

Project Name	Bulgaria-Wetlands Restoration and... Pollution Reduction Project
Region	Europe and Central Asia Region
Sector	Natural Resources Management
Project ID	BGPE68858
Borrower(s)	GOVERNMENT OF BULGARIA
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1. Country and Sector Background

Background. Bulgaria is situated in the heart of southeast Europe, and lies in the eastern part of the Balkan Peninsula. Its climate ranges from continental in the north and west to Mediterranean in the east and south. The average annual precipitation is 640 millimeter (mm), but ranges from 480 mm on the Black Sea coast to 1800 mm in the mountains. The average annual temperature is 10oC, but varies from -2oC in winter to 25oC in summer. In general, Bulgaria is well endowed with natural resources. The wide range of soils is conducive to a diversified agriculture and forestry. About 56% of the total area is agricultural land, about 35% is covered by forests, and 5% is covered by water. Radical economic and structural reforms were introduced in 1997. They resulted in a dramatic fall in the inflation rate, acceleration in the privatization of state owned enterprises and the return to modest economic growth. The economic changes, however, led to widening regional disparities in living standards and infrastructure, particularly in rural areas. During the 1990s, the privatization of agricultural land, which took place mainly via the restitution process, resulted in fragmentation in land ownership. Many of the small private farms that emerged from the land restitution are subsistence in nature. Poverty rates are higher among rural areas. In 1997, over 41% of rural residents were poor compared to 33% in urban areas. Main Sector Issues. The Black Sea, a critical regional resource,

suffers severe environmental damage from eutrophication (i.e., the collapse of food chains due to loss of life-giving oxygen), the introduction of exotic species, inadequate resource management, and loss of habitat -- all of which have led to long-term ecological change and a decline of its biological diversity. In-depth analytical work points to an increase in nutrient flux down the major rivers, as the most serious problem facing the Danube River and the Black Sea over the medium to long-term. The effects of eutrophication on the northwestern shelf of the Black Sea at the mouth of the Danube have had particularly disastrous impacts to water quality, natural habitat, and fish populations on which both biodiversity and human populations depend. The Danube River is one of the continent's largest and most important rivers linking Central and Eastern Europe. It flows approximately 2900 kilometers through thirteen countries from Germany to the Black Sea, includes 300 tributaries and drains 817,000 square kilometers. The Danube contributes approximately 60% of the nutrient load to the Black Sea, with approximately 60% of the nitrogen compounds and about 66% of the phosphorous compounds originating from non-point sources within the Danube watershed. Regional action to clean up the Danube/Black Sea. In response to growing concerns about Danube pollution, and in recognition of the fact that significant nutrient reduction requires regional commitment, the Danube River riparian countries drew up the Convention on the Cooperation for the Protection and Sustainable Use of the Danube River, signed in 1994 and entered into force in 1999. Monitoring of the implementation of the Convention is the responsibility of the International Commission for the Protection of the Danube River (ICPDR), located in Vienna. Similarly, the six countries bordering the Black Sea decided that joint action to save the Black Sea was urgently needed, and in 1992, signed the Bucharest Convention for the Protection of the Black Sea Against Pollution (ratified in early 1994). The Bucharest Convention was given additional impetus in 1993 by the Odessa Ministerial Declaration on the Protection of the Black Sea Environment, also endorsed by Bulgaria. Nutrient reduction is the highest priority issue for both programs. Role of Bulgaria. The Danube River forms the border between Bulgaria and its northern neighbor Romania for 472 kilometers (km) before continuing through Romania to the Black Sea. More than half the area on the Bulgarian bank of the Danube is floodplain, covering 1280 square km. Over the years, the wetlands and floodplain have been drained or dyked to create arable land or as an anti-malaria measure, such that today's wetlands cover only about 10% of the area that existed at the turn of the century and hence cannot perform their original ecological function. Although about half of the country drains into the Danube River, Bulgaria is currently not the largest contributor of nutrient loads to the river. The Transboundary Diagnostic Analysis (TDA) undertaken under the Black Sea Environmental Program between 1993-99, indicates that Bulgaria places third on the Black Sea riparian countries in terms of the nitrogen (N) and phosphorous (P) contributions to the Sea. Actions which Bulgaria might take to address the issue of transboundary pollution have to be matched with a program addressing real national priorities with national benefits in order to be politically and financially justified. Government and local officials are eager to integrate interventions which address transboundary pollution and global biodiversity with efforts that help Bulgaria meet EU environmental acquis. Other identified national benefits include opportunities for the sustainable use of aquatic resource, providing income for local communities. An approach which integrates global and national development

