuania"
		MoE letter	98,000	28,000	The Phare 2003 project "Institutional strengthening and modernization of state protected areas service administrations"
Municipalities	829,400	See table 3 bellow			
ECAT	15,600	ECAT		15,581	The sum was rounded up
Eco-clubs	10,300	MoE letter	36,000	10,286	Support by local communities provided to the strict nature reserves in terms of voluntary campaigns
OMPO	19,700	OMPO		20,000 Eur	At the time of calculation 1 USD was equal to 1 EUR, at this moment the value of 1 EUR is bigger than 1 USD
State Road Fund	199,700	MoE letter	672,000	192,000	Improvement of roads needed for management of the sites
Biota (NGO), private	137,100	Biota		137,100	
Dzukija National Park	46,700	Administration of Dzukija National Park letter		46,700	
SAPARD, municipality	815,000	National Paying Agency letter Ministry of Agriculture letter		815,000	In the letter it is certified that amount of 2,832,000 euros will be provided for agri-environmental sub-measure. This sub- measure will be implemented in three pilot areas. One of those three territories is Dovine River (Zuvintas Lake) basin. On that score we have calculated approximately one third of the total amount
State Forestry Enterprise	85,000	Svencioneliai State Forest enterprise letter	203,000	60,000	
		Taurage State Forest enterprise letter		27,000	
State Fishery Centre	62,900	Lithuanian State Pisciculture and Fisheries Research Centre letter	220,000	62,900	
Private individual (JSC Labanoro turas, JSC Alga in Zuvintas)	382,400	JSC "Alga" letter	718,000	205,000	
		JSC "Labanoro turas" letter	621,000	177,400	
Atgaja (NGO)	10,400	Community "Atgaja" letter		10,400 EUR	At the time of calculation 1 USD was equal to 1 EUR, at this moment the value of 1 EUR is bigger than 1 USD
Frankfurt Zoological Society/EU funds	450,000	Frankfurt Zoological Society letter		150,000 EUR	At the time of calculation 1 USD was equal to 1 EUR, at this moment the value of 1 EUR is bigger than 1 USD
		State Service of Protected Areas letter		300,000 EUR	Land purchase for establishment of Natura 2000 sites to support the initiative of the Frankfurt Zoological Society in buying land for Kamanos Strict Nature Reserve
State Forest Fund	121,400	MoE letter	425,000	121,430	Forest inventory for Zuvintas and Viesvile sites and preparation

					of Karsuva Forest management plan including newly developed biodiversity approach
Wild Nature Support Fund	5,700	Gyvosios Gamtos Paramos Fondas (=Wild Nature Support Fund)		5,700	The average is 20,000 LTL ≈ 5,700 USD
Key Habitat Project	5,700	Key Habitat Project		5,700	
ISPA	4,443,300	MoE letter	6,200,000	1,771,429	Reconstruction of wastewater treatment plans
		Marijampole Municipality letter	9,000,000	2,571,400	Closure of Marijampole municipality dumping site and clearing out of the area
		Marijampole Municipality letter	164,000	46,900	Closure of small dumping sites in the territory of Marijampole municipality in Zelsva, Padovinys and Dauksiai
		Taurage Municipality letter	200,000	57,100	Removal of central pesticide storage in Sakaline forest
Lithuanian Cranberry Growers Association with Canadian partners	12,000	Cranberry Growers Association with Canadian partners		12,500	
EPA - Monitoring	31,100	MoE letter	109,000	31,143	Environmental monitoring
MATRA project	95,000			95,000	
Total	**10,424,400**				

