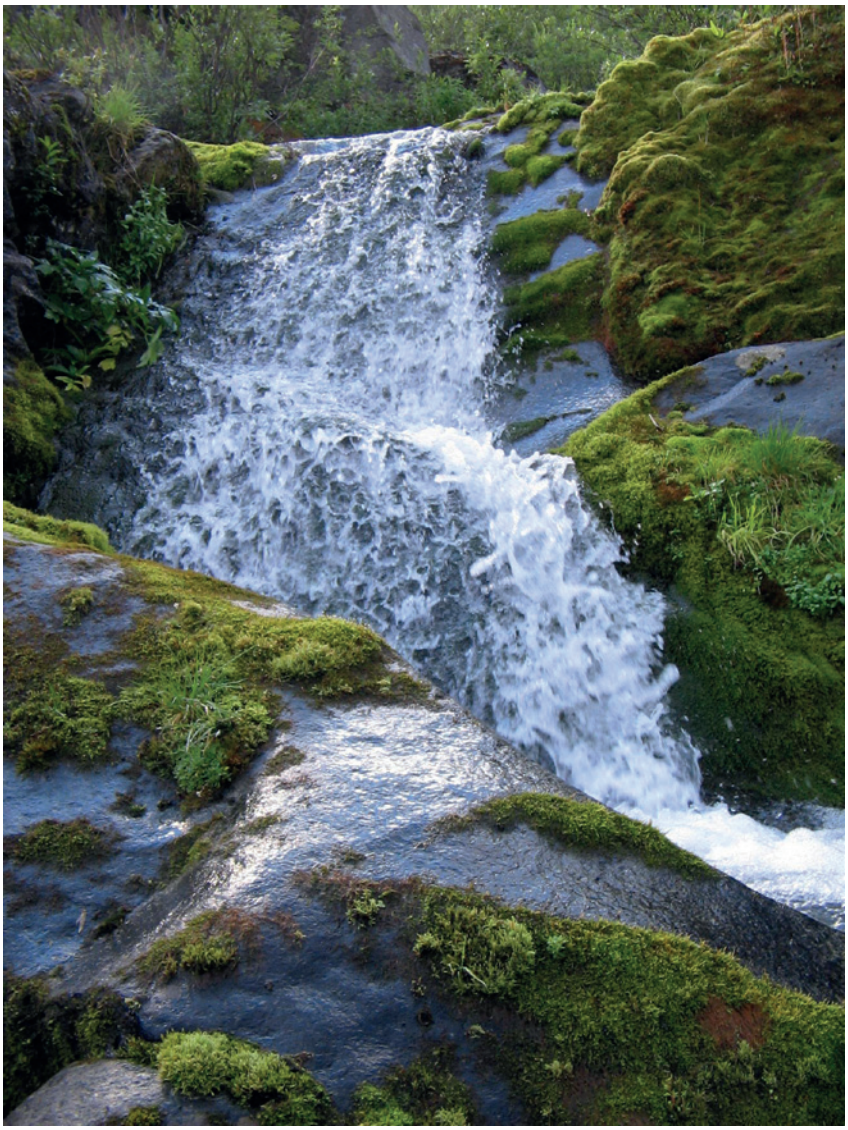
Natalia Milovidova, Nadezhda Alexeeva, Natalia Lentsman and Arja Halinen (eds)

Assessment of the management state and needs of regional protected areas in the North-West Russia

(Arkhangelsk Region, Vologda Region, Leningrad Region, Murmansk Region, Republic of Karelia, St. Petersburg)



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Project partners

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Finnish Environment Institute (SYKE)

Russian Federation:

Arkhangelsk Region:
Regional state institution “Directorate of Regional Protected Areas”

Vologda Region:
Department of Natural Resources and Environment Protection of the Vologda Region

Leningrad Region:
Committee for Natural Resources of the Leningrad Region

Murmansk Region:
State regional institution “Directorate (Administration) of the Regional Protected Areas of the Murmansk Region”

Republic of Karelia:
Ministry of Agriculture, Fish Industry and Ecology of the Republic of Karelia

City of St. Petersburg:
State institution “Directorate of Protected Areas of St. Petersburg”

Executive partner in the Russian Federation:
Baltic Fund for Nature (St. Petersburg Charitable Public Organisation “Biologists for Nature Conservation”)

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Natalia Milovidova, Nadezhda Alexeeva, Natalia Lentsman and Arja Halinen (eds)

ASSESSMENT OF THE MANAGEMENT STATE AND NEEDS OF REGIONAL PROTECTED AREAS IN THE NORTH-WEST RUSSIA

(ARKHANGELSK REGION, VOLOGDA REGION, LENINGRAD REGION, MURMANSK REGION, REPUBLIC OF KARELIA, ST. PETERSBURG)

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ABSTRACT

This report presents the results of the assessment of the management state and needs of regional protected areas (RPAs) in six regions in the North-West Russia: Arkhangelsk, Vologda, Leningrad and Murmansk Regions, Republic of Karelia, St. Petersburg. The assessment was carried out within the framework of the project "Development of regional PAs in the North-West Russia". Some other project results are briefly presented.

The main aims of the assessment were to identify strengths and weaknesses of the RPAs management in the regions participating in the project and to determine its developmental priorities. Emphasis was made on revealing characteristic features and tendencies of management of the RPA *network* in each region. In addition, information on threats to RPAs was collected. The assessment was based on the Management Effectiveness Tracking Tool (METT) developed by the World Bank and WWF. It was performed by the staff of RPAs management authorities and experts from scientific institutions and environmental NGOs.

Background and methodology of the assessment are explained in Chapter 1. The main body of the report consists of six chapters devoted to the assessment results in the participating regions. Each chapter contains general information about the region, presents its PA network with the focus on RPAs and lists the threats to RPAs. A brief historical overview of the RPA network is given, and the authorities responsible for them are presented. The revealed strengths and weaknesses of RPA management are presented and discussed, and an identification of its developmental priorities is attempted. The conclusion contains a brief summary of the assessment results, some analysis of the general tendencies revealed and a few recommendations for future work. Appendices contain supplementary information on RPAs and on the assessment methodology.

The report is expected to serve as a tool for the RPA management authorities. In particular, the assessment results may be used as a basis for further monitoring of the RPA management effectiveness. The assessment methodology explained in the report may prove useful for other PA managing authorities in Russia. As a source of information about RPAs and their management in the six regions in the North-West Russia, the report will be interesting to a broad nature conservation audience. The report is published in English and in Russian.

KEYWORDS	Regional protected areas, nature conservation, management effectiveness evaluation, North-West Russia		
OTHER INFORMATION	2. rev. edition. The project "Development of regional PAs in the North-West Russia", within which the report was prepared, was financed by the Finnish Ministry of the Environment under Finnish-Russian Development Programme on Sustainable Forest Management and Conservation of Biodiversity in North-West Russia. The project was implemented by Metsähallitus Natural Heritage Services and the Finnish Environment Institute (SYKE) in cooperation with Russian partners, mainly: regional state institution "Directorate of Regional Protected Areas" (Arkhangelsk Region), Department of Natural Resources and Environment Protection of the Vologda Region, Committee for Natural Resources of the Leningrad Region, state regional institution "Directorate (administration) of the Regional Protected Areas of the Murmansk Region", Ministry of Agriculture, Fish Industry and Ecology of the Republic of Karelia, and state institution "Directorate of Protected Areas of St. Petersburg". Executive project partner in Russia was the Baltic Fund for Nature (St. Petersburg charitable public organisation "Biologists for Nature Conservation").		
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АВТОР(Ы)	Наталья Миловидова, Надежда Алексеева, Наталия Ленцман и Арья Халинен (ред.)		
НАЗВАНИЕ	Оценка состояния управления и потребностей региональных особо охраняемых территорий на Северо-Западе России (Архангельская область, Вологодская область, Ленинградская область, Мурманская область, Республика Карелия, Санкт-Петербург)		
РЕЗЮМЕ	В данном отчете представлены результаты оценки состояния управления и потребностей региональных особо охраняемых природных территорий (РООПТ) в шести регионах Северо-Запада России: Архангельской, Вологодской, Ленинградской и Мурманской областях, Республике Карелии, Санкт-Петербурге. Эта оценка была проведена в рамках проекта «Развитие региональных ООПТ на Северо-Западе России». В отчете кратко представлены также и некоторые другие результаты проекта. Основными целями оценки было выявить сильные и слабые стороны управления РООПТ в регионах– участниках проекта и определить приоритетные направления его развития. Основной акцент был сделан на выявлении тенденций и характерных особенностей управления *сетью* РООПТ каждого региона. В дополнение к этому была собрана информация по негативным воздействиям на РООПТ (т. е. угрозам для них). Оценка была основана на Методе мониторинга эффективности управления ООПТ (METT), разработанном Всемирным банком (World Bank) и Всемирным фондом дикой природы (WWF). Оценку проводили сотрудники управляющих организаций, а также специалисты научных учреждений и общественных природоохранных организаций. Предпосылки и методология оценки объясняются в главе 1. Основную часть отчета составляют шесть глав, посвященные результатам оценки в участвовавших в проекте регионах. Каждая глава содержит информацию о регионе, обзор сети ООПТ с акцентом на РООПТ, и список выявленных угроз для РООПТ. Приведен краткий исторический обзор развития системы РООПТ и представлена организация, управляющая РООПТ региона. Перечислены и обсуждены выявленные в ходе оценки сильные и слабые стороны управления РООПТ и сделана попытка выявить приоритетные направления его развития. Заключение отчета содержит краткое резюме результатов оценки, некоторый анализ выявленных тенденций и ряд рекомендаций на будущее. В приложениях дана дополнительная информация о РООПТ и методологии оценки. Предполагается, что данный отчет послужит полезным инструментом для организаций, управляющих РООПТ. В частности, результаты оценки могут быть использованы как основа для дальнейшего мониторинга эффективности управления РООПТ. Описанная в отчете методология оценки может оказаться полезной для управляющих РООПТ организаций в других российских регионах. Как источник информации о РООПТ и управлении ими в шести упомянутых выше регионах Северо-Запада России, отчет будет интересен широкой природоохранной аудитории. Отчет опубликован на английском и русском языках.		
КЛЮЧЕВЫЕ СЛОВА	Региональные особо охраняемые природные территории, охрана природы, оценка эффективности управления, Северо-Запад России		
ПРОЧАЯ ИНФОРМАЦИЯ	Издание второе, исправленное. Проект «Развитие региональных ООПТ на Северо-Западе России», в рамках которого был подготовлен данный отчет, финансировался Министерством окружающей среды Финляндии в рамках Программы развития устойчивого управления лесами и сохранения биоразнообразия в Северо-Западном регионе Российской Федерации. Проект осуществляли Служба природного наследия Лесной службы Финляндии (Metsähallitus) и Центр окружающей среды Финляндии (SYKE) в сотрудничестве с российскими партнерами. Главными партнерами проекта в России были ОГУ «Дирекция особо охраняемых природных территорий регионального значения» (Архангельская область), Департамент природных ресурсов и охраны окружающей среды Вологодской области, Комитет по природным ресурсам Ленинградской области, ГОУ «Дирекция (администрация) особо охраняемых природных территорий регионального значения Мурманской области», Министерство сельского, рыбного хозяйства и экологии Республики Карелии, ГУ «Дирекция особо охраняемых природных территорий Санкт-Петербурга». Исполнительным партнером проекта в России выступал Балтийский фонд природы (Санкт-Петербургская благотворительная общественная организация «Биологи за охрану природы»).		
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KUVAILULEHTI

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ALUEYKSIKKÖ			
TEKIJÄ(T)	Natalia Milovidova, Nadezhda Alexeeva, Natalia Lentsman ja Arja Halinen (toim.)		
JULKAISUN NIMI	Arviointi Luoteis-Venäjän alueellisten luonnonsuojelualueiden hoidon tilasta ja tarpeista. Arkangelin, Vologdan, Leningradin ja Murmanskin alueet, Karjalan tasavalta, Pietarin kaupunki.		