objectives increases the likelihood of long-term project success. Bulgaria faces a number of issues as it attempts to meet its international commitments to reduce nutrients and generally clean up the Danube/Black Sea, and to comply with EU environmental acquis. These include: Water quality and nutrient reduction. Water in Bulgaria is a scarce resource, with per capita endowment less than half the average for European countries. One third of the country faces permanent or seasonal water shortages. Nitrogen content exceeds drinking water standards in a number of rural settlements. The water scarcity problem is aggravated by pollution from various sources, especially agricultural run-off, inadequately treated urban wastewater, changes in hydrological conditions and the decline of both quality and quantity of aquatic ecosystems. The underlying causes of the pollution include lack of financial resources for the construction and operation of wastewater treatment plants with tertiary treatment capacity in a number of Bulgarian towns, inappropriate agricultural practices, industrial pollution, and to a lesser extent to the present economic situation, low household incomes and poor financial situation of wastewater companies. About 49% of all wastewater generated (including 43% of industrial wastewater) is discharged directly into the environment without any preliminary treatment. Nationwide, half of the towns with population of over 50,000, and about 75% of the towns with a population of over 10,000 people have no wastewater treatment plants (WWTP). According to the TDA, Bulgaria contributes approximately 7,500 tons of N and 720 tons of P per year into the Danube. For the Black Sea, the numbers are significantly higher: 2,480 tons of N and 693 tons of P from domestic sources, and an additional 2,000 tons of N and 432 tons of P from its rivers flowing into the Black Sea. Wetlands, in turn, can result in retention and recycling of nutrients found in surface water flows, and can offer cost-effective solutions for abatement of nitrogen and phosphorus loads. Biodiversity conservation and wetland restoration. Bulgaria is one of the most biodiversity-rich countries on the Danube. It is the third richest European country from the point of view of animal and plant diversity. The National Biodiversity Strategy (1994) as well as the National Action Plan for the Conservation of the Most Important Wetlands (1995) have identified priority areas for conservation and restoration of wetlands, including areas of international importance such as nesting sites of the Ferruginous Duck and the endangered Dalmatian Pelican. In its efforts to develop a wetlands strategy consistent with EU directives on habitats and the protection of wild birds, the Government has faced opposition from some local community members who do not always appreciate the importance of wetlands for conserving globally significant biodiversity, for maintaining water quality, flood control and a variety of other environmental services. In general, public opinion has favored the draining of wetlands for other land uses -- Government's policy from the 1950s to the 1980s. Protected areas management. Activities related to nature protection are regulated by the Environmental Protection Law, Forestry Law, the Protected Area Law (PAL), and the Hunting Law. While the PAL stipulates procedures to prepare protected areas management plans, development of these plans will require the integration of biodiversity conservation with economic development with a participatory planning process. Similarly, in order to gain acceptance from poor local communities to reduce pressure on nature resources, there is a clear need to identify and implement alternative income generating activities, to undertake awareness raising programs, and to have park administrations proactively foster sustainable economic activities within the project

region. Government Strategy. Bulgaria's strategy for nutrient reduction, biodiversity protection and agriculture and rural development has the following objectives: Compliance with the EU Water Framework Directive. The country will be required to achieve "good status" for the all surface waters - measured not only by the water quality of its water bodies, but also by the healthy functions of natural water ecosystems (including transboundary river basins).

Compliance with the EU Habitats and Birds Directives. The country is required to establish a network of effective protected areas covering representative habitats which will become part of the European Nature 2000 network of protected areas upon EU accession.

Fulfill obligations under several international agreements to which the country is a signatory. The country has committed itself to implement the Strategic Action Plans of the Black Sea and Danube Conventions, which includes participating in the development of a common Danube River Basin Management Plan in the framework of the Danube Convention. Efforts to restore water quality and water ecosystems are also relevant to the Ramsar Convention on Wetlands of International Importance, especially as waterfowl habitat, encouraging sustainable development and wise use of natural resources in wetland areas. The Danube wetland complex within the project sites is the most representative of riverine wetlands and of international importance for waterfowl habitat. Achieve sustainable rural development. The National Agriculture and Rural Development Plan 2000-06 aims for sustainable rural development consistent with the best environmental practices, and calls for the promotion of

environmentally-friendly farming and environmental protection. Recent and Planned Government Actions. The Government of Bulgaria has demonstrated a commitment to improving nature protection and water quality. Water quality and management. In 1999, the Bulgarian Parliament adopted a new Water Act that reflects to a large extent the requirements of the EU Water Framework Directive. The Water Act includes the elements on the planning, study and management of the national and river basin levels and the administrations that will be established to carry out these management responsibilities.

It introduces a more integrated approach to water management based on river basin principles -- to ensure common management of surface and groundwater according to quality and quantity, in order to achieve sustainable use and protection of waters, water ecosystems, and wetlands. Implementation of the Water Act requires institutional changes and new skills to carry out modelling, planning and increased

monitoring. Investments in point-source pollution. The Government has planned investments from the National Environmental Protection Fund for a small number of priority wastewater treatment plans, identified according to a set of criteria. Virtually all cities on Danube tributaries are included in the National Program for priority construction of urban wastewater treatment plants for cities above 10,000 inhabitants.

