CEPF FINAL PROJECT COMPLETION REPORT

I. BASIC DATA

Organization Legal Name: Vsemirnyi Fond Prirody

Project Title (as stated in the grant agreement): Development of the Econet Scheme of the North Caucasus on the Base of Analysis of Satellite Images and Topographical Maps - Phase II

Implementation Partners for this Project:

Project Dates (as stated in the grant agreement): 1 February 2008 – 30 June 2009

Date of Report (month/year): August 2009

II. OPENING REMARKS

Provide any opening remarks that may assist in the review of this report.

Creation of the system of protected Areas in the North Caucasus started in 1924. Now according to the Federal Law on National Protected Areas adopted in 1995 North Caucasus protected areas are organized into two management levels: 1) federal protected areas managed by the Russian Federal administration and 2) regional protected areas managed by Russia's regional administrations). Protected areas at both levels are organised into 6 categories based on their management objectives (table 1).

Table 1

Management level and categories of Russian PAs

Management level / *Categories*	**Federal**	**Regional**	**IUCN Category**
Strict nature reserve (zapovednik)	6		Ia; Ib
National park	3		II
Nature park		1	IV,V
Zakaznik (sanctuary)	8	85	III; IV
Natural monument		6	III
Resorts and health spas	1		V

The existing system of PAs today can not guarantee long-term biodiversity conservation. Many of the protected areas were created in "leftover" habitats – areas that were not developed because they were useless for agriculture or economic development. A spatial analysis of the representativeness of the system on the regional scale has never been carried out. Existing reserves are generally isolated patches of intact habitats, without any connectivity to the overall the system. Protected areas may be linked by natural or semi-natural ecosystems but these key linking areas are not protected.

One of the most effective ways to conserve biodiversity is by creating a network of protected areas (Econet), consisting of traditional forms of reserves (strict nature reserves, national and nature parks, refuges etc.) connected by broad ecological corridors with various multiple use regimes to facilitate natural animals migrations while allowing sustainable rural development.

- ***Objective and purposes of Econet***

Econet is a system, which combines protected nature areas with different status and territories with different regimes of sustainable use of nature resources, integrated into the context of socio-economical development.

On one hand, an Econet provides for the conservation of the entire spectrum of biodiversity, and, on the other hand, can be realistically created and provide for the socio-economic development of the area.

The use of remote data (satellite images) and relevant maps allows one to approach the entire study area from different points of view (biodiversity conservation, land-use, socio-economic development) at the same time, which in turn enables the identification of protected natural areas as a single integral system. The major analytical approaches are based on the conservation of biological diversity which is dependent upon aspects such as the variety of habitats, possibility of intrapopulational breeding, etc. Conservation of the natural diversity of species, communities, habitats, as well as maintaining their relationships, requires the creation of a hierarchically organized network of areas. In turn, accomplishing this task implies the subordination and specific spatial conjugation of its discrete elements, ensuring representation of every level of biological and landscape diversity. The proposed method of creating ecological networks will guarantee the solution of the majority of the aforementioned problems.

Econets are created to maintain the environmental potential of natural territories in order to meet the following goals:

- maintaining ecological balance and protecting ecological processes at a regional level;
- protecting biological and landscape diversity and natural heritage;
- restoring renewable natural resources and providing for their sustainable use;
- preserving unique and valuable areas;
- offering ecological education;
- monitoring the environment and producing information that enables long-term, sustainable use of the environment;

- creating recreational areas for human comfort;
- providing a balance between protecting biodiversity and providing for economic development of regions.

- ***Elements of Econet***

For an Econet to be successful, its component parts and functions should include the following elements:

Core areas capable of supporting ecological balance and preserving a natural level of biological and landscape diversity. Core areas include animal habitats and landscapes of high importance to nature conservation, specifically:

- representative natural and semi-natural (modified by human activity) ecosystems;
- self-sustaining populations of species, including rare species and other species that are of particular concern;
- areas that provide environmental support services;
- representative landscapes that are particularly valuable, typical or unique.

Core area management aims at the long-term conservation of natural landscapes and processes within an area's given borders.

Transit areas (ecological corridors) are areas that link core areas and have specific regulations for nature management. Transit areas ensure:

- sustainable links between species populations and between habitats of sufficient size;
- access to breeding and wintering grounds for migratory species;
- possibility for genetic exchange among populations;
- geochemical cycles and processes that sustain the balance of the landscape.

Transit areas can be made up of connected or fragmented areas that together comprise a connected ecological space. As long as geographical conditions are taken into consideration, territories of many different types can be used as transit areas.