Table 2. Co-financing of Moe

Co-financed actions	Source	Amount in LTL	Amount in USD
Improvement of legal basis	MoE letter	187,000	53,400
Daily maintenance of strict nature reserves – project sites	MoE letter	5,372,000	1,535,000*
Office space, internet, premises for meetings etc. (in – kind contribution)	MoE letter	175,000	50,000
Reconstruction and modernization of the administration buildings of the strict nature reserves	State Service of Protected Areas letter	1,462,650	417,900
Establishment of the exhibition about Lithuanian wetlands in Kaunas Zoological Museum	State Service of Protected Areas letter	636,740	182,000
Provided premises for seminars/workshops	State Service of Protected Areas letter	3,850	1,100
Total:			**2,239,400****

* The sum of daily maintenance of strict nature reserves (1,535,000 USD) is calculated from two subsums:

1. Protection, monitoring, etc. daily running (1,466,400 USD)
2. Establishment of new positions in the strict nature reserves (68,600 USD)

The amount of 1,466,400 USD is included in baseline. For this reason the difference of Moe co-financing on the prodoc signature page (773,000 USD) and on the brief (2,239,400 USD) occurred.

**MoE letter, indicated other co-financing sources (Phare, Land cadaster etc.) in the prodoc. This reallocation caused difference from 2,239,400 USD to 3,941,000 USD.

Table 3. Co-financing of Municipalities

Co- financed actions	Source	Amount in LTL	Amount in USD
Demounting of the former farms nerby the reserve and clearing – out of the area	Akmene Municipality letter	6,000	1,710
Kamanos Strict Nature Reserve nature restoration activities	Akmene Municipality letter	20,000	5,710
Strengthening of environmental education and awareness	Akmene Municipality letter	56,000	16,000
Reconstruction of heating plant and heating system in Simnas town	Alytus Municipality letter	400,000	114,300
Closure of Simnas dumping site	Alytus Municipality letter	500,000	142,900
Strengthening of environmental education and awareness	Alytus Municipality letter	20,000	5,700
Closure of Viesvile dumping site and restoration of the area	Jurbarkas Municipality letter	300,000	85,700
Reconstruction of recreational facilities and establishment of nature trails in Viesvile townlet	Jurbarkas Municipality letter	320,000	91,400
Establishment of Panemuniai bicycle trail nearby Viesvile townlet	Jurbarkas Municipality letter	170,000	48,600
Establishment of pier in Viesvile on purpose to strengthen water tourism in Nemunas	Jurbarkas Municipality letter	110,000	31,400
Preparation of nature guides	Jurbarkas Municipality letter	15,000	4,300
Reconstruction of local homesteads and adaptation for eco-tourism in Viesvile ward	Jurbarkas Municipality letter	110,000	31,400
Strengthening of environmental education and awareness	Jurbarkas Municipality letter	50,000	14,300
Improvement of the environment in Viesvile ward	Jurbarkas Municipality letter	150,000	42,900
Strengthening of environmental education and awareness	Marijampole Municipality letter	80,000	22,900
Improvement of environment in Dauksiai, Gudeliai and Liudvinavas wards	Marijampole Municipality letter	60,000	17,100
Voluntary water quality monitoring of rivers and rivulets	Marijampole Municipality letter	150,000	42,900
Strengthening of environmental education and awareness	Svencionys Municipality letter	12,000	3,400
Outfitting of premises for environmental education classrooms in three local schools	Svencionys Municipality letter	12,000	3,400
Reconstruction of sewage treatment plant in Eiciai village	Taurage Municipality letter	160,000	45,700
Closure of Eiciai dumping site and restoration of the area	Taurage Municipality letter	35,000	10,000
Reconstruction of Eiciai boiler room	Taurage Municipality letter	80,000	22,900
Strengthening of environmental education and awareness	Taurage Municipality letter	28,000	8,000
Reconstruction of local homesteads and adaptation for eco-tourism in Marcinkonys ward	Varena Municipality letter	20,000	5,700
Strengthening of environmental education and awareness	Varena Municipality letter	40,000	11,400
Total			**829,720**

This table indicates amounts included as Municipality co-financing. Some amounts from Municipality co-financing letters were calculated as associated financing and are not included here. Some amounts are bigger than it was planned in a proposal, because the co financing letters arrived only after the proposal had been sent to New York.