Financial resources however are far from sufficient to cover investment costs. Nutrient reduction investments are not addressed specifically by the plan. The Government will rely heavily on grants or soft loans from international donors for the construction of wastewater treatment plans, in particular the EU pre-accession funds -- Instrument for Structural Policies for Pre-Accession (ISPA). The high operation and maintenance costs, which are rarely financed from outside sources, is a constraint for the implementation of this program. Hence the government is very interested in looking at low-cost technologies such as wetland restoration as a means of reducing nutrient loads and meeting water quality

standards. Wetland restoration for biodiversity conservation and nutrient reduction. The Government recognizes the multiple benefits of wetland restoration: first, as a way to decrease transboundary pollution; second, as a means of preserving globally significant biodiversity; and third, as a possible source of revenue for local communities living in the poorer regions of Bulgaria. By restoring the spawning grounds for fish, the expectation is that the local fishing industry will make a comeback.

2. Objectives

The project development objective is that local communities and local authorities in the Persina Nature Park and Kalimok/Brushlen Protected Site areas adopt sustainable natural resources management practices. The project will help demonstrate how environmentally-friendly rural development activities can improve livelihoods. The global environmental objective is to demonstrate and provide for replication of reduction of transboundary nutrient loads and other agricultural pollution flowing into the Danube River and the Black Sea Basins while at the same time conserving key target threatened species in the project areas through: (i) wetlands restoration and protected areas management programs; and (ii) support for stakeholders to adopt environmentally-friendly economic activities in the two project areas. In support of these objectives, the project will assist in: (i) the restoration of critical priority wetlands in the Danube River basin and piloting the use of riparian wetlands as nutrient traps; (ii) the establishment of comprehensive monitoring systems for water quality and ecosystem health; (iii) support for protected areas planning in Persina Nature Park and Kalimok/Brushlen Protected Site; (iv) strengthening capacity to protect and manage biodiversity and natural resources; (v) building public awareness of sustainable natural resources management and biodiversity conservation; and (vi) promoting and supporting entrepreneurial and agricultural activities within the project region which ensure the sustainability of natural resources and are compatible biodiversity conservation objectives.

3. Rationale for Bank's Involvement

The Bank has assisted the Government formulate a strategy to comply with EU environment legislation and to meet the expected high costs. The main issue involves financing. The proposed project may provide an alternative to high-cost investment in infrastructure if the expected improvements in water quality from non-point source pollution are forthcoming. The Bank is in a unique position to help the government synthesize experiences and lessons learned from this project and from several other related projects in the water and agriculture sectors (Agriculture Structural Adjustment Loan, Land Cadastre), as well as its considerable experience in regional integrated river basin planning and management, to help implement the new water policy and assist the Government in its negotiations with the EU. Secondly, the Bank plays an important role in helping coordinate donor assistance. Given the number of donors assisting Bulgaria, this role is needed to coordinate investments, technical assistance, and policy advice. The Bank can do this within the context of the CAS and through its regular participation in donor coordination dialogue. In addition, the World Bank/GEF has built experience over the past decade involving numerous coastal zone, wetland, water quality and protected areas management projects related to the Black Sea and Danube River. Experience garnered through such projects as the Ukraine Danube Biodiversity Project, the Romania Danube Delta and Georgia Integrated Coastal Management

Projects and coordination with the Black Sea Environment, Danube River Basin Environment and Danube Pollution Reduction Programs is being shared with newly started projects.

4. Description

The project will assist the Government of Bulgaria to: (i) restore critical priority wetlands in the Danube river basin and make use of the wetlands in riparian zones as nutrient traps; and (ii) promote protected areas management and the sustainable use of natural resources, through management planning, monitoring of water quality and ecosystem health, public awareness/participation programs and environmental education. Although the project only directly addresses the restoration of selected priority wetlands in Bulgaria, these activities will play a critical demonstration role within the region, promoting nutrient reduction investments in other parts of Bulgaria and neighboring countries. A brief description of each project component is provided below.

Component 1: Wetlands Restoration (Total: US\$5.02 million, GEF: US\$3.43 million, Other Donors (TBI): US\$0.76 million, GoB: US\$0.83 million). The most innovative aspect of the proposed project, this component -- if successful -- has a high replication value throughout Bulgaria and the region. In the initial phase of this component, 2,340 ha of former marshes will be restored in two already identified sites, Belene Island within Persina Nature Park and Kalimok/Brushlen Marshes within Kalimok/Brushlen Protected Site, to demonstrate the use of wetlands as nutrient sinks. Additional sites are expected to be identified and restored later during project implementation. Selection criteria for these additional sites will include: ecological potential, floodplain type, current land use, and nutrient reduction potential.

The GEF funds will finance consultancy services for the elaboration of detailed engineering designs, baseline surveys, and the supervision of construction as well as the civil works themselves for the two already identified sites. The civil works will include both construction and rehabilitation activities of small infrastructure which will regulate water flows through the wetlands at the Belene Island and Kalimok/Brushlen sites -- allowing for controlled flooding that optimizes nutrient trapping, biodiversity restoration, fish production while minimizing the risk of impacts to agricultural areas.