In general, the process of creating the ecological network outline can be divided into the following constituents:

- biodiversity and socio-economic analysis;
- data verification by regions experts
- synthesis of the results of processing and biodiversity analysis.

The initial materials for the ecological networks planning are:

- digitized elevation maps scaled 1: 200,000 m to be converted into 3D raster images for further analysis
- satellite images with a pixel resolution of 35 m.
- topographic map scaled 1: 200,000 m
- landscape map scaled 1: 200,000 m.
- data with distribution of species and natural complexes
- current land use, existing and planning socio-economic development.

III. ACHIEVEMENT OF PROJECT PURPOSE

Project Purpose *Short-term impact of the project will be clear understanding by stakeholders and decision-makers that land use planning and conservation of species of special concern through Econet is the only way for sustainable socio-economical development of the region.*

Planned vs. Actual Performance

Indicator	Actual at Completion
Purpose-level: Short-term impact of the project will be clear understanding by stakeholders and decision-makers that land use planning and conservation of species of special concern through Econet is the only way for sustainable socio-economical development of the region.	
1.1 All key landscapes and ecosystems are identified and included into the Russian Caucasus Econet scheme.	Data on 82 different type of landscape as well as more than 80 rare and endangered species were analyzed and incorporated into the Econet scheme
1.2 Socio-economic development features are incorporated into the Russian Caucasus Econet scheme	Important and available socio-economic data like existing and planned roads, railways, settlements, cities, developing of agriculture, farming, mining and etc. was analyzed and incorporated
1.3 Stakeholders and decision-makers are aware about the Russian Caucasus Econet scheme and ready to use it for regional planning process	Three meetings were held with representatives of regional governments were organized in Makhachkala, Vladikavkaz and Sochi. At these meetings the Econet scheme was presented and discussed with officials. Two GIS workshops were held to train local authorities and experts (about 30 people) in using Econet data in planning.

Describe the success of the project in terms of achieving its intended impact objective and performance indicators.

A gap-analysis was completed for the system of PAs (Protected Areas) of the North Caucasus, it resulted in the identification of key landscapes, habitats and species necessary for inclusion in the Caucasus Econet so that the PA system could reach 100% representativness. The sufficiency of existing PAs for the conservation of species of special concern was also taken into consideration.
New PAs were identified to fill the gaps identifined in the analysis. Changes to the management status and\or boundaries of existing PAs were also suggested in order to optimize their effectiveness. Corridors were also indentified to link the PAs. The required management level and conservation regime were identified for each of the suggested PAs and corridors. The final proposed scheme (see attachment) was discussed with regional experts and authorities who are responsible for the management of PAs, conservation and sustainable use of nature resources. The scheme was sent to federal and regional authorities, responsible for nature conservation so that it could be included in land use plans. The Federal Ministry of nature resources has started negotiation with regional authorities on the creation of top priority federal PAs. Training on the use of the GIS Econet database was provided to regional experts and authorities.

Were there any unexpected impacts (positive or negative)?

Due to the federal decree on landscape planning (issued in May 2008), the perspective schemes of PAs must be completed (in all regions of the Russian Federation) no later then the end of 2010. This means that the proposed Econet scheme could be successfully introduced into practice, if regional and federal authorities include the results in their perspective PA schemes.

The process of developing and promoting the Econet scheme has initiated better communication and cooperation on nature conservation and rural development between administrations in each of the seven regions in the Caucasus.

IV. PROJECT OUTPUTS

Project Outputs*: Enter the project outputs from the Logical Framework for the project*

Planned vs. Actual Performance

Indicator	Actual at Completion
Output 1: Unified Russian Caucasus Econet is developed taking into account biodiversity conservation and socio-economical development approaches	
1.1 Satellite images, topographical maps, biodiversity data are collected and analyzed. Data are integrated in the Russian Caucasus Econet	Topographical maps scale 1: 200 000 were used for the analysis. They consist of 28 base vector layers, satellite images LANDSAT with spatial resolution 35 meters in pixel and SPOT with spatial resolution 1 kilometer in pixel. Consequently, potential core areas and ecological corridors with three-level hierarchy were identified in GIS. In parallel, data on the number and distribution of special concern were collected and analyzed to clarify the sufficiency of the system of PAs for their