ANNEX 2I: TERMS OF REFERENCE

Project Manager Terms of Reference

Job Title: Project Manager (PM)

Duty Station: Vilnius, Lithuania

Project reference:
Project No. LIT/03/G31/A/1G/99
Conservation of Inland Wetland
Biodiversity in Lithuania

Duration of Employment: 60 months

Preferred qualifications:

Higher level degree in natural resources management, local area development planning, regional planning, environmental science or similar field.
At least five years of professional experience in environmental management, and demonstrated competence in biodiversity conservation.
Experience in nature conservation and design, implementation, and monitoring and evaluation of sustainable development projects.
Excellent communication skills (written, verbal, interpersonal).
Fluency in English.

Organizational setting:

Ensures development, co-ordination and management of the project Conservation of Inland Wetland Biodiversity in Lithuania.
Acts as a leader of the Project Implementation Team.
Acts as Secretary to the Project Steering Committee, reporting regularly on project implementation and performance.
Complies with the terms and conditions referred to in the Project Document regarding all aspects of implementation, monitoring and reporting.
Undersigns all project progress reports, financial reports and requests.

Job content:

1. Ensures effective communication with the relevant public authorities, institutions and other stakeholders on project's activities.
2. Establishes and maintains links with national and international project partners with the aim of maximizing synergies and ultimate project impact.
3. Reports regularly to the Project Steering Committee on all relevant aspects of Project implementation, monitoring and reporting, including on relations with stakeholders and continued support to the project in both financial and political terms.
4. Supervises the Project Implementation Team established for the implementation of project activities ensuring cost-effective use of project funds and ultimate project impact.
5. Organizes the development of contracts for local and international experts and consultants, co-operating partners and monitors their implementation.
6. Ensures preparation and submission to the PSC and UNDP of regular progress and financial reports, as set out in the project document.
7. Supervises that activities under the project are performed in accordance with the budget as set out in the project document.

8. Ensures the expenditures incurred are in compliance with the activities referred to in the project.
9. Monitors co-financing and refers to PSC if donor contributions are problematic.
10. Proposes the composition and terms of reference for Multisectoral Wetlands Working Group and submits them for the approval of PSC.
11. Ensures project promotion and effective public relations with the aim of ensuring continued public and private support to the project at both political and financial levels.
12. Establishes and manages mechanisms for exchange of experience, and lessons learned at the local and national levels.

Project Assistant Terms of Reference

Job Title: Project Assistant (PA)

Duty Station: Vilnius, Lithuania

Project reference:
Project No. LIT/03/G31/A/1G/99
Conservation of Inland Wetland
Biodiversity in Lithuania

Duration of Employment: 60 months

Preferred qualifications:

Higher level degree in natural resources management, local area development planning, regional planning, environmental science or similar field
Knowledge and professional experience regarding nature management, restoration and/or monitoring issues.
Motivated for data search and work with stakeholders.
Communicative, experienced in teamwork.
Good written and spoken English skills.

Organizational setting:

PA is appointed by the Project Implementing Agency "Nature Heritage Fund" to assist Project Manager to discharge his duties.
PA performs a job under supervision and guidance of the Project Manager.

Job content:

1. Assists in development of the contracts for local and international experts and consultants.
2. Reports to the Project Steering Committee on a regular basis regarding project implementation and other issues related to maximizing support to the project from stakeholders and relevant institutions.
3. Assists in ensuring effective communication with the relevant public authorities, institutions and other stakeholders on various organizational matters.
4. Assists in organising and co-ordination of the project activities, especially related to nature management, restoration, monitoring.
5. Selects and evaluates nature management, monitoring and other needed machinery and equipment for purchase.
6. Assists in ensuring planned co-funding for the project implementation.
7. Facilitates and assists in planning of the project monitoring.
8. Prepares information and organises updating of the project website.
9. Assists in preparation (organisation of preparation) of information about the project for media.
10. Assists in preparation of regular progress reports.