Grant support is being sought to finance activities related to the second set of wetland sites to be restored under the project: consultant services for additional site identification, pre-feasibility and feasibility studies, design of restoration activities, and the necessary civil works (including the supervision of their construction). Other than the two sites already selected for restoration under the Project, the Bulgarian "National Action Plan for the Conservation of the Most Important Wetlands in Bulgaria" (1995) as well as the UNDP/GEF/WWF "Evaluation of Wetlands and Floodplain Areas in the Danube River Basin" (1999) have identified other critical wetland sites in need of restoration and protection based on predominately their biodiversity value. The Project will assist the GoB to undertake a re-assessment of identified priority wetlands, using a broader range of criteria developed as "lessons learned" from the preparation phase of the original two restoration sites, such as nutrient-uptake potential and marginal cost (linking to the Nutrient

Reduction Strategy Guidelines Component) as well as social indicators (current land-use and ownership patterns).

Component 2: Protected Areas Management (Total: US\$7.37 million, GEF: US\$3.38 million, EU PHARE: US\$1.59 million, Austria:US\$0.38 million, Farmers and Municipalities: US\$0.15 million, GoB: US\$1.87 million). This component will support the next step towards the sustainable resource management and protection within the two protected sites, Persina Nature Park (21,700 ha) and Kalimok/Brushlen Protected Site (6,000 ha). Starting with the preparation of protected areas management plans at the two sites, the component will then move on to support the implementation of priority actions identified within the management plan framework. Both the wetlands restoration and protected areas management regimes will integrate needs of the local communities with the biodiversity objectives of the two protected areas. This component will include: (i) the development of protected areas management plans in Persina Nature Park and Kalimok/Brushlen Protected Site; (ii) the implementation of priority actions identified in these plans, including the management of the restored wetlands and surrounding land (including the operation and maintenance of the flood control infrastructure), establishment of a contingency relief fund, establishment of a farmer transition support fund to assist farmers make the transition to economic activities compatible with conservation objectives and sustainable use of natural resources, and the provision of technical support for development of "green" business; (iii) strengthening monitoring programs for water quality, biodiversity, socio-economic indicators, and health risks within the protected areas, (iv) a public awareness and environmental education program, including a small grant scheme for activities that promote biodiversity conservation; (v) institutional strengthening for entities responsible for land/water management to ensure sustainable management of the restored sites and surrounding landscape; and (vii) developing strategic guidelines to support the preparation of a nation-wide nutrient reduction strategy.

The GEF funds will finance consultancy services for the preparation of nutrient reduction strategy guidelines, development of the contingency relief and farmer transition support funds; study tours and field visits to exchange experiences in protected areas and wetlands management and sustainable development; formal training courses on wetlands restoration and management, protected areas management, and sustainable use of natural resources; equipment needs for the operation and maintenance of the restored wetlands and the two park administrations; civil works for the construction or rehabilitation of the park infrastructure (administration and visitor center(s), trails, interpretation points); the demarcation of park boundaries; and the organization of field visits to disseminate project progress. In addition, the GEF will capitalize the small grant scheme for biodiversity conservation, and the contingency relief and the farmer transition support funds.

A parallel project (entitled Integrated Management Planning and Administrative Capacity Building for Protected Wetlands Areas) to be financed by EU PHARE through its National Environmental Program and the Government of Bulgaria (thereafter the PHARE project), will provide technical assistance for the elaboration of protected areas management plans in Persina Nature Park (PNP) and Kalimok/Brushlen Protected Site (KBPS), the environmental education program, and the strengthening of

institutions relevant to protected areas and wetlands restoration. In addition, the PHARE project will finance consultant services for the design and supervision of the monitoring system as well as the training of Bulgarian technicians to use it; training of protected areas administration staff, local authorities, local communities, and NGOs on issues relevant to protected areas management; elaboration of operational rules, procedures and fund-raising plans for the park administrations; elaboration of sustainable natural resources use programs. As part of this project, the Ministry of Environment and Water will finance the supply and installation of the equipment needed for the monitoring system.

The Austrian Government, through the Ministry of Foreign Affairs, will provide financial support to the Russe Business Support Center (BSC) for Small and Medium Enterprises to support the development of green-business proposals compatible with sustainable use of natural resources and biodiversity conservation. The BSC with its two information centers in the project sites will target its support to rural and urban clients located within the boundaries of the protected areas. The Austrian Government will finance consultancy services to carry out feasibility studies of "green business" concepts and ideas. In addition to advice on business plan development, three forms of financial support will be provided: a machine leasing fund program, a small loans fund program, and an investment fund program to foster the development of "green" small- and medium-size enterprises.