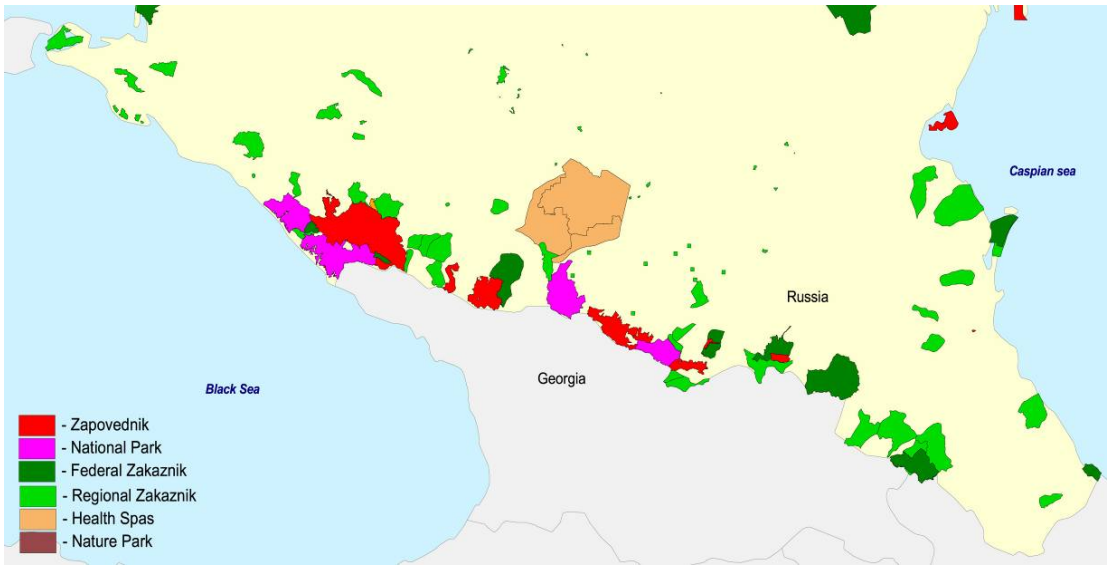
	conservation. For that analysis special questionnaires were developed and filled in by experts. Data on the distribution and conservation of wetlands of international importance, important bird areas, high conservation value forests and landscapes etc. were also included in the analysis. Compilation of the above data provides the basis for designing the system of ecologically connected areas with different land use regimes.
1.2. Socio-economic data of the Russian Caucasus Econet are verified by regional experts	Econet planning was held with participation of experts from protected areas, research institutes, universities, non government organizations, management authorities etc. Three workshops were held to discuss the proposed Econet with more then 100 experts from the region.
1.3 Biodiversity data of the Russian Caucasus Econet are verified by regional experts	
Output 2: Recommendations for the conservation status and land use regime of the key areas and landscapes according to the level of their importance are developed.	
2.1 Areas and landscapes are selected, recommendations for the conservation status and land use regime are drafted	Recommendations on conservation\land use regime for each element of the Econet were drafted and discussed with stakeholders and experts.
2.2 Recommendations for the conservation status and land use regime are discussed with stakeholders and finalized	
2.3 Recommendations are passed to the Federal Ministry of Natural Resources and all regional Ministries (Committees) of Natural Resources	Recommendations were passed to the Federal Ministry of Natural Resources and all regional conservation authorities
Output 3: Regional decision-makers and experts are aware on Econet and provided with the unified Russian Caucasus Econet GIS	
3.1 Regional experts and governmental officials are aware on the Econet concept	Econet concept and scheme are presented to regional authorities and experts (see above workshops and meetings under Output 1 and below under 3.2)
3.2 Regional experts and governmental officials have capacities to use the Econet scheme	The concept of Econet design and management was presented to regional authorities and experts. Two training workshops on GIS technologies are provided for regional management authorities and experts.

3.3 GIS is passed to all regional Ministries (Committees) of natural resources, protected areas and uploaded on website for other experts	GIS data (Fig.2) was passed to all regional authorities, protected areas and experts

Describe the success of the project in terms of delivering the intended outputs.