TIIVISTELMÄ

Tässä raportissa esitellään tuloksia arvioinnista, joka käsitteli alueellisten luonnonsuojelualueiden hoidon tilannetta ja tarpeita Luoteis-Venäjällä. Arvioinnissa oli mukana kuusi Venäjän federaation hallinnollista aluetta: Arkangelin, Vologdan, Leningradin ja Murmanskin alueet, Karjalan tasavalta ja Pietarin kaupunki. Arviointi toteutettiin osana *Luoteis-Venäjän alueellisten luonnonsuojelualueiden kehittäminen* -hanketta, jonka muita tuloksia esitellään raportissa lyhyesti.

Arvioinnin tarkoituksena oli tunnistaa alueellisten luonnonsuojelualueiden hoidon vahvuudet ja heikkoudet hankkeessa mukana olevilla alueilla ja määrittää hoidon kehittämisen prioriteetit. Pääpaino oli hankkeessa mukana olleiden Luoteis-Venäjän alueiden alueellisten luonnonsuojelualueiden verkoston hoidon erikoispiirteiden ja kehityssuuntien tunnistamisessa. Lisäksi tehtiin yhteenveto luonnonsuojelualueisiin kohdistuvista uhkista. Arviointikehyksenä käytettiin luonnonsuojelualueiden hoidon tehokkuuden arviointi -menetelmää (METT), jonka ovat kehittäneet Maailmanpankki ja WWF. Arvioinnin suorittivat alueellisten luonnonsuojelualueiden hoidosta vastaavat viranomaiset yhteistyössä luonnontieteellisten tutkimuslaitosten ja ympäristöjärjestöjen edustajien kanssa.

Arvioinnin tausta ja menetelmät esitellään luvussa 1. Raportin pääosa muodostuu kuudesta arvioinnin tuloksia hankkeessa mukana olleilla Luoteis-Venäjän alueilla käsittelevästä luvusta. Näissä luvuissa esitellään perustietoja alueesta ja sen luonnonsuojelualueiden verkostosta painottaen alueellisia suojelualueita. Lisäksi esitetään yhteenveto suojelualueisiin kohdistuvista uhkatekijöistä. Suojelualueverkoston historiaa kuvataan lyhyesti, ja alueiden hoidosta vastaavat viranomaiset esitellään. Arvioinnissa paljastuneet suojelualueiden hoidon vahvuudet ja heikkoudet kuvataan, sekä esitetään kehittämistoimia. Raportin viimeisessä luvussa esitetään lyhyt yhteenveto arvioinnin tuloksista ja analysoidaan esiin tulleita luonnonsuojelualueiden hoidon kehityssuuntia, sekä esitetään suosituksia suojelualueiden tulevalle hoidolle ja hallinnoinnille. Raportin liitteet sisältävät lisätietoa Luoteis-Venäjän alueellisista suojelualueista sekä arvioinnissa käytetyistä menetelmistä.

Raportti palvelee suojelualueiden hoidosta vastaavia viranomaisia toimien lähtökohtana alueellisten luonnonsuojelualueiden hoidon tehokkuuden seurantaan tulevaisuudessa. Hankkeessa käytettyä arviointimenetelmää voivat hyödyntää hankkeen kohdealueiden ohella myös luonnonsuojelualueista vastaavat viranomaiset muualla Venäjällä. Samalla raportti tarjoaa tietopaketin alueellisista luonnonsuojelualueista ja niiden hoidosta laajemmallekin yleisölle. Raportista julkaistaan englanninkielinen ja venäjänkielinen versio.

AVAINSANAT	Luonnonsuojelualueet, luonnonsuojelu, suojelualueiden hoidon tehokkuuden arviointi, Luoteis-Venäjä		
MUUT TIEDOT	2. korjattu painos. Tämä raportti on laadittu *Luoteis-Venäjän alueellisten luonnonsuojelualueiden kehittäminen* -hankkeessa, jonka on rahoittanut Suomen ympäristöministeriö, Luoteis-Venäjän luonnonsuojeluohjelma. Hankkeen on toteuttanut Metsähallituksen luontopalvelut yhdessä Venäjän yhteistyötahojen kanssa. Hankkeessa ovat olleet kumppaneina alueellisista luonnonsuojelualueista vastaavat viranomaiset Arkangelin, Vologdan, Leningradin ja Murmanskin alueilta sekä Karjalan tasavallasta ja Pietarin kaupungista. Käytännön toteutuksesta Venäjällä on vastannut Pietarissa toimiva Baltic Fund for Nature, joka on osa ”Biologists for Nature Conservation” -järjestöä.		
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FÖRFATTARE	Natalia Milovidova, Nadezhda Alexeeva, Natalia Lentsman och Arja Halinen (red.)		
PUBLIKATION	Evaluering av förvaltningssituationen och -behoven i naturskyddsområden i nordvästra Ryssland. Arkangelsk-, Vologda-, Leningrad- och Murmansk-områdena, Karelska republiken, S:t Petersburgs stad.		
SAMMANDRAG	I denna rapport presenteras resultat av evalueringar av nuvarande förvaltningspraxis och -behov i naturskyddsområdena i nordvästra Ryssland. I denna rapport behandlas sex administrativa områden i Ryska Federationen: Arkangelsk-, Vologda-, Leningrad- och Murmansk-områdena, Karelska republiken och S:t Petersburgs stad. Evalueringen har utförts inom projektet för utveckling av regionala naturskyddsområden i nordvästra Ryssland. I rapporten granskas i korthet också andra resultat från projektet. Syftet med bedömningen var att identifiera styrkor och brister i förvaltningen av de regionala naturskyddsområdena i de administrativa områden som ingår i projektet, samt att definiera de åtgärder som bör prioriteras i utvecklingen av förvaltningen. Huvudbetoningen var att identifiera särdrag och utvecklingstrender inom förvaltningen av naturskyddsområdens nätverk i varje administrativt område. Dessutom utarbetades en sammanfattning av aktuella hot mot naturskyddsområdena. Som ram för evalueringen användes metoden för evaluering av förvaltningens effektivitet (METT) utvecklat av Världsbanken och WWF. Evalueringen har utförts av regionala myndigheter ansvariga för naturskydd och förvaltning av naturskyddsområden tillsammans med representanter från vetenskapliga institutioner och miljöorganisationer. Bakgrunden och metoden av evalueringen presenteras i första kapitlet av rapporten. Huvuddelen av rapporten består av sex kapitel där resultaten av evalueringen av de administrativa områden som deltar i projektet diskuteras. Varje kapitel utgörs av allmän information av området, presentation av naturskyddsområdens nätverk med fokusering på regionala naturskyddsområden samt sammanfattningen av aktuella hotbilder. Historisk översikt över de regionala naturskyddsområdens nätverk granskas i korthet, och myndigheter som svarar för deras förvaltning presenteras. Avslöjade styrkor och brister i förvaltningen av de regionala naturskyddsområdena beskrivs och diskuteras, och även punkter som bör prioriteras i utvecklingen av förvaltningen definieras. I rapportens sista kapitel presenteras ett kort sammandrag av evalueringens resultat, analys av påvisade gemensamma utvecklingstrender inom förvaltningen av naturskyddsområdena samt några förslag till framtida arbetet. Rapportens appendix innehåller mera information om regionala naturskyddsområden och metoder som användes vid evalueringen. Rapporten kan användas som verktyg i det egna arbetet av regionala myndigheter som ansvarar för naturskydd och förvaltning av naturskyddsområden. Framför allt kan resultaten av evalueringen användas som utgångspunkt inom framtida uppföljning av förvaltningens effektivitet vid regionala naturskyddsområden. Rapporten skulle också vara fördelaktig för andra liknande myndigheter i Ryssland i deras arbete. Samtidigt erbjuder rapporten ett kunskapspaket om regionala naturskyddsområden och förvaltningen av dem även för en mera omfattande publik.		
NYCKELORD	Naturskyddsområden, naturskydd, evaluering av naturskyddsområdens förvaltningseffektivitet, nordvästra Ryssland		
ÖVRIGA UPPGIFTER	2. rättade uppl. Denna rapport har utarbetats inom projektet för utveckling av regionala naturskyddsområden i nordvästra Ryssland, som finansierats av Finlands miljöministeriet vid Naturskyddsprogrammet i nordvästra Ryssland. Projektet genomförts av Forststyrelsens naturtjänster tillsammans med samarbetspartners i Ryssland, först och främst myndigheter ansvariga för förvaltning av naturskyddsområden i Arkangelsk-, Vologda-, Leningrad- och Murmansk-områdena, Karelska republiken och S:t Petersburgs stad. Verkställande partner i Ryssland har varit ”Baltic Fund for Nature” som representeras av den offentliga organisationen ”Biologists for Nature Conservation” som baserar sig i S:t Petersburg.		
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Foreword

"Borders separate – Nature unites". This IUCN motto reflects in the best way possible the sense and the spirit of the Russian-Finnish project "Development of regional protected areas in the North-West Russia". Finland and the environmentally similar neighbouring regions of the Russian Federation possess a dense network of protected areas, intended for preservation of both unique and typical natural complexes of the European North. However, the organisation of nature conservation in protected areas has so far differed considerably not only in different countries but also in different Russian regions. The subjects of the Russian Federation are traditionally rather autonomous in respect to administration. Their contacts are mostly confined to economy, rarely extending into the sphere of nature conservation.

In this project, team work of the representatives of six Russian regions made it possible to realise the natural unity of the North-West Russia and Europe and to improve information exchange and networking between the participating regions in the issues concerning regional protected areas. Collaboration with Finnish experts provided the possibility of studying the experience of Finland, one of the recognised European leaders in the field of establishment and management of protected areas. The assessment of the management situation of regional protected areas identified common problems as well as management strengths, revealing at the same time the specific features of the management situation in the participating region. It is also important that the assessment was carried out with the use of an internationally recognised method: the project participants from different regions were thus acquainted with the world practice of evaluating protected areas' management efficiency.

Mutual awareness of the fact that natural complexes of northern Europe are an inseparable entity governed by nature's laws and not by territorial and administrative division is the first and the most important achievement of the project. This understanding formed the basis for the establishment of practical cooperation between the participating regions and Finland in the sphere of protected areas' management. In its turn, this cooperation allows one to get a new angle on regional protected areas of the North-West Russia, to realise their role in the nature protection system in the European subcontinent and, therefore, to assign them a worthy place in the Programme of Work on Protected Areas of the Convention on Biological Diversity.

Rustam Sagitov
Director of the Baltic Fund for Nature (St. Petersburg charitable public organisation "Biologists for Nature Conservation")

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Introduction

Protected areas (PAs) are recognized worldwide as an important tool of landscape and biological diversity conservation. Furthermore, many PAs deliver ecosystem services and natural products, offer for recreation and education, and preserve spiritual and cultural values. It would be no exaggeration to say that PAs play an important role in maintaining the connection between people and nature. The Convention on Biological Diversity (Rio de Janeiro, 1992) obligates its Contracting Parties to support the establishment and maintenance of comprehensive, effectively managed and ecologically representative national and regional systems of protected areas by 2010 for terrestrial and by 2012 for marine areas (Programme of Work on Protected Areas).