Project Assistant / Accountant Terms of Reference

Job Title: Project Assistant/Accountant(PA)

Duty Station: Vilnius, Lithuania

Project reference:
Project No. LIT/03/G31/A/1G/99
Conservation of Inland Wetland
Biodiversity in Lithuania

Duration of Employment: 60 months

Preferred qualification:

Higher level degree in business administration, public administration, or management.
Knowledge and professional experience of public accounting, financial management or similar fields.
Communicative, experienced in teamwork.
Good written and spoken English skills.

Organizational setting:

PA is appointed by the Project Implementing Agency "Nature Heritage Fund" to assist Project Manager to discharge his duties
PA performs a job under supervision and guidance of the Project Manager.

Job content:

1. Assists in development and drafting of the contracts for local and international experts and consultants.
2. Prepares and submits to UNDP regular financial reports in accordance with UNDP requirements and formats.
3. Prepares the cash advance requests based on the forecast of forthcoming needs for the relevant period.
4. Makes disbursements in accordance with activities and the budget of the Project Document.
5. Ensures that project disbursements are valid and supported by adequate documentation.
6. Maintains proper books of accounts and all records related to funding project activities.
7. Assists the Project Manager to carry out the procurement, use, control and disposal of non-expendable equipment in accordance with UNDP requirements.
8. Performs all necessary secretarial services.

Project Steering Committee (PSC) Terms of Reference

Project reference:
Project No. LIT/03/G31/A/1G/99
Conservation of Inland Wetland
Biodiversity in Lithuania

Objective:

The PSC should advise and monitor the Project Team during implementation of the project Conservation of Inland Wetland Biodiversity in Lithuania implemented in accordance with the tasks outlined in the Project document.

Composition and terms of appointment:

The PSC will consist of members nominated from the Ministry of Environment, UNDP and other authorities as it is indicated in the Project document.
The representative of the MoE will chair the PSC. The Project Manager will be the secretary of the PSC.
No financial compensation will be provided for participation at the PSC meetings. Only reimbursement of reasonable and necessary expenses such as long-distance travel to project sites and the PSC meetings may be provided. Reimbursement of expenses such as travel should be approved prior to the actual expenditure.

Protocol:

As outlined in the Project document, the PSC will meet on a regular basis (2 times per year). The Project Manager will facilitate routine operations (agendas, minutes, progress reports).
The PSC meeting will be considered valid when more than 50 % of PSC members' are present. Where possible, the PSC will operate on the basis of consensus rather than formal voting. In case of voting decision-making requires more than 50 % of participating PSC members' votes. The agreed decision will be outlined in PSC meeting minutes. Secretary and Chairman will sign the minutes.

Tasks and Functions:

PSC functions will include:

- Review and endorse Project reports and detailed work-plans produced by the Project Team.
- On the basis of proposals made by the Project Team, discuss and make amendments to the initial work-plan as well as reallocate the budget among the budget-lines.
- Support the active involvement of the relevant Protected Areas Administrations, local communities and stakeholders.
- Discuss or negotiate with donors if co-financing problematic.
- Approve the composition and TOR for Multisectoral Wetlands Working Group and secure inter-agency replication programme.
- Secure linkages with the needs and desires of the government and synchronise the project outcomes with other relevant projects, the development plans for protected areas, implementation of other programmes.
- Work to ensure continued support to the project and its aims beyond its current lifetime.

Time frame:

These terms takes effect upon signature of the Project document, and will expire after termination of the Project.