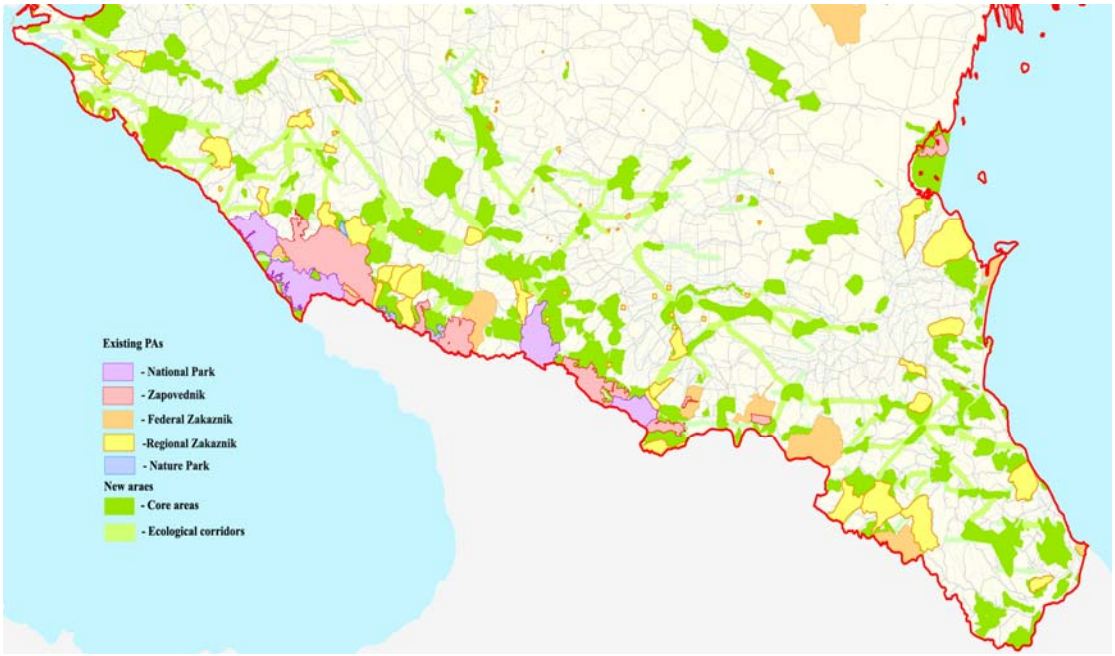
A unified econet scheme has been developed for the North Caucasus. Before the scheme was developed, each of the 7 regions has their own plan for further development of the system of PAs which did not consider ecological connectivities with adjacent regions. Usually the planning of PA systems does not have a systematic approach and most of existing systems do not provide for the conservation of all important landscapes and species in the region.

Fig.1 System of Protected Areas of the North Caucasus.



Econet designed as a system of ecologically connected areas with different land use regimes which could guarantee long term conservation of natural habitats and species of special concern. The proposed scheme will provide the base for further coordination of nature conservation among all regions of the North Caucasus.

Fig.2 Proposed Econet scheme for the North Caucasus



The Econet scheme is presented to all PA's management authorities of the region for further approval as an official landscape planning document. Unified GIS provided for all regions of the North Caucasus for further use.

Two training workshops were provided for users of the GIS.

Were any outputs unrealized? If so, how has this affected the overall impact of the project?

No unrealized outputs.

V. SAFEGUARD POLICY ASSESSMENTS

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.

No action was required.

VI. LESSONS LEARNED FROM THE PROJECT

Describe any lessons learned during the various phases of the project. Consider lessons both for future projects, as well as for CEPF's future performance.

In case of further CEPF presence in the area, the following three lessons learned should be taken into account:

1. regional authorities do not have clear information about existing system of PAs – so an inventory of the system, assessment of its sufficiency and efficiency is essential for future

2. existing regional and federal PAs are not fully meeting their original conservation goals due to inappropriate management, lack of funding, impact of climate change etc.

3. there is a lack of information about biodiversity, existing PAs, socio-economic data. Collection of this information requires more funds and time.

Project Design Process: (aspects of the project design that contributed to its success/failure)
The project had a clear focus and realistic set of activities which allowed it to be fully implemented.

Project Execution: (aspects of the project execution that contributed to its success/failure)
A very important aspect of the project execution is that CEPF should provides enough flexibility in terms of budget reallocation, timelines etc during the project. During project design it is quite difficult to predict what will happen over a three-years perspective and CEPF should be flexible enough to allow adaptive management to meet challenges as they arise. .

VII. ADDITIONAL FUNDING

Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.

Donor	**Type of Funding***	**Amount in USD**	**Notes**
Russian Government	C	30000	For designing of new PA
WWF Germany	C	15000	For designing of new PA

***Additional funding should be reported using the following categories:**

A *Project co-financing (Other donors contribute to the direct costs of this CEPF project)*

B *Complementary funding (Other donors contribute to partner organizations that are working on a project linked with this CEPF project)*

C *Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF project.)*

D *Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)*

Provide details of whether this project will continue in the future and if so, how any additional funding already secured or fundraising plans will help ensure its sustainability.

WWF Russia has started implementation of the Econet scheme with its own (but very limited) funding. Additional project proposals have been submitted to different donors (and have been shortlisted) for the creation of different parts of Econet along the Caspian and Black seas.

VIII. ADDITIONAL COMMENTS AND RECOMMENDATIONS

VIII. INFORMATION SHARING

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. One way we do this is by making programmatic project documents available on our Web site, www.cepf.net, and by marketing these in our newsletter and other communications.

These documents are accessed frequently by other CEPF grantees, potential partners, and the wider conservation community.

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