The North-West Russia has an extensive PA network, an essential component of which are PAs of regional significance. Being very diverse as to the protected values, protection regime and the surrounding social context, regional PAs (RPAs) in the North-West Russia offer excellent opportunities for meeting the challenges posed by the Convention on Biological Diversity and other nature conservation conventions, such as the Ramsar Convention, the Bern Convention and the Helsinki Convention. One of the directions of activity of the state authorities responsible for RPA management in the North-West Russia is international cooperation, aiming at increasing the efficiency of PA management.

The project "Development of regional PAs in the North-West Russia" was carried out in 2006-2010 as part of the Finnish-Russian Development Programme on Sustainable Forest Management and Conservation of Biodiversity in the North-West Russia. The overall aim of the project was to improve general functioning and management of RPAs and to promote networking between RPAs in the North-West Russia, as well as between RPAs in Russia and in Finland. The main project partners were Metsähallitus Natural Heritage Service (Finland), the Finnish Environment Institute (SYKE) and the regional state authorities responsible for RPAs and their subordinate state institutions (hereafter referred to as "management authorities") in six regions in the North-West Russia: the Arkhangelsk Region, the Vologda Region, the Leningrad Region, the Murmansk Region, the Republic of Karelia and the City of St. Petersburg[1]. The executive partner of the project in Russia was the Baltic Fund for Nature (St. Petersburg Charitable Public Organisation "Biologists for Nature Conservation"). Various NGOs and scientific institutions were also involved in the project.

In the course of the project, it became obvious that the state of RPA management in the participating regions varied considerably. It also turned out that the contacts between the RPA authorities in different regions were rather limited. These gaps in understanding of the current state of management and prospects of its development in the neighbouring regions hindered to some degree the progress of the regional authorities responsible for RPA management, made difficult experience exchange between the management authorities in different regions and prevented Metsähallitus experts from sharing their experience with the Russian colleagues in the most effective way.

1 These six subjects of the Russian Federation are also referred to in this report as "regions - participants of the project" and "participating regions".

This was the reason why it was decided to carry out within the framework of the project an assessment of the management state and needs of the RPAs in the participating regions. The main aims of the assessment were to identify strengths and weaknesses of the RPAs management in the participating regions and to determine developmental priorities of their management. The accent was made on revealing tendencies and characteristic features of management of the RPA network in each region. The assessment was also expected to give an impetus to the development of monitoring of the RPA management effectiveness. In addition, information on threats to RPAs was collected.

The assessment of the management state and needs of RPAs was mostly carried out in 2008, though some aspects were verified until 2010. The assessment was based on the Management Effectiveness Tracking Tool (METT), developed by the World Bank and WWF[2]. The assessment was performed by the staff of the management authorities and experts from scientific institutions and environmental NGOs. Detailed description of the assessment methodology is given in chapter 1.

This report presents the results of the above assessment. It also introduces some other results of the project "Development of regional PAs in the North-West Russia". The report exists in two versions, the English one and the Russian one.

Abbreviations

IUCN – International Union for Conservation of Nature
METT – Management Effectiveness Tracking Tool
NHS – Natural Heritage Services
NWR – North-West Russia
PA – protected area
RF – Russian Federation
RPA – regional protected area
SYKE – Finnish Environment Institute
WWF –World Wildlife Fund

2 Management Effectiveness Tracking Tool. Reporting Progress at Protected Area Sites: Second edition, July 2007.

1 Assessment of the management state and needs of the regional PAs as part of the project "Development of Regional Protected Areas in the North-West Russia"

1.1 A brief overview of PA network in the subjects of the Russian Federation that participated in the project "Development of regional PAs in the North-West Russia"[3]

According to the Russian Federation law "On Protected Areas"[4] , Russian PAs may have federal, regional and local significance. Depending on their significance, PAs may be federal property, regional property (that is, property of RF subjects), or municipal property (property of municipal units). Correspondingly, their administration is the responsibility of federal state authorities, regional state authorities (that is, state authorities of the RF subjects), or local government authorities. The law defines 7 PA categories, which are different as to their objectives, regime and management. PA categories and the corresponding significance levels are presented in the table.

Categories of PAs in Russia

Categories	Significance levels		
	Federal	Regional	Local
Strict state nature reserves *(zapovedniks)*, including biosphere reserves	+		
National parks *(natsionalnye parki)*	+		
Nature parks *(prirodnye parki)*		+	
State nature reserves *(zakazniks)*	+	+	
Nature monuments *(pamyatniki prirody)*	+	+	
Dendrological parks *(dendrologicheskie parki)* and botanical gardens *(botanicheskie sady)*	+	+	
Health resorts and spas *(lechebno-ozdorovitelnye mestnosti i kurorty)*	+	+	+

Note. At present, the latter two categories ("Dendrological parks and botanical gardens" and "Health resorts and spas") in the participating regions lack the normative documents confirming their status as regional PAs. Therefore, these PA categories are not considered in the present report. The report presents information only on the regional PAs that are administered by the state authorities of the Russian Federation subjects and the subordinate state institutions.

3 Six subjects of the Russian Federation that participated in the project, namely, Arkhangelsk Region, Vologda Region, Leningrad Region, Murmansk Region, Republic of Karelia and St. Petersburg, are also referred to in this report as "regions that participated in the project" and "participating regions".

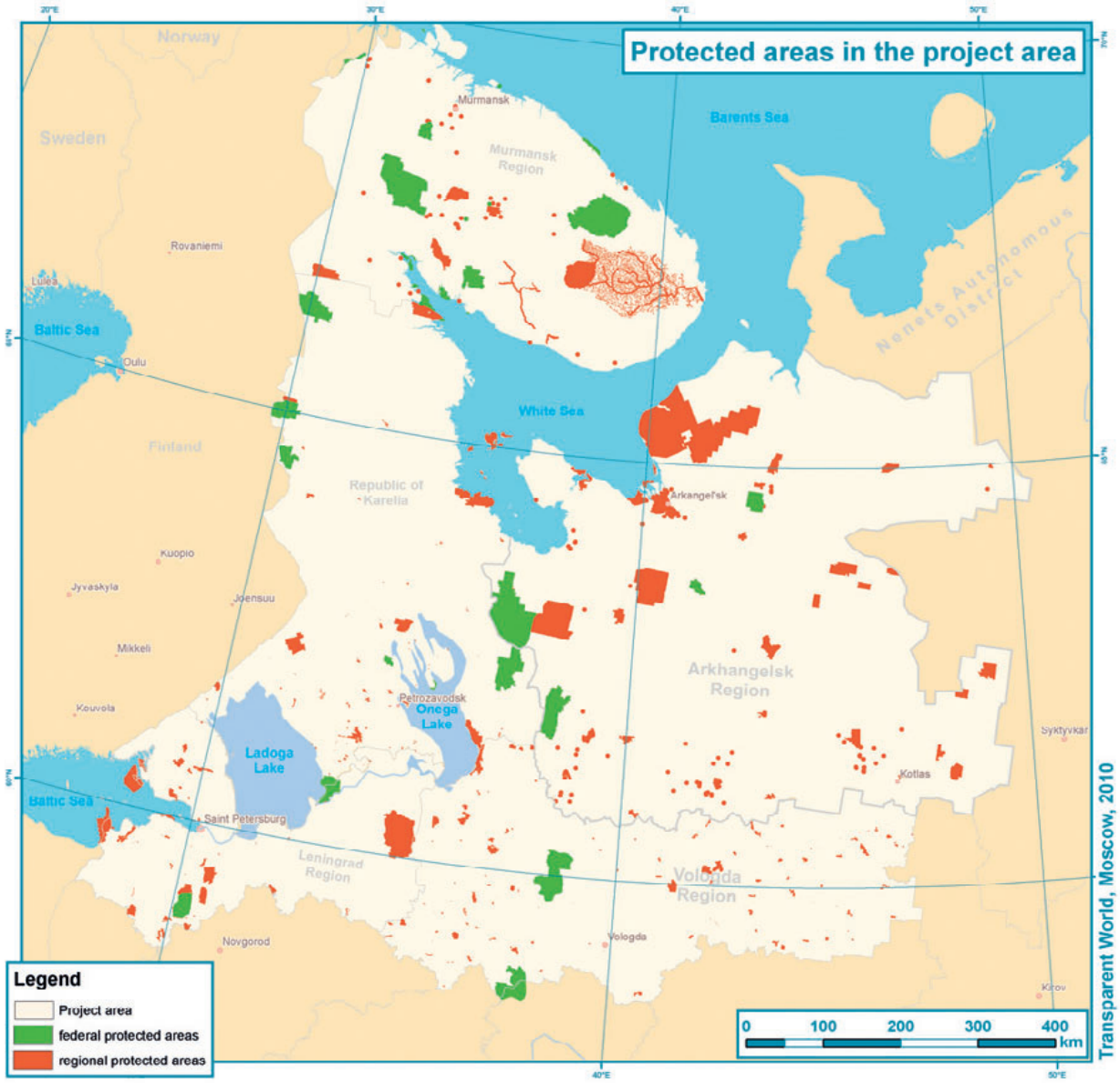
4 "On Protected Areas". Federal law of the Russian Federation of 14 March, 1995 no. 33-ФЗ. See also: Clause-by-clause commentary to the Federal law of the Russian Federation "On Protected Areas", second edition, supplemented and reworked. V.B. Stepanitsky, 2001.

It should be explained that at present there is no clear established system of criteria for division of PAs into significance levels and categories[5]. During an almost century-long history of Russian federal PAs, approaches to their establishment have changed many times, and, correspondingly, so did the approaches to the establishment of regional PAs. On the other hand, due to the fact that the procedure of RPA establishment is easier that that of federal PA establishment, some regional PAs came to comprise extremely valuable natural complexes and objects, which in principle deserve stricter protection. Thus, some PAs, federal as well as regional, do not fully correspond to the significance level and category officially assigned to them.

The Russian Federation law "On Protected Areas" also delegates to the competent executive authorities of the RF subjects the right to establish other PA categories in addition to those listed in the law. The only region in the North-West Russia to make use of this right is the Vologda region, where two new PA categories were established: protected natural complex and tourist-recreational area (see chapter "Vologda Region").

In the six RF subjects that participated in the project there are 22 federal PAs: 8 strict nature reserves (zapovedniks), 6 national parks and 8 nature reserves (zakazniks). The total number of regional PAs in the participating regions is 495, of them 173 nature reserves (zakazniks), 317 nature monuments, 2 nature parks, 2 tourist-recreational areas and 1 protected natural complex. In two regions, the Vologda region and the Leningrad region, there are also PAs of local significance (in total, 17). Besides, in the six participating regions there are 4 UNESCO biosphere reserves and 4 UNESCO World Heritage sites, 7 Ramsar sites (i.e. areas included in the List of Wetlands of International Importance) and 4 Baltic Sea Protected Areas (BSPA). These areas with an international status are associated with both regional and federal PAs. More information is presented in the chapters devoted to the participating regions (see chapter 3 Vologda Region).

5 Stepanitsky V.B., Stishov M.S., Troitskaya N.I., Troitsky A.A. "Analysis of PA management forms and categories". In: "Protected Areas of Russia: Modern State and Prospects of Development" by V.G. Krever, M.S. Stishov, I.A. Onufrenya; WWF Russia, 2009.