Component 3: Project Coordination, Management and Monitoring (Total: US\$0.89 million, GEF: US\$0.69 million, GoB: US\$0.20 million). This component will support a Project Coordinating Unit (PCU) within the Ministry of Environment and Water (MoEW) in Sofia with field staff located in Persina Nature Park and Kalimok/Brushlen Protected Site to coordinate, manage and monitor the activities under the project. The PCU will have full responsibility for procurement, financial management, and disbursement related to the activities funded by the GEF grant; financial management reporting of overall project; monitoring/evaluation and reporting of overall project progress implementation; coordination with the Russe BSC and the PHARE-Unit within the MoEW responsible for project activities supported through parallel financing; and coordination with central ministries and their regional and local branches. Two full-time Local PCU Liaison Officer (to be funded by the project) will facilitate procurement of project related goods, works and services, coordination, and reporting of project implementation at the local level. The Local PCU Liaison Officers will provide assistance to the protected areas administrations and will be hosted within their premises. The project will provide funds to meet salaries and fees of the PCU staff and technical advisors; incremental operating expenses of the PCU; engage consultants to design and install a monitoring program for the evaluation of project impacts; engage consultants to carry out impact evaluation studies over the life of the project; and to finance auditing services over the life of the project. The project will also provide funds for an initial project launch workshop, followed by two procurement workshops, and other workshops over the project period.

5. Financing

Total (US\$m)

BORROWER/RECIPIENT \$2.90
IBRD
IDA
LOCAL COMMUNITIES \$0.15
EC: PHARE \$1.59
AUSTRIA, GOV. OF (EXCEPT FOR FED CHANCELLERY-DG DEV COOP) \$0.38
GLOBAL ENVIRONMENT FACILITY \$7.50
BILATERAL AGENCIES (UNIDENTIFIED) \$0.76
Total Project Cost \$13.28

6. Implementation

Project Steering Committee. During Project preparation, the MoEW coordinated the establishment of a high level Project Steering Committee (PSC), which served as the principal forum for addressing inter-sectoral issues relevant to project preparation activities. The PSC, which worked well during project preparation, will continue operating through out project implementation and will be responsible for providing overall project oversight, advice and a bridge between the various agencies and ministries -- ensuring coherence between the Project and existing/planned activities of the various agencies. The PSC will also help to resolve any issues which may arise during implementation. The PSC comprises representatives from the MoEW, MoAF, Ministry of Justice, Ministry of Economy, Ministry of Health, Ministry of Labor and Social Policy, Ministry of Regional Development and Public Works, municipalities within project sites, and NGOs. The Minister [or authorized Deputy Minister(s)] of the Ministry of Environment and Water will continue chairing the PSC, with the PCU serving as Secretariat. The Government will re-appoint the PSC to review project progress, advise and assist in resolving obstacles to project implementation. Local Consultative Councils (CCs) in Persina Nature Park and Kalimok/Brushlen Protected Site. The Management Concepts for both establishment of the protected areas suggest the establishment of local Consultative Councils (CCs) at the two protected areas sites to: (i) discuss issues and formulate proposals concerning the state of the park and its development; (ii) coordinate and ensure the compatibility of the management plans with regional economic development plans; (iii) ensure the interests of the local communities are represented during both the planning and implementation of the protected areas management regimes; (iv) discuss annual plans and accounts about activities of the park administrations for the implementation of the protected areas management regimes; and (v) assist in searching for funding sources for financing nature-protection activities compatible with the management regime. Specific functions will be listed in the Operational Manuals of the CCs. Apart from providing oversight and reinforce coordination at the local level during the preparation of the protected areas management plans, the local CCs can also serve as a permanent mechanism for conflict-resolution of natural resource management issues within the protected area landscape. Studies carried out during the preparation stage suggested the potential composition of the local CCs: representatives from the regional administrations, the Regional Forestry Board, the Regional Inspectorates of Environment and Water, municipalities, Forestry Units, scientific and academic institutions and NGO, unions of land and forest owners, and local media. The studies also suggested to appoint the Park Director as the chairman of the local CC with the functions to convene and organize the work of the local CC, to sign proceedings and other documents related to the work of the local CC, and to implement the local CC recommendations.