Subcontracts/Consultancies

The project will cover a wide spectrum of activities, which will require a number of subcontracts and consultancies. These are grouped into three categories: Nature management, Socio-economic activities, Public awareness and education. Contracts for each activity will be elaborated and may include both consultancy and subcontracting. All contracts will be drafted under the responsibility of the Project Manager, and reviewed and approved under standard UNDP procedures for National Execution. The Project Steering Committee will review contracts as part of its overall supervision of progress to fulfilment of the work plan. Detailed TOR for each contract will be developed during the project's inception phase.

Activities exceeding 20.000 USD are presented in the tables, below.

Nature management

Nr.	Title of activity	Brief description of activities	Amount (USD)
1.	Habitat inventory	Inventory and mapping of habitats of the project sites	26.000
2.	Development of plan for restoration of Kamanos Bog	• Analysis of current hydrological situation • Development of the plan for restoration of hydrological regime	22.000
3.	Restoration of hydrological regime in the Kamanos Bog	Damming of drainage ditches affecting the bog	87.000
4.	Development of program of sustainable forest use	• Analysis of existing requirements re forest use • Development of amendments to existing requirements on forest use to secure sustainable forest management based on FSC standards. • Development of proposals on capacity development of the management planning institution;	31.000
5.	Reintroduction of capercaillies in the Karsuva forest	• Development of program (methodology) for reintroduction of capercaillies • Reintroduction of capercaillies	23.000
6.	Establishment of fish-ladders on the Viesvile River	• Design of fish ladders • Construction of fish ladders	87.000
7.	Preparation of water management plan for the Dovine River Basin	• Analysis of current hydrological situation • Determination of favourable conservation status for Natura 2000 sites in the basin • Modelling of the basin to secure favourable status of Natura 2000 sites	130.000
8.	Implementation of first priority measures for restoration of the Zuvintas Lake and the Amalvas wetland hydrological regime	Based on the outcomes of the water management plan for the Dovine River Basin implementation of first priority hydrology restoration measures	230.000
9.	Restoration of important bird meadows	Removal of shrubs and woody biomass, mowing of meadows/reintroduction of livestock	113.000

Socio-economic

Nr.	Title of activity	Brief description of activities	Amount (USD)
1.	Adaptation of Grybaulios fish ponds to bird-watching tourism	• Development of the programme for creation of bird-watching infrastructure in Grybaulios fish ponds • Construction of basic bird-watching facilities	35.000
2.	Establishment of recreational water route in the Persoksna River	• Route design • Creation of water route infrastructure	30.000
3.	Facilitation of agri-environmental measure	Development and implementation of awareness raising and capacity building program	37.000

Public awareness and education

Nr.	Title of activity	Brief description of activities	Amount (USD)
1.	Public awareness campaign	Development and production of information materials on wetland conservation (web sites, books, booklets, films, postcards etc.)	140.000
2.	Establishment of exhibitions on wetlands	Design and creation of stationary and transportable exhibitions about Lithuanian wetlands	65.000
3.	Establishment of Januliskis Visitor Centre	• Design of the interior of the visitor Centre • Basic equipment of the VC	115.000
4.	Establishment/reconstruction of the nature trails in the surroundings of Girutiskis reserve	• Design of the nature trails • Construction of the nature trails	33.000
5.	Basic renovation/outfitting of the museum and lecture hall in Zuvintas administration building	Modest repairs, renovations and equipping to bring facilities to basic service standards	40.000
6.	Establishment/reconstruction of the nature trails in the Zuvintas biosphere reserve	• Design of the nature trails • Construction of the nature trails	25.000

Where implementation of the project requires the Implementing Agency to award contracts for services (technical drawings, business plans, marketing services, etc.), works (construction, renovation, reconstruction etc.) and supplies (purchasing of equipment etc.), it must award the contract to the tender offering the best value for money, that is to say, the best price-quality ratio, in compliance with UNDP rules and regulations set in UNDP Procurement Manual, as well as meet standard principles of transparency and equal treatment for potential contractors, care being taken to avoid any conflicts of interest.