Assessment of management state and needs of regional PAs was carried out in six regions of the North-West Russia: Arkhangelsk, Vologda, Leningrad and Murmansk Regions, Republic of Karelia, and St. Petersburg. Total number of RPAs in these regions on June 1, 2010, was 495, and their total area, 3433.9 thousand ha.

In the following paragraphs PA categories are briefly presented (following the federal law of the Russian Federation "On Protected Areas"), and the IUCN categories corresponding to them are mentioned[6].

State strict nature reserves *(zapovedniks)* are nature conservation, scientific-research and environmental education institutions, whose aims are preservation and study of the natural course of natural processes and phenomena, genetic fund of plant and animal world, separate species and communities of plants and animals, typical and unique ecological system. A characteristic feature of zapovedniks is that within their limits protected natural complexes and objects (land, waters, Earth's interior, plant and animal world) that have nature conservation, scientific and environmental education importance as examples of natural environment, typical or rare landscapes or places of preservation of genetic fund of plant and animal world are completely withdrawn from the economic activities. Strict limits on visits are imposed in the zapovedniks. Corresponding IUCN categories: Ia – managed mainly for science; Ib – managed mainly for wilderness protection.

National parks are nature conservation, environmental education and scientific-research institutions, whose areas comprise natural complexes and objects that have a special ecological, historical and aesthetic significance, and that are intended for use in nature conservation, environmental education, scientific and cultural aims as well as for regulated tourism. Corresponding IUCN categories: II – managed mainly for ecosystem protection and recreation.

State nature reserves *(zakazniks)* are areas that have special significance for preservation or restoration of natural complexes or their components and maintenance of ecological balance. *Zakazniks* may have a different profile, for example: **complex (landscape) *zakazniks*** are intended for conservation and restoration of natural complexes (natural landscapes); **biological (botanical and zoological) *zakazniks*** are intended for conservation and restoration of rare and disappearing plant and animal species, including species valuable from economic, scientific and cultural viewpoint; **paleontological *zakazniks*** are intended for conservation of fossils; **hydrological *zakazniks*** are intended for conservation and restoration of valuable aquatic objects and ecological systems; **geological *zakazniks*** are intended for conservation of valuable objects and complexes of inanimate nature. Corresponding IUCN categories: Ib – managed mainly for wilderness protection; IV – managed mainly for conservation through management intervention; some zakazniks correspond to category VI – managed mainly for the sustainable use of natural ecosystems.

Nature monuments are unique, irreplaceable natural complexes and natural and artificial objects valuable from ecological, scientific, cultural and aesthetic viewpoint. They may be land or water areas as well as solitary natural objects. Corresponding IUCN categories: III – managed mainly for conservation of specific natural features.

Nature parks are nature conservation recreational institutions. They include natural complexes and objects that have considerable ecological and aesthetic value and are intended for nature conservation, environmental and recreational purposes. Corresponding IUCN categories: II – managed mainly for ecosystem protection and recreation.

6 Correspondence between federal PA categories and IUCN categories is given according to the publication "Protected Areas of Russia: Modern State and Prospects of Development" (V.G. Krever, M.S. Stishov, I.A. Onufrenya, WWF Russia, 2009). Correspondence between regional PA categories and IUCN categories is given according to "Narrative report on the implementation of the Programme of identification of the potential Areas of Special Conservation Interest (ASCIs) of the Emerald Network in the Russian Federation in 2009".

1.2 The role of regional PAs in the PA network of the participating regions

Regional PAs are administered by state authorities of the RF subjects and subordinate state institutions. Contrary to *zapovedniks* and national parks, many RPAs have until recently had no administrations of their own, no staff, no permanent budget and no work plan. For many years, the established nature management regime as such was sufficient for fulfilment of PA objectives.

Changes in geopolitical, economic and social spheres of the last two decades have also influenced the situation with PAs. On the whole, a gradual increase of anthropogenic load upon natural complexes of PAs is observed. This calls for new approaches to PA management, which would allow combining nature conservation tasks with the tasks of economic and social development (recreation, support of entrepreneurs, support of traditional way of life, maintenance of environment quality in general, etc.). It is also becoming important to ensure the support of PAs by means of active interactions with local communities, the developing entrepreneurship and other interested parties.

Experience in this sphere is now being actively accumulated. In some RF subjects, in order to optimise PA management, state institutions responsible for management of all RPAs in the region (directorates or administrations of PAs) have been established within the jurisdiction of the corresponding state authorities. Out of the participating regions, this way was chosen in the Arkhangelsk, Leningrad and Murmansk Regions, and in St. Petersburg. In the Vologda Region and the Republic of Karelia, RPA management remains the responsibility of, correspondingly, the Department of Natural Resources and Environment Protection of the Vologda Region and the Ministry of Agriculture, Fish Industry and Ecology of the Republic of Karelia.

On the whole, regional PAs have a less strict protection regime as compared with, e.g., *zapovedniks*, and many of them are traditional places of recreation and sport tourism, collection of mushrooms and berries, fishing, sometimes hunting, haymaking etc. Of course, such anthropogenic load, increasing, can come into contradiction with the protection regime, but, on the other hand, such traditional use can be a starting point for establishing a dialogue with the local communities and other interested parties. It can also open new vistas for harmonic incorporation of PAs into local social-economic context and for planning of non-exhausting, sustainable use of natural ecosystems. Many RPAs, especially those situated close to cities, have a large potential for development of environmental education, and in many places this work is already carried out. Thus, RPAs supplement national parks, which cannot meet all the recreational and educational demands of the residents of the North-West Russia. In some cases, RPAs also preserve spiritual, cultural, historical and ethnographical values.

It can be said with certainty that regional PAs contribute considerably to preservation of biological and landscape diversity of the Russian Federation and, in particular, North-West Russia, being in many respects complementary to the system of federal PAs. An illustrative statistical example: in the participating regions 22 federal PAs occupy the area of 7736.98 thousand ha, whereas 495 regional PAs occupy the area of 3433.9 thousand ha.[7] Especially important is the role of RPAs in the regions where there are few federal PAs or where federal PAs occupy a relatively small area. For instance, the total area of 2 federal PAs of the Leningrad Region is 102.12 thousand ha, whereas 39 regional PAs occupy the area of 465.37 thousand ha. In St. Petersburg there are no PAs of the federal level at all.

More detailed estimates are now being obtained, and suggestions for improvement of PA network in the North-West Russia are being

7 Here and further in the text the data on the total area of PAs in the participating regions and its percentage of the total area of the region are approximate. This is associated with the fact that official data about the areas of PAs and the regions are taken from different sources, where the calculation methodology may have been different.

elaborated. For example, in 2006-2008 WWF Russia has analysed the representativeness of the existing network of federal PAs and suggested the ways of its development. This was a pioneering attempt for Russia of elaborating a prospective network of federal PAs on the basis of the analysis of all the information available on biological diversity of the whole country.[8] The state of regional PAs was analysed in two projects carried out in 2006-2010 in the Arkhangelsk Region, the Vologda Region, the Leningrad Region, the Murmansk Region, the Republic of Karelia and St. Petersburg: "GAP analysis in Northwest Russia" and "Development of Regional Protected Areas in the North-West Russia" (see below). There are reasons to believe that the results of these two projects would form a good basis for further spatial and functional improvement of PA network in the North-West Russia.

1.3 The project "Development of Regional Protected Areas in the North-West Russia"

The project "Development of Regional Protected Areas in the North-West Russia" was carried out as part of the Finnish-Russian Development Programme on Sustainable Forest Management and Conservation of Biodiversity in the North-West Russia. This programme was established in 1997 in response to the environmental concerns caused by the increased export of timber from Russia to Finland in the 1990ies and the consequent conflicts between forestry and nature conservation. Finnish and Russian authorities sought to reconcile these conflicting interests with a programme aiming at the development of both these sectors. The programme is financed by the Finnish Ministry of Foreign Affairs together with the Finnish Ministry of the Environment.

The objectives of the nature conservation component of the programme are to promote the establishment of new protected areas, to develop PA network and to support nature conservation research in the North-West Russia, as well as to encourage cooperation, planning and implementation of multilateral environmental projects. These objectives are consistent with the targets of the United Nations Convention on Biological Diversity (Rio de Janeiro, 1992), to which both Russian Federation and Finland are Contracting Parties. Over 50 nature conservation projects have been carried out within the programme, the cooperation between Russian and Finnish partners being gradually extended from the border regions to the other parts of the North-West Russia. In 2006-2010 two projects focused on protected areas were carried out as a part of the programme: "Development of Regional Protected Areas in the North-West Russia" and "GAP analysis in Northwest Russia". The target areas of these two projects were the

8 "Protected Areas of Russia: Modern State and Prospects of Development" (V.G. Krever, M.S. Stishov, I.A. Onufrenya, WWF Russia, 2009).

same six NWR regions, and the project partners were often the same organizations. The goal of the GAP-analysis project was to analyze and evaluate the representativeness of the PA network in the participating regions and gaps in it. This project will be completed in the first quarter of 2011, resulting in a comprehensive database and a publication containing cartographical material on the existing PA network and recommendations for its development. In a way, these two projects, "GAP analysis..." and "Development of Regional Protected Areas..." can be said to have been complementary.

More information about the Finnish-Russian Development Programme on Sustainable Forest Management and Conservation of Biodiversity in the North-West Russia can be found at www.environment.fi/nwrussia.

The project "Development of regional PAs in the North-West Russia" was implemented by Metsähallitus Natural Heritage Services (NHS) and Finnish Environment Institute (SYKE) in cooperation with the regional state authorities responsible for RPA management and their subordinate state institutions (further referred to as "management authorities") in six regions of the Russian Federation: the Arkhangelsk Region, the Vologda Region, the Leningrad Region, the Murmansk Region, the Republic of Karelia and the City of St. Petersburg. Speaking concretely, the main project partners in Russia were: in the Arkhangelsk Region — regional state institution "Directorate of Regional Protected Areas", in the Vologda Region — Department of Natural Resources and Environment Protection of the Vologda Region, in the Leningrad Region — Committee for Natural Resources of the Leningrad Region, in the Murmansk Region — state regional institution "Directorate (Administration) of the Regional Protected Areas of the Murmansk Region", in the Republic of Karelia — Ministry of Agriculture, Fish Industry and Ecology of the Republic of Karelia, and in St. Petersburg — state institution "Directorate of Protected Areas of St. Petersburg". The RPA management authorities that participated in the project are described in the following chapters in more detail. The executive partner of the project in Russia was the Baltic Fund for Nature (St. Petersburg charitable public organisation "Biologists for Nature Conservation"). Metsähallitus NHS, together the Baltic Fund for Nature, was responsible for project implementation and management, and reported the progress to SYKE, which financed the project and carried out general coordination.

Also involved in the project were experts from the following institutions and organisations: Lomonosov Pedagogical State University, WWF Arkhangelsk project office, Administration of municipal unit "Pinezhskii municipal region" and Administration of municipal unit "Verkolskoe" (Arkhangelsk Region); Vologda State Pedagogical University, Vologda regional department of the Russian Geographical Society and Limited liability company "Geokom" (Vologda Region); State institution "Arctic and Antarctic scientific-research institute" and Fund of Support and Development of PAs, Protection, Restoration and Rational Use of Animal World Objects of the Leningrad Region (Lenoblpriroda) (Leningrad Region); WWF Murmansk project office and Kola Biodiversity Conservation Center (Murmansk Region); Karelian Scientific Center of the Russian Academy of Sciences, Karelian regional public nature conservation organization SPOK (Republic of Karelia); St. Petersburg State University, St. Petersburg Scientific Center of the Russian Academy of Sciences and non-commercial partnership "Partnership for Zapovedniks" (St. Petersburg).