Although, the PIP describes the general functions, recommended representation and chairmanship of the CCs, the specific functions will be listed in the Operational Manual of the CCs. Care should be observed in the final selection of the chairmanship of the CCs so as to avoid creating conflict of interest situations. The project will support the establishment of these local CCs at the two project areas to advise the MoEW and the protected areas management administrations on protected areas management, to improve the usefulness of the investments and to ensure that local stakeholders opinions and concerns are heard during the management planning and implementation process. Throughout the Project, the Government will ensure the maintenance of the local CCs to oversee and reinforce coordination at the local level. Agreement has been reached on the general functions, recommended representation and chairmanship of the Consultative Councils that will be established to assist the Persina Nature Park Directorate and the Kalimok/Brushlen Protected Site Administration, which will become an integral part of the Project Implementation Plan Project Coordinating Unit. A Project Preparation Unit (PPU) under the supervision of the MoEW was established during Project preparation to handle day-to-day coordination and administration of the Project's preparatory GEF. The PPU is now fully operational and will become the Project Coordinating Unit (PCU) once the implementation phase begins. The PCU will have a central office in Sofia, two local liaison officers, and significant physical presence at the two project sites. It will be responsible for overall project coordination and management, financial management activities as well as for implementation of the Environmental Management Plan and Process Framework. All financial management, procurement, disbursement procedures for the proposed activities funded by the GEF grant will be implemented in accordance with the relevant Bank guidelines. The PCU will also be responsible for establishing and maintaining a comprehensive Project monitoring and evaluation system during the life of the project. The monitoring will be based in the significant amounts of baseline data collected and to be collected during the preparatory/implementation phase and will be designed so as to measure project performance against the intended outcomes of the project -- social economic and ecological. The PCU will comprise a Project Manager, an Accountant, a Financial Management Specialist, a Procurement Specialist, a Database/GIS Management Specialist, Technical Experts (on demand), a Grants Program Officer, two local Liaison Officers, an Administrative/Technical Assistant, and a Driver. The local liaison officers will assist the Persina Nature Park and Kalimok/Brushlen Protected Site administrations in coordination associated with project implementation, and in carrying procurement of goods, works and services at the local levels under the oversight of the Procurement Specialist and in accordance with Bank requirements. The Financial Management Specialist and the Procurement Specialist will provide training to the staff of the protected areas management administrations. The procurement and financial management capacity of the two park administrations will be assessed at the end of first year implementation, and depending on the results of the assessment, responsibility for small procurement will be transferred to them. Institutional Arrangements for Project Implementation. In order to ensure project sustainability and capacity building, the project will be implemented by existing entities acting at the local or regional levels. An implementation matrix, which clearly identifies functions and responsibilities for project implementation, has been developed and is included in the Project Implementation Plan (PIP). In brief, the Persina

Nature Park Directorate and Kalimok/Brushlen Protected Site Administration will guide and coordinate the preparation of the protected areas management planning activities and the public awareness and education program activities, will manage the Biodiversity Conservation Small Grant Program as per the operational manual and under the supervision of the PCU, will be responsible for the operation and maintenance of restored wetlands and related protected sites, in close coordination with the Ministry of Environment and Water, the Ministry of Agriculture and Forestry, the National Forestry Board, local municipalities (Nikopol, Belene, Svishtov, Tutrakan, Slivo Pole), the Belene Prison Administration and the Regional Forestry Boards (Lovech, Veliko Turnovo and Russe). The Regional Inspectorates of Water and Environment (Pleven and Russe) will be responsible for supervising the design and installation of the monitoring equipment in close coordination with the protected areas management administrations, the Regional Hygiene and Epidemiological Inspectorates, and the Regional Directorate of the Ministry of Agriculture and Forestry, the research institutes of the Academy of Science (Zoological Institute and Hydrometeorological Institute), the Executive Agency of Environment, the National Center for Health and Epidemiology, local municipalities and NGOs. The Russe Business Support Center will be responsible for the implementation of the Eco-Business Development Support program in close coordination with the PCU. The Ministry of Environment and Water through the PHARE Unit (under the guidance of a Steering Committee) will be responsible for the procurement, contracting, and disbursement of payments related to the PHARE supported activities. A contractor to be hired under the project will be responsible for the administration of the Farmer Transition Support Fund under the close supervision of the PCU/grants program officer. The Ministry of Environment and Water in close coordination with the Belene Prison Administration, the protected areas administrations, and the local municipalities will be responsible for the wetlands restoration component. The Water Department of the MoEW will take the lead in the coordination of activities towards the development of the national strategic nutrient reduction guidelines. The MoEW/PCU through the grants program officer and the local liaison officers and in close coordination with the protected areas administration will be responsible for the implementation of the Contingency Relief Fund. Financial Management. The PCU will be responsible for all financial management aspects of the Project. All financial management and disbursement procedures will be in accordance with the relevant World Bank guidelines. The Bulgarian Government, through the PCU, will establish and maintain through the life of the project a project financial management system (FMS) in a format acceptable to the Bank and in accordance with OP/BP 10.02. Before project appraisal, a World Bank accredited Financial Management Specialist performed a detailed assessment of the system in accordance with the Bank's OP/BP 10.02 and the World Bank project financial management requirements. The result of the assessment is that the Project arrangements met the minimum World Bank financial management requirements. Additional actions and steps agreed with the Government to strengthen the system have been successfully completed, with the exception of the appointment of the project auditor and accountant (expected by June 30, 2002). With regard to financial accounting and reporting, the PCU will keep separate project accounts, by each financing source and by each project component and activity. The project accounts will then be consolidated in the accounting records of the MoEW, with the PCU submitting detailed monthly reports to the MoEW accounting department.