Metsähallitus is a state-owned enterprise responsible for the management of state-owned land and water areas in Finland. Natural Heritage Services is the business unit of Metsähallitus carrying out the public administration duties of the company, namely managing protected and hiking areas, controlling hunting and fishing rights and promoting conservation and recreational use of the state lands and waters. Currently NHS manages 35 national parks and a number of other protected areas, covering over 70 million hectares of land and water areas.

Metsähallitus has a long history of successful cooperation with Russia in the field of nature conservation. Cooperation between Metsähallitus NHS and Russian federal PAs has focused on establishment of transboundary protected areas, management of national parks and development of nature tourism. Vivid examples of this cooperation are "Friendship" *(Druzhba)* Nature Reserve (established on the basis of the Kostomukhshskii strict nature reserve *(zapovednik)* and five

neighbouring protected areas in Finland), Oulanka-Paanajärvi twin parks and Kalevala National Park. In 2000ies, Metsähallitus NHS extended the cooperation to the Russian regional PAs, with the focus on facilitating their effective management.

The overall aim of the project was to improve general functioning and management of regional PAs in the participating NWR regions and to promote networking of the PAs in the North-West Russia and Finland. The project was expected to provide support for the regional authorities responsible for regional PAs through workshops, seminars, study tours and expert meetings. The project consisted of two main parts: 1) joint activities aimed at increasing the competence of PA managers and at facilitating contacts and experience exchange between the partners (workshops, seminars, study tours devoted to various issues related to PA management) and 2) pilot projects carried out by the participating regions and focusing on the solution of some concrete tasks of PA management. In the course of these pilot projects, close consultations on various practical issues between Russian and Finnish experts were conducted. Whenever possible, the project promoted the involvement into PAs management of various stakeholders: NGOs, entrepreneurs, local communities etc.

The project start-up meeting was held in late 2006. Project events of 2007 were: 1) workshop on legal aspects of RPAs (hosted by the Archangelsk Region), 2) a study tour to the Paanayarvi National Park in Russia and its Finnish twin, Oulanka National Park, with the focus on PA management practises, and 3) seminar devoted to participatory management of RPAs and cooperation with federal PAs (hosted by the Murmansk Region). Project events of 2008 were: 1) workshop on fundraising for PAs in the Nature Park Veppskii Forest (Leningrad Region), and 2) a working meeting in St. Petersburg. In the autumn of 2008, there was a workshop in Palmse (Estonia) devoted to Estonian practises of PA management and the opportunities for trilateral cooperation in nature conservation between Estonia, Finland and Russia. Project events of 2009 were: 1) seminar devoted to public involvement and interactions with NGOs (St. Petersburg), 2) a study tour to Savonlinna and Pihlajavesi Natura 2000 site in South-East Finland with the focus on practical aspects of management planning, and 3) seminar in Zelenogorsk (hosted by St. Petersburg), where reports on regional pilot projects were discussed. In 2010, the role of RPAs in the international PA networks and the possibilities for future cooperation were discussed in St. Petersburg. The project results were summed up at the enlarged session of the ecological expert group of the Coordination Council on Cross-border and Interregional cooperation at the Office of the Plenipotentiary Envoy of the President of the Russian Federation to the North-West Federal District (St. Petersburg) on June 10, 2010. In 2008-2010, the assessment of the management state and needs of the regional PAs, whose results are presented in this report, was conducted.

In 2008, five participating regions (the Arkhangelsk Region, the Vologda Region, the Leningrad Region, the Murmansk Region and St. Petersburg) carried out pilot projects focusing on the development of specific management activities of RPAs. The pilot projects were conducted by the regional RPA management authorities together with Russian partners and Metsähallitus experts. The choice of the pilot project topics was dictated by the most urgent developmental needs of the RPAs. In the Archangelsk Region, the pilot project was aimed at the development of management plan for Verkolskii nature reserve *(zakaznik)*. In the Vologda Region, within the framework of the pilot project, the establishment of the protected natural complex "Onezhskii" was carried out and materials for its management plan were developed. In the Leningrad Region, the pilot project was devoted to identification of training needs of the 52 staff members of the RPA management authority and to organisation of seminars on various aspects of PA management. In the Murmansk Region, within the framework of the pilot project three events were organised: two training seminars for the RPA rangers and a seminar on interaction between federal and regional PAs of the Murmansk Region, where the most important decision was made about the establishment of the scientific council attached to the RPA management authority. The pilot project of St. Petersburg consisted in development of a standard statute *(tipovoye polozhenie)* for PAs and development of the management plan for Gladyshevskii nature reserve *(zakaznik)*. The pilot projects are described in more detail in the following chapters.

1.4 The Assessment of the management state and needs of the RPAs: background, aims, methodology

Background. In the course of the project, it became obvious that the state of RPA management in the participating regions varied considerably. It also turned out that the contacts between the RPA authorities in different regions were rather limited. The gaps in understanding of the current state of management and prospects of its development in the neighbouring regions hindered to some degree the progress of the regional authorities responsible for RPA management, made difficult experience exchange between the management authorities in different regions and prevented Metsähallitus experts from sharing their experience with the Russian colleagues in the most effective way. Therefore, it was suggested to carry out an assessment of the management state and needs of the regional PAs in the participating regions (hereafter referred to as the Assessment).

Time limits. The Assessment was conducted in 2008, and this year is considered in the report as the "time of the Assessment". It should be noted, however, that some aspects of the management state and needs of RPAs reflected in this report have been verified until 2010.

Aims. The main aim of the Assessment was to identify strengths and weaknesses of the RPA management in the participating regions and to determine development priorities of their management. The emphasis was made on revealing trends and specific features in management of the network consisting of many PAs in the concrete region. The Assessment was also expected to give an impetus to monitoring of the effectiveness of the RPA management. In addition, information on threats to RPAs was collected.

Choice of method. The assessment was based on the Management Effectiveness Tracking Tool (METT), developed by the World Bank and WWF.[9] The METT was developed to help track and monitor changes in the management effectiveness of PAs. This method is based on the framework for assessing management effectiveness of Protected Areas, suggested by the World Commission on Protected Areas (WCPA) of the IUCN. The WCPA Framework is based on the idea that good protected area management follows a process that has six distinct stages, or elements: it begins with understanding the **context** of existing values and threats, progresses through **planning**, and allocation of resources **(inputs)**, and as a result of management actions **(processes)**, eventually produces products and services **(outputs)**, that result in impacts or **outcomes.**

While it does not yield the information necessary for concrete management decisions, the METT does provide a quick overview of the management effectiveness. Originally intended for application to individual protected areas, this tool has also been applied at the level of PA networks.

The choice of the METT for the Assessment was based on the following considerations:

- This tool covers a broad range of activities implied by the notion of "PA management" and helps to identify milestones on the way towards improving the situation in the case of each particular activity;
- This tool may be used to reveal the overall state of management within the whole network of PAs in a particular region;
- Its scoring system is well suited for identification of PA management strengths and weaknesses, as well as development priorities and needs of the management;
- Four variants of answers provided for each issue facilitate comparison of the questionnaires filled by different teams of experts in different regions;
- In addition, it provides a "checklist" of threats to PAs, which makes it possible to collect this important information alongside with the management state assessment;

9 Management Effectiveness Tracking Tool. Reporting Progress at Protected Area Sites: Second edition, July 2007.

- Finally, the METT is relatively easy to use, and can be used by protected area managers or other relevant experts with the minimal expenditure of resources.

Brief description of the METT. The METT consists of three questionnaires to be filled in by the assessors: two datasheets and an assessment form. The first datasheet records administrative data: details of the assessment and basic information about the site (name, size, location etc.). The second datasheet provides a generic list of threats which protected areas can face. On this datasheet the assessors are asked to identify threats to the PA under assessment and rank their impact or, in other words, to identify threats of high, medium and low significance. Threats of high significance are those threats that seriously degrade PA values; threats of medium significance are those that have some negative impact; threats of low significance are those threats that are present but do not seriously impact the values. The fourth possibility of threat impact assessment, "no answer", means that the threat is absent or not applicable to the protected area in question.

The management assessment form contains 30 issues presented in table format, with three columns for recording details. In the first column, the issue should be assessed using a simple score: 0 (bad), 1 (poor), 2 (good), 3 (excellent). To assist in the choice of the score, four alternative criteria (variants of answers) are suggested for each issue. Inevitably, there may occur situations when the variants of answers suggested by the authors of the method do not correspond to the real state of things. In such cases, the best-corresponding variant should be chosen and explanations should be given. If the issue is not relevant for a particular PA, it should be left without an answer, and a commentary should be given. These comments and explanations, if any, should be recorded in second column of the assessment form. In this column the assessors can also provide a more detailed qualitative description of the situation (notes of PA staff, references to documents, monitoring or research results etc.). The third column, next steps, invites the assessors to propose steps for improving the situation with the management aspect under consideration.

Full English version of the Management Effectiveness Tracking Tool can be obtained at http://www.panda.org/what_we_do/how_we_work/conservation/forests/tools/tracking_tool/.

Using METT for the Assessment. In order to adjust the METT to the needs of this particular Assessment and to make it fit better the concrete situation in the North-West Russia, several modifications were introduced into the tool. To note, the introduction of such modifications is not forbidden by the authors of the method.

Firstly, in order to satisfy the need of describing the management state in a *network* of PAs in each region, it was decided to assess as many of the regional PAs as it was reasonably possible (see section **Assessed PAs** below). They were treated individually within a general management assessment form, with a separate column allotted for each protected area under assessment. On the contrary, *threats* were identified (with the use of the threat datasheet) not for individual PAs but together for all the PAs under assessment.

Secondly, to keep time and efforts required for the assessment within sensible limits, it was agreed to be satisfied with less detailed information than it was suggested by the METT authors. In particular, the first datasheet was not used at all, and the fields "comment/explanation" and "next steps" of the management assessment form were not filled in.

Thirdly, several issues (and respective variants of answers) in the management assessment form were modified or specified in comparison with the original text for better correspondence with the actual situation in the North-West Russia. This mainly concerns issue 1 (legal status), issue 2 (regulations concerning control and guarding/protection) and issue 29 (fees for nature use). The management assessment form was also supplemented with issue 13A (it was present in the METT version of 2003, but was deleted from the version of 2007).

Management assessment form and threat datasheet were translated in Russian specifically for the purpose of the Assessment, since the second edition of METT did not exist in Russian. The management assessment form was translated taking into consideration the Russian version of the first edition of METT (2003). Complete

versions of the forms used for the Assessment are given in the Appendices C and D.

Assessed PAs. It was agreed to include in the assessment, first of all, nature reserves *(zakazniks)* and nature parks *(prirodnye parki)*, because these PA categories, in comparison with, e.g., nature monuments, usually have a larger area and play a greater role in the preservation of landscape and biological diversity; consequently, their management generally requires more attention. It was thus assumed that the assessment carried out for these categories of protected areas will help to identify the main trends and specific features of management within the RPA networks. In some of the regions, the assessors also chose to assess several nature monuments *(pamyatniki prirody)* and reserves *(rezervaty)*. The assessed PAs are marked with an asterisk in the list of PAs in the participating region (see Appendix A).

Assessors. The assessment (filling in the questionnaires and providing further comments) was done by the staff of the management authorities. Experts from scientific institutions and NGOs who actively work in regional PAs were also involved in this work. The list of organizations and experts who took part in the assessment is given in the Appendix B.

Analysis of the Assessment results was performed by the authors of the present report on the basis of the questionnaires filled in by the assessors and in close collaboration with them. In the process of report preparation, the results collected in the METT questionnaires were supplemented, when necessary, with some more detailed information on the PA system in each region, collected through correspondence and meetings with the experts.

1.5 Presentation of the Assessment results

The main body of the report contains six chapters devoted to the Assessment results in each participating region. The structure of the chapters is more or less uniform. Each begins with the brief information about the region. Then follows **"PAs of the ... Region"** section presenting the PA network in the region with the focus on RPAs. Threats to regional PA, as identified with the use of the threat datasheet, are also presented in this section. Only threats of high and medium significance are given. Threats were not analysed in detail, but were sometimes commented upon by the assessors. The following section, **"Characteristic features of regional PA management in ..."**, offers a brief historical overview of the RPA network in the region, and presents the authorities responsible for them.

The following section, **"Analysis of regional PA management in ..."**, is the largest section of each "regional" chapter. It presents the results collected through the management assessment form. This section contains a table, where the issues of the management assessment form were divided into two groups depending on the score assigned to them by the assessors:

1) **strengths** (the majority of the answers for individual PAs have scores "3" and/or "2");

2) **weaknesses** (the majority of the answers for individual PAs have scores "1" and/or "0").

The graph following the table shows the percentage of answers with scores "0", "1", "2" and "3" given for each issue.

Strengths and weaknesses of management, presented in the table, are self-explanatory. Their more detailed analysis was outside the scope of the Assessment, with one exception: an attempt was made to determine **developmental priorities** of the RPA management. For this, the Assessment results were examined in the light of the idea about critical management activities.

Critical management activities, corresponding to certain issues of the management assessment form, had been identified by WWF during a large-scale worldwide assessment of PA management effectiveness implemented in 2004 using the METT. The conclusion was that these activities often correlated most closely

with overall management effectiveness[10]. Consequently, a supposition was made within the present Assessment that the elimination of drawbacks concerning these management activities is likely to have a large impact on the overall management effectiveness.

These critical management activities are:

- legal status (issue 1 of the management assessment form);
- PA objectives (issue 4);
- boundary demarcation (issue 6);
- management plan (issue 7)*;
- regular work plan (issue 8);
- current budget (issue 15);
- monitoring and evaluation of management activities (issue 26).

** Issue 7 (management plan), which was not in the original WWF-complied list of critical management activities, was regarded as such in the present Assessment, since in the current PA management practice in the participating regions it is closely related to the critical management activity "regular work plan" (issue 8). Moreover, management planning is an overarching activity that links the majority of the others.*

Critical management activities are shown **in bold script** in the table with the management assessment results. Their presence among the "strengths" is an additional indication of a good state of management, while their presence among the "weaknesses" is an indication that this issue should possibly be considered as a **developmental priority** for the next period of PAs management system in the region. The discussion of achievements and drawbacks in implementing critical management activities in the region concludes the section.

It should be emphasized that the management developmental priorities revealed in this way by no means are to be considered as definitive. The concrete situation can certainly dictate another sorting of priorities. The concept about critical management activities is just one of the tools that may help a PA manager to make the right choice concerning the main directions of management development.

In the end, each "regional" chapter contains the presentation of the **pilot project**, carried out in the region within the framework of the project "Development of Regional PAs in the North-West Russia".[11]

10 Tracking progress in managing protected areas around the world, an analysis of two applications of the Management Effectiveness Tracking Tool developed by WWF and the World Bank, WWF, June 2007.

11 In one of the participating regions (Republic of Karelia) the pilot project was not conducted.

2 Arkhangelsk Region

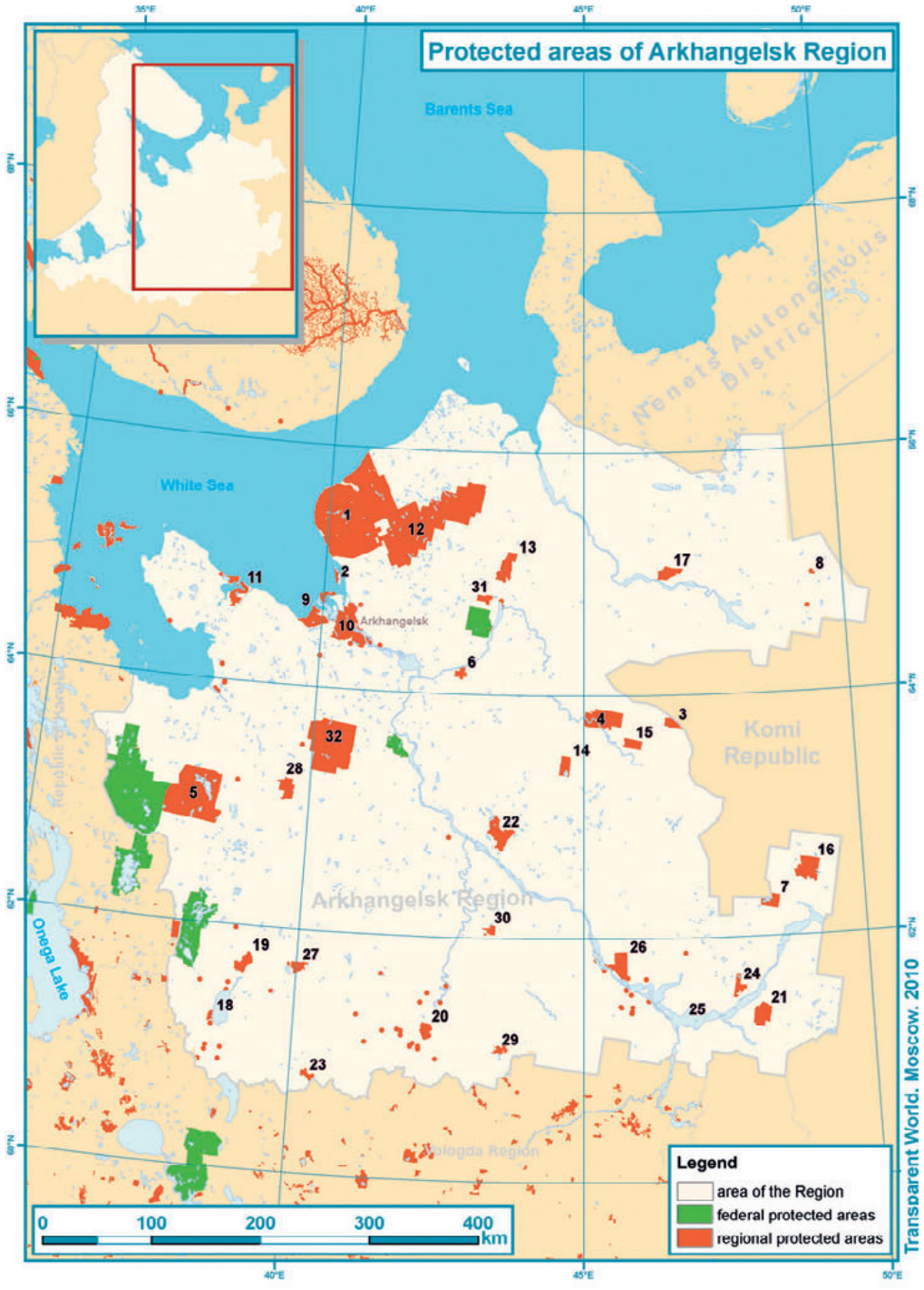
The area of the Arkhangelsk Region together with the Nenets Autonomous District is 58740 thousand ha. Its population is 1304.5 thousand people (according to the data of portal of the Russian Federation government, http://www.government.ru for 16.05.2010). The area of the Arkhangelsk Region without the Nenets Autonomous District is 41008 thousand ha (it is this figure that will be used further for designation of the region's area). The administrative centre of the Arkhangelsk Region is the city of Arkhangelsk.

Biogeographically, the territory of the Arkhangelsk Region belongs to:

- arctic, northern (typical), southern small-to-large yernik (shrubby) tundra zones and northern taiga, middle taiga and southern taiga forest zones *(Rastitel'nost' evropeiskoi chasti SSSR*. - Leningrad: Nauka, 1980, 429 pp.)
- boreal region according to the map of biogeographic regions of Europe (European Environment Agency, 2005, http://www.eea.europa.eu).

The Arkhangelsk Region is situated in the catchment basins of the White Sea, the Barents Sea, the Kara Sea and the Pechora Sea, which, in turn, belong to the basin of the Arctic Ocean.

The White Sea coast in the Dvinskoi zakaznik. Photo by Dmitri P. Zasukhin.



Numbers on the map correspond to numbers in the list of RPAs of the Arkhangelsk Region (see Appendix A).

2.1 PAs of the Arkhangelsk Region

There are six federal protected areas in the Arkhangelsk Region: national park "Kenozerskii", which is a UNESCO biosphere reserve, national park "Vodlozerskii" (Onega branch, another part of the park belongs to the Republic of Karelia), which is also a UNESCO biosphere reserve, national park "Russian Arctic" (established in 2009), state nature reserve *(zapovednik)* "Pinezhskii", state nature reserve (*zakaznik*) "Franz-Josef Land" and biological state nature reserve (*zakaznik*) "Siiskii". The total area of federal protected areas is 6201.27 thousand ha (15.12% of the region's area).

The network of regional PAs of the Arkhangelsk Region comprises 32 nature reserves (*zakazniks*) and 67 nature monuments: altogether, 99 PAs with the total area of 1679.05 thousand ha (4.09% of the region's area). There are 22 biological *zakazniks*, 8 landscape *zakazniks*, 1 geological *zakaznik* and 1 hydrogeological *zakazniks*. Verkolskii landscape state nature reserve (*zakaznik*) stands out among the other regional *zakazniks*, because it was established for the preservation of valuable landscape described in the books of the Soviet writer Fyodor Abramov.

Nature monuments preserve water objects (including bogs), forest objects (both forest plots and single trees) and karst caves. There are 29 botanical nature monuments, 25 complex nature monuments, 2 landscape nature monuments, 7 hydrological nature monuments and 4 geological nature monuments.

Landscape and ecological representativeness of PAs network in the Arkhangelsk Region is currently being assessed and the normative document consolidating general principles of its establishment in the Arkhangelsk Region (the Concept of PA network development in the Arkhangelsk Region) is being developed (within the framework of the project "GAP analysis in Northwest Russia").

To note, there is a UNESCO World Heritage Site in the Arkhangelsk Region: "Cultural and Historic Ensemble of the Solovetsky Islands".

The Arkhangelsk Region is rich in natural resources and has well-developed mining and timber industries, which pose the greatest threats to the PAs of the region. Significant negative impact is also caused by hunting and fishing, which are traditional occupations of the local population.

Threats to regional PAs of the Arkhangelsk Region

Threats of high significance	Threats of medium significance
• Mining and quarrying* • Logging and wood harvesting • Loss of cultural links, traditional knowledge and/or management practices • Natural deterioration of important cultural site values	• Hunting, killing and collecting terrestrial animals • Fishing, killing and harvesting aquatic resources** • Fire and fire suppression (including arson) • Increased fragmentation of natural complexes within protected area • Other 'edge effects' (apart from increased fragmentation of natural habitats within protected area and isolation from other natural habitats) on park values ***

Notes:

* Diamonds; bauxites; limestone for pulp and paper industry; limestone for cement industry; clay for cement industry; palygorskitovye clays; other minerals.