The PCU will prepare quarterly Financial Monitoring Reports (FMRs) in accordance with formats agreed with the Bank during negotiations. The Government expressed its preference to continue preparing the Project Management Reports (PMRs), which are produced by the existing software system as the FMRs. The FMRs will be submitted to the World Bank no later than 45 days after each quarter's end. The first quarterly FMRs will be submitted after the end of the quarter in which disbursements commence. FMRs formats to be used by the Russe BSC and EU PHARE Unit will also be designed to ensure compatibility with the Project financial requirements. The frequency of reporting will be on a quarterly basis. With regard to audit arrangements, the project annual financial statements will be audited each fiscal year in accordance with Bank guidelines, by independent auditors acceptable to the Bank, based on terms of reference agreed with the World Bank. Conclusion of a contract with selected auditors, satisfactory to the Bank, will be a condition of effectiveness in the Grant Agreement. Copies of the audit reports will be submitted to the Bank within six months after the close of the fiscal year (calendar year). The audit reports will cover the Project Financial Statements, Special Account, as well as all the Statement of Expenses (SOEs). The Russe BSC and EU PHARE-Unit will be required to submit copies of the annual audit reports and supporting documents, which will be reviewed by the Project's auditor. Disbursements from the Grant be made based on traditional disbursement methods (i.e., from the Special Account with reimbursements made based on Statements of Expenditures (SOEs) and full documentation, and direct payments from the Grant Account). The Government, through the MoEW will establish, maintain and operate, under terms and conditions acceptable to the Bank, a Special Account (SA) denominated in US Dollars at the Bulgarian National Bank. The PCU will also use local project accounts for local contributions to the Project. A detailed description of the financial management and accounting system that will be used for the project is presented in Annex 6. Project Monitoring and Evaluation. In order to ensure timely and successful project implementation and continual feedback to enhance project's impacts, a monitoring and evaluation system will be put in place. Monitoring and evaluation will be the responsibility of the PCU. Monitoring will be based on the baseline surveys (i.e., environmental, socio-economic) carried out during project preparation, the feedback from the monitoring and evaluation system itself, additional surveys to be carried out as part of the baseline studies, project objectives, intended outcomes, as well as annual impact evaluation studies to be carried out during the life of the project. A simple management information system for project's monitoring and evaluation will be designed by the PCU, including reporting formats for both the wetlands restoration and the protected areas management components and the monitoring indicators listed in Annex 1. Quarterly and consolidated annual reports including the use of project funds and project impacts will be prepared by the PCU. Significant supervision by qualified Bank staff will be conducted during the start-up phase. A mid-term review will be carried out to assess overall project progress, identify lessons learned and disseminate good practices. This process will be closely coordinated with the review of similar projects in the Danube and Black Sea Programs to allow for maximum benefits and sharing of knowledge.

7. Sustainability

The long-term sustainability of project benefits is linked to the adequate

management and maintenance of the restored wetlands and associated protected areas, and adoption of economic activities compatible with nature conservation and sustainable use of natural resources. Management and maintenance will require sufficient institutional and financial resources. The project makes provisions for strengthening the capacity of local and regional implementing institutions as well as local administrations to ensure they acquire the needed managerial and technical skills and capabilities. A provision is also made to support incremental operation and maintenance costs of implementing agencies on a declining basis while developing financial mechanisms to finance protected areas basic maintenance costs. Project sustainability will be enhanced by actively involving local institutions in project implementation and by supporting the development and implementation of comprehensive management plans that link wetlands restoration and nature conservation objectives with sustainable socio-economic development and tangible benefits for the local people. The project will support for ongoing demonstration of the economic, environmental and social benefits from the project.

8. Lessons learned from past operations in the country/sector

Experience from wetlands restoration and pollution abatement programs in Europe and around the world suggest that: The early involvement in project concept design of key stakeholders from across the water, agriculture, and environment sectors as well as of local communities is essential in order to ensure ownership, build lasting commitment and achieve successful project implementation. The rationale, benefits and objectives of the project should be made known to all stakeholders, if not through active participation, then through effective public awareness programs. The benefits of sustainable land use need to be demonstrated and the results widely disseminated. Problems should be solved jointly with clients and not for them. Capacity and skills transfer can only be achieved by working with clients, to do otherwise is to leave solutions that are unsustainable. Maintaining support for central governmental units, but emphasizing decentralized responsibility for financial and project management (e.g. Romania's Danube Delta Biodiversity and Agricultural Pollution Control Projects) helps to build local ownership and sustainability of project activities. Socio-economic and regional development issues need to be carefully considered in the design of the project, which in turn should provide support for the integration of environmental and sustainable development principles into regional planning exercises. Early on, the project needs to focus on activities which promote replication, sustainability and resource mobilization beyond the life of the project. Continuity in supervision responsibility contributes greatly to the relationship between the Bank and its client. World Bank experience with the Bulgaria country portfolio indicates that: In order to avoid delays in disbursements, forward planning of budget needs to be ensured early in project preparation and carefully monitored during each of Bulgaria's budget years. Significant effort must be undertaken to ensure project management capacity is adequate to permit implementation of complex activities and policy measures with efficacy and speed. While direct participation of sector ministries is essential for the implementation of individual projects, successful implementation relies heavily on good relationships and cooperation from central units such as the Ministry of Finance when it comes to dealing with issues such as counterpart funding, VAT, financial management, approval processes and procedures, technical exchange of views on legislation. The proposed

program will incorporate these experiences and build on them, specifically by: (i) continuing the inclusive and participatory approach; (ii) effectively communicating the purpose and progress of the program to stakeholders through a public awareness campaign; and (iii) building national and local capacity for sustainable management of wetlands.