** Collection of algae, sealing and whaling.

*** Wood cuttings along the PA borders; construction of line objects.

A complete list of threats from the threat datasheet is given in the Appendix C.

2.2 Characteristic features of regional PA management in the Arkhangelsk Region

The first regional PAs in the Arkhangelsk Region were established in 1970s. Initially administered by different bodies, they were later transferred under the jurisdiction of the Committee of Ecology of the Arkhangelsk Region. The regional state institution "Directorate of regional protected areas" (hereafter referred to as the Directorate) was established in 2005 within the Committee for operational management of regional PAs. Currently the Directorate is within the jurisdiction of the Agency of Natural Resources and Ecology of the Arkhangelsk Region (hereafter referred to as the Agency), which carries out state management and state control in the sphere of establishment and functioning of regional PAs.

At present, the staff of the Directorate comprises 42 people; besides the administration, there are three departments and a territorial department in the Nenets Autonomous District:

- Department of protection of state nature reserves (*zakaznik*s) and nature monuments (PAs department; 25 people, five of them work in the office, the rest directly in the PAs, ensuring the regime observance);
- Department of ecological education and methodological work (3 persons);
- Administrative and general service department (4 persons);
- Territorial department responsible for protection of state nature reserves (*zakaznik*s) and nature monuments of Nenets Autonomous District (4 persons).

Since its establishment the Directorate has been implementing systematic control of the regime observance and ensuring systematic approach to the licensing of economic activities within the PAs borders.

The Directorate is making PAs inventory aimed at establishing correspondence between the protection status and the actual state of

Sunset in the Klonovskii zakaznik. Photo by the Directorate of RPAs of Arkhangelsk.

things. For instance, several nature monuments were found to be no longer in existence and were abolished; two *zakaznik*s were merged to form one PA, etc. At present, the legal basis of all PAs has been brought into accordance with the acting legislation. Unfortunately, this work is a never-ending process because of the constantly changing legislation (both federal and regional). In particular, structural reorganization of the regional executive authorities calls for introduction of changes into the PAs statutes *(polozheniya)*, since the normative acts contain a reference to the no longer existing Committee of Ecology of the Arkhangelsk Region.

Inventory of species and landscape diversity of regional PAs is carried out with participation of scientific research establishments, such as the Institute of the Ecological Problems of the North (Urals Branch of the Russian Academy of Sciences), Northern Research Institute of Forestry, Pomorskii State University, Arkhangelsk State Technical University and others. Development of management plans for the PAs has been launched. Systematic work on providing the existing PAs with infrastructural facilities is carried out (installation of information boards, maintenance of the trail network, provision of facilities at resting places, biotechnical activities).

These activities are financed through the ecological safety programme of the Arkhangelsk Region, which envisages support of the PA functioning, in particular, inventories and infrastructure.

Beside the project "Development of regional PAs in the North-West Russia", the Directorate is involved in the implementation of the project "GAP analysis in Northwest Russia" (2007-2011) of the Finnish Environment Institute (SYKE) (in collaboration with WWF Arkhangelsk project office).

Aleksey Fedorov, head of regional state institution "Directorate of regional protected areas":

The very fact of existence of an institution responsible specifically for PAs is an achievement. Few regions can boast of such an institution.

2.3 Analysis of regional PA management in the Arkhangelsk Region

Management situation was assessed only for the regional zakazniks (32 out of 101 regional PAs).

Strengths and weaknesses of RPAs management in the Arkhangelsk Region

Each issue is followed by a number (in brackets), which is the issue's number in the Management Assessment Form. The complete version of the Form is given in the Appendix. Issues that constitute key management activities are given in bold.

Strengths (most answers have score 3 and/or 2)	**Weaknesses** (most answers have score 1 and/or 0)
● **Legal status (1)** ● Regulations concerning control and guarding/ protection (2) ● Law enforcement (capacity/resources for practical realization of control and guarding/protection) (3) ● **PA objectives (4)** ● PA design (5) ● **Boundary demarcation (6)** ● **Regular work plan (8)** ● Personnel management (13a) ● Staff training (14) ● **Current budget (15)** ● Security of budget (16) ● Management of budget (17) ● Equipment (18) ● Maintenance of equipment (19) ● Participation of indigenous and traditional people (23)* ● Condition of values (30)**	● **Management plan (7)** ● Information about valuable objects (9) ● Protection systems (10) ● Research (11) ● Active management of habitats, species, ecological processes and cultural values (12) ● Staff numbers (13) ● Environmental education and awareness (20) ● Planning for land and water use around PA (21) ● Contacts with local authorities and land and water users (22) ● Participation of local communities (24) ● Economic benefit (25) ● **Monitoring and evaluation of management activities (26)** ● Visitor facilities and services (27) ● Contacts with commercial tourism companies and entrepreneurs (28) ● Fees for nature use (29)

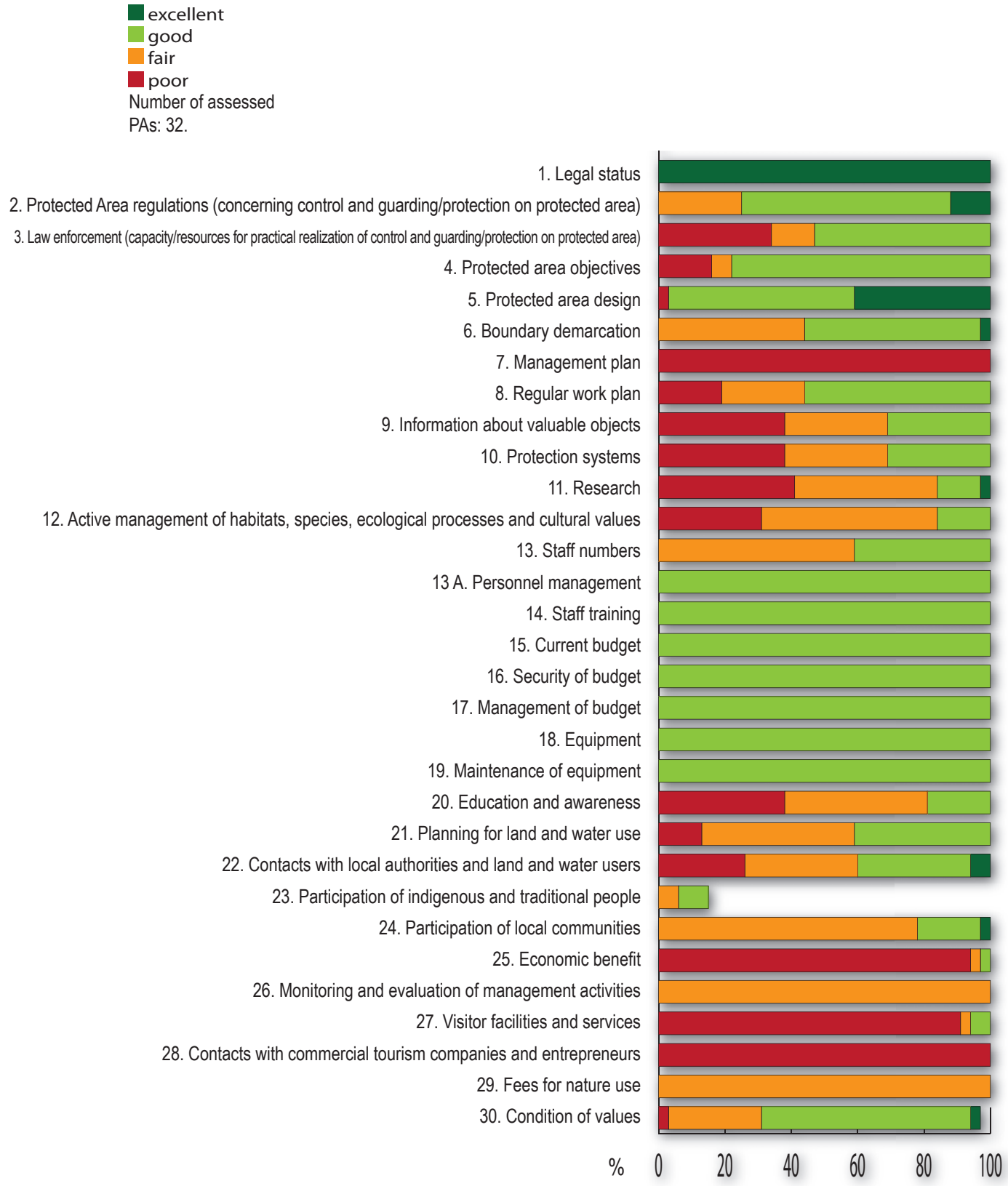
Notes:

* The issue was considered as irrelevant for 27 PAs where there are no indigenous and traditional peoples.

** There is no information on the Puchkomskii landscape nature reserve *(zakaznik).*

In the case of approximately a half of the issues, the scores are the same for all the PAs, which reflects the similarity of the overall management situation. Another half of issues is characterised by a high dispersal of the scores.

Strengts and weaknesses of RPAs management in the Arkhangelsk Region



2.3.1 Critical management activities

Strengths of management

Legal status (issue 1) was considered as a strength of the RPA management in the Arkhangelsk Region due to systematic work of the Directorate with the legislation basis.

Though later the global recession brought about slumps, current budget (issue 15) was on the whole acceptable at the time of the Assessment due to the ecological safety programme of the Arkhangelsk Region. Owing to this, management activities partially corresponded to PA objectives (issue 4) formulated in the PAs statutes *(polozheniya)*.

Success in boundary demarcation (issue 6) is explained by the presence of staff members, who work directly in the PAs and raise the awareness of authorities, local people and land users, as well as by the adequate budget, which allowed demarcation of the PA boundaries in nature by information boards. In addition, almost all the PAs boundaries in the Arkhangelsk Region pass along the forest compartment lines or are restricted by the natural relief features (in particular, rivers).

Regular work plan (issue 8) exists and is to a large extent implemented for most of the PAs and, therefore, this issue is a management strength.

Weaknesses of management

The first and so far the only management plan was developed for the Verkolskii landscape state nature reserve *(zakaznik)* within the framework of the pilot project.

Regular work plans are developed without taking into account the results of monitoring and management assessment (issue 26). Their objectives are set by the Agency, to which the Directorate is subordinate.

2.3.2 Developmental priorities of regional PA management

The Assessment results indicate that, in order to increase the efficiency of the management of the RPA network in the Arkhangelsk Region, priority consideration should be given to the following critical management activities:

- Development and implementation of PA management plans.
- Development and implementation of an effective monitoring and evaluation system (management activities against performance), as well as systematisation of monitoring results and their use in management (adaptive management).

2.4 Pilot project

The pilot project of the Arkhangelsk Region within the framework of the project "Development of regional PAs in the North-West Russia" comprised the development of the management plan for Verkolskii landscape state nature reserve *(zakaznik)* (envisaging, in particular, environmental education in the PA) and publication of the photo-album "Abramov's places. Verkolskii landscape zakaznik".