9. Program of Targeted Intervention (PTI) N

10. Environment Aspects (including any public consultation)

Issues : The project will finance the restoration of former marshes along the Danube. The major environmental objective of the Project is to reduce the amount of nutrients flowing into the Black Sea. The Project is expected to be environmentally beneficial. No new structure of significant size will be built under the project and no major adverse environmental impacts are expected. Given the nature of the restoration work, the project has been classified as environmental category "B." This classification is consistent with Bulgarian environmental impact assessment regulations and the requirements of the World Bank outlined in Operational Policy (OP) 4.01 on Environmental Assessment. Consistent with the provisions of OP 4.01 and Bulgarian environmental legislation, notably the Protected Areas Act (1998, 1999, 2000), the Regulation No 4/2001 on Environmental Impact Assessment, the Water Act (1999), an Environmental Assessment (EA) was carried out during the preparation phase based on the technical information provided by the Project Preparation Unit of the Ministry of Environment and Water and its consultants. A combination of quantitative and qualitative assessment techniques, ranging from desk-based analysis, to water and social surveys, have been undertaken. The conclusions of the environmental impact assessment are that provided mitigation measures described in the Environmental Management Plan, the proposed project is in compliance with the environmental requirements of both the Government of Bulgaria and the World Bank with respect to restoration developments of this nature. The Environmental Assessment contains a description of existing environmental conditions at the two project sites, including climate, hydrology, soil and water quality, groundwater and biodiversity and assesses the impacts on these conditions from implementation of the project, during the construction and operation phases. A number of mitigation and monitoring activities have been identified as part of an environmental management plan, in order to address these impacts and to provide adequate safeguards for the environment. A brief analysis was conducted of a number of technical alternatives to the proposed restoration schemes, including the non-restoration alternative. The no-restoration alternative was found to be nonviable from an environmental point of view. Other technical alternatives were founded nonviable from a technical point of view. Five restoration alternatives were assessed for Belene Island. In general, the idea of regulating the proposed level of flooding of this project area at 20 meters above sea level, as is provided for 4 of the proposed technical alternatives, is supported by the environmental assessment. Although a higher level (21 m) would be desirable to provide a much larger wetland area (2,070 ha, compared with only 1,290 ha), high flood levels are available for only a few days of the year. Pumping would be excessively costly and, in fact, unable to maintain such a level in view of the porous nature of the subsoil. The proposed level of flooding of 20 m would ensure a flooding duration of 50-60 days annually, which is entirely sufficient from an ecological point of view. Two of the analyzed technical

alternatives propose to intake water from the southern part of the Belene island, which is not desirable from an environmental point of view because of the potential hot water emission in the future from the Belene Nuclear Power Plant, whose construction was initiated and stopped. Any of the other two alternatives that propose the entry of water from the northern part of the island will be a preferred option. The environmental assessment supports the northern alternatives, but with additional internal dykes protecting agricultural lands to the west of the wetlands. This recommendation should be supported with a much more detailed technical design in order to evaluate the risk of bogging and salinization of agricultural land. An evaluation should be made of the way in which the draining system should function in the western part of the island, which is used for economic activities and of the risk for the existing infrastructure and buildings. Three restoration alternatives were assessed for Kalimok marshes. The recommendation of flooding to 14 m above the sea level is accepted by the environmental assessment, which would ensure a flooding duration of 60 days annually. Artificial maintenance of the level of the marshes by means of pumps (as is proposed for both alternative) will be unsustainable. The assessment supports that most of the existing dykes should be kept in their current position, so that the flooding regime will be mostly controlled by the sluices. The sluices should be designed taking into account the possibility for migration of fish species from the lower stretch of the Danube. If needed, they should be equipped with adequate fish ladders. The EA identified the following potential negative impacts of the project: (i) there is a risk that reduced pollution and increased fish stocks as a result of wetland restoration activities will not materialized; (ii) there is risk of indirect flooding and raising groundwater levels on arable and non-arable land, buildings, irrigation and drainage structures, roads, and other infrastructure; (iii) there is a health risk associated with the potential increase in mosquito population, malaria risk and fish contamination; and (iv) disposing of excavated soils. Other issues relate to the impacts on biodiversity, habitats and rare species caused by contractors during the construction phase. As part of the environmental assessment process, public consultations were held during the preparation of the EA with several stakeholders at the local levels in three phases. First, consultation with stakeholders were organized during the initial stage, which helped to identify key social/environmental issues and provided information on stakeholders' concerns about, and views of, potential environmental impacts. [The same team that conducted the environmental assessment also conducted the social assessment.] Prior to the public disclosure of the draft EIA, the second phase of consultation consisted of public meetings at the two project sites, to share with all interested stakeholders the key findings of the assessment and the proposed mitigation and management options. Upon the public disclosure of the draft final EIA, public hearings were organized in the two project sites. During the consultation process, local populations did not voice any major concerns about the project.

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Note: This is information on an evolving project. Certain components may not be necessarily included in the final project.

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