Contacts of management authorities

Regional state institution "Directorate of regional protected areas"
14 P. Usova street
163002 Arkhangelsk
Russia
Tel./fax: +7-8182-29-52-07, +7-8182-29-52-10,
e-mail: ogu@atnet.ru
Head of the Directorate: Aleksey V. Fedorov

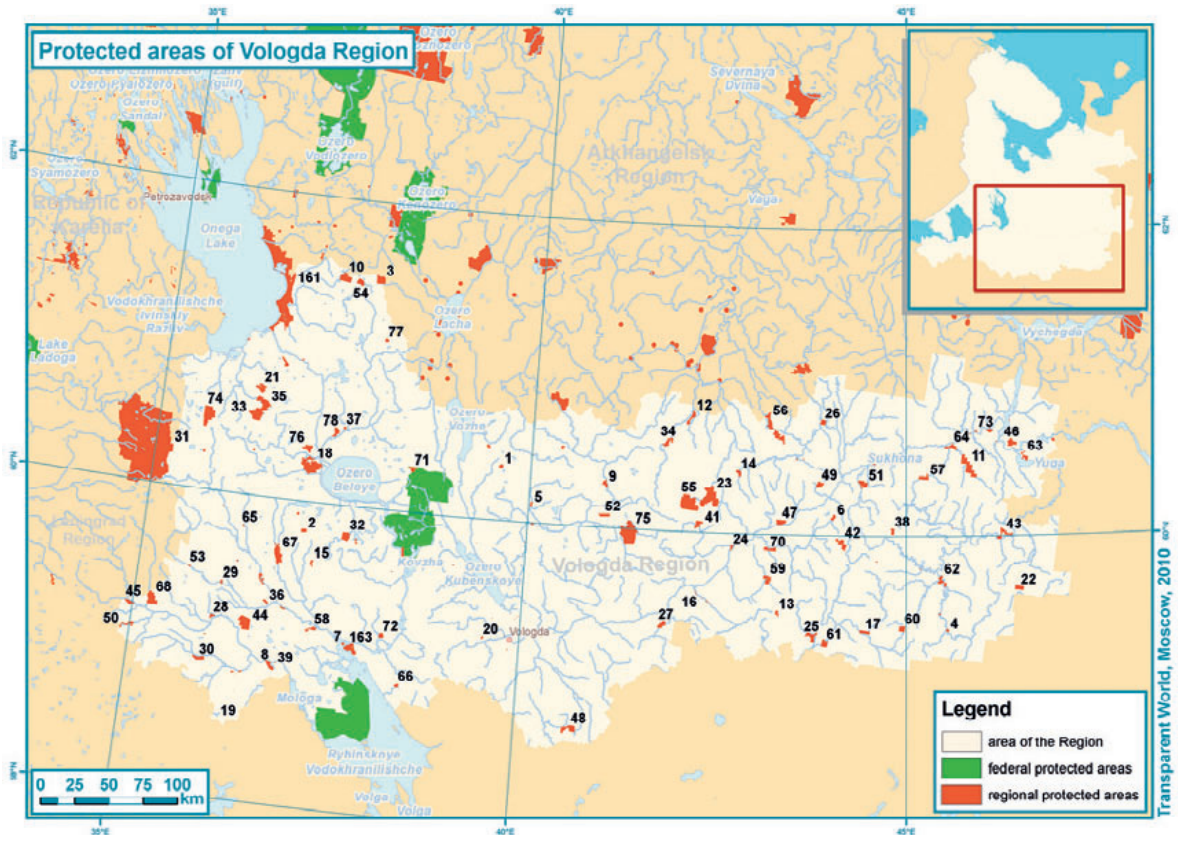
3 Vologda Region

The area of the Vologda Region is 14570 thousand ha. Its population is 1245.5 thousand people (according to the data of portal of the Russian Federation government, http://www.government.ru for 16.05.2010). The administrative centre of the Vologda Region is the city of Vologda.

Biogeographically, the territory of the Vologda Region belongs to:

- middle taiga and southern taiga zones *(Rastitel'nost' evropeiskoi chasti SSSR.* - Leningrad: Nauka, 1980, 429 pp.);
- boreal region according to the map of biogeographic regions of Europe (European Environment Agency, 2005, http://www.eea.europa.eu).

The Vologda Region is situated in the catchment basins of three seas: the White Sea, the Caspian Sea and the Baltic Sea (within the latter, to the catchment basin of Lake Onega, one of the largest freshwater bodies in Europe).



Numbers on the map correspond to numbers in the list of RPAs of the Vologda Region (see Appendix A).

3.1 Characteristic features of protected areas of the Vologda Region

There are two federal protected areas in the Vologda Region: the national park "Russian North" and the state nature biosphere reserve *(zapovednik)* "Darvinskii", which is a UNESCO biosphere reserve (a part of it is situated in the Yaroslavl Region). Their total area is 229.3 thousand ha, which makes up 1.57% of the region's area.

The network of regional PAs of the Vologda Region comprises 163 areas (total area, 219.75 thousand ha; 1.51% of the region's area): 78 nature reserves (*zakaznik*s), 82 nature monuments, 1 protected natural complex and 2 tourist-recreational areas.

Most of the biotopes preserved by the PA network are forest biotopes (70%) and wetland biotopes (24%); among the latter, mostly raised bogs are preserved. Less represented are aquatic biotopes (2.8%) and grassland biotopes (1.1%). A special place among the nature monuments of the Vologda Region is occupied by 18 old parks laid in the 17th-18th centuries. The manors of the Bryanchaninovs, the Mezhakovs and the Batyushkovs, as well as the old park of the Pavlo-Obnorskii Monastery (Yunosheskoe Village) are also monuments of historical and cultural significance.

The PA network of the Vologda Region is based on the principle of preservation of natural "references" of the 33 landscape regions. The concept of a unified RPA network is implemented. The lattice points of the network are formed by landscape nature reserves (*zakaznik*s), best reflecting the natural diversity of the region. The network of *zakaznik*s is supplemented by nature monuments and other protected objects.

According to the Federal Law "On Protected Areas", the competent executive authorities of the Russian Federation subjects have the right to establish, in addition to the PA categories listed in the above law, other PA categories. The Vologda Region is the only region in the North-West Russia that made use of this right. New PA categories, protected natural complex and tourist-recreational area, were established and their normative and legal basis was elaborated.

The protected natural complex "Onezhskii" is a combination of hydrological, geological and landscape nature monuments, key ornithological territories and cultural heritage objects, such as archaeological and historical monuments. Its significance for the Vologda Region is associated with its nature conservation, scientific, cultural, aesthetical, recreational and health-improving values. Alongside with nature conservation, its objectives include provision of recreational facilities, rational use of tourist-recreational resources and development of environmental education and awareness.

Ekaterina Osipova, chief specialist of the Department of Natural Resources and Environment Protection of the Vologda Region:

"The project brought face to face the representatives of different [North-West Russia] regions, who otherwise might have never met. Such exchange of experience is very valuable. One begins to understand that the neighbours are working upon the same problems, and this means that there is always someone to ask for help."

Devonian outcrops in the nature monument "Andomskii Geological Section" within the protected natural complex "Onezhskii" at the South-Eastern shore of Lake Onega. Photo by Tapani Pirinen.

The aim of tourist-recreational areas is preservation of natural complexes and ecosystems under conditions of regulated recreational load, since these areas are traditionally used for recreation anyway.

Another specific PA category, protected bog, is currently not taken into account in the list of the PAs of the region. Transfer of 135 protected bogs, put under protected in 1973-1979, into the category "nature reserve" (*zakaznik*) is under way.

Also under way is work on assigning the status of regional PAs to 13 zoological hunting nature reserves (*zakaznik*s), which are currently under the jurisdiction of the Department of Protection, Control and Use of the Animal Objects of the Vologda Region. Besides, 399 areas were nominated for reservation for assigning PA status; they require a more detailed survey. Therefore, the network of regional PAs is being expanded both by means of establishing new PAs and by means of changing the category of other protected objects.

Thirteen PAs of local significance are registered in the Vologda Region, with the total area of 11.7 thousand ha (0.08% of the region's area). Local PAs are taken into account in the state cadastre at the regional level, but are managed, controlled and financed by the local authorities (municipalities) that have established them.

Noteworthy, one of the 23 UNESCO World Heritage Sites in Russia, "Ensemble of the Ferapontov Monastery", is situated in the Vologda Region. Though a historical-cultural and not a natural site, the Ensemble is a perfect addition

to the landscapes of the adjoining national park "Russian North".

The main industry of the region is black metallurgy, but it does not exercise any considerable influence on the protected areas, which are situated far from the industrial complexes. A well-developed timber industry poses a more significant threat. The Vologda Region is crossed by several major transportation lines connecting Central Russia with the Urals and Siberia; there are two large transport nodes: railway node (Vologda) and waterway node (Cherepovets, a port on the Volga-Baltic route). A considerable part of PAs are situated in areas with a high anthropogenic impact, which determines the major threats.

Threats to regional PAs of the Vologda Region

Threats of high significance	Threats of medium significance
• Garbage and solid waste • Destruction of cultural heritage objects	• Housing and settlement • Wood and pulp plantations • Roads and railroads • Utility and service lines • Logging and wood harvesting • Fishing, killing and harvesting aquatic resources • Fire and fire suppression (including arson) • Increased fragmentation of natural complexes within protected area • Isolation from other natural habitats • Invasive non-native/alien plants* • Invasive non-native/alien animals** • Loss of cultural links, traditional knowledge and/or management practices

Notes:

* Giant hogweed *(Heracleum sosnowskyi).*

** Colorado beetle *(Leptinotarsa decemlineata)*, zebra mussel *(Dreissena polymorpha)*, kilka *(Clupeonella cultriventris)*, freshwater needle-fish *(Xenentodon cancila)*, ratan goby *(Neogobius ratan)*, racoon dog *(Nyctereutes procyonoides)*, canadian beaver *(Castor canadensis),* muskrat *(Ondatra zibethicus)*, American mink *(Neovison vison)*, bison *(Bison bonasus).*

A complete list of threats from the threat datasheet is given in the Appendix C.

3.2 Characteristic features of regional PA management in the Vologda Region

State administration and state control in the sphere of organisation and functioning of regional PAs is carried out by the Department of Natural Resources and Environment Protection of the Vologda Region (hereafter referred to as the Department). First-hand work related to regional PAs is carried out by two members of the Department's staff.

For monitoring and research, experts from the Vologda State Pedagogical University and other institutions are invited on a contractual basis.

All regional PAs are established without withdrawal of land from users and without transfer of land into the category of PA lands. Therefore, activities related to protection, forest conservation, and maintenance are carried out by the organisations managing or owning the lands. For example, PAs situated on the lands of the Forest Fund are managed by the Department of the Forest Complex of the Vologda Region via the district forestries *(leskhozes)*. Old parks, as a rule, have a double governance, being managed by the directorates within the jurisdiction of the Department of Culture and Protection of Objects of Cultural Heritage; these directorates are also entrusted with the protection duties. The Department also cooperates with the municipal authorities that have state inspectors on the staff. These inspectors control the PAs situated on municipal lands. In recent years, in the PAs that are most frequently visited in summer, protection with the aid of the Cossacks ("Vologda Cossacks district") was organised as an experiment; the Cossacks are invited on a contractual basis after the necessary training. By a decree of the head of the Department, a regulation concerning public inspectors has been approved; the work of the public inspectors is supervised by the state (municipal) inspectors.

Besides the project "Development of Regional Protected Areas in the North-West Russia", the Department participated in the implementation of the project "GAP analysis in Northwest Russia" (2007-2011) of the Finnish Environment Institute (SYKE) (in collaboration with the Vologda State Pedagogical University).

The establishment of the first protected areas in the modern understanding of this term started in the Vologda Region in 1963. Initially they were administered by the regional organisation of the All-Russia Nature Protection Society and later, by the Committee for Ecology and Nature Use, the territorial organ of State Committee for Ecology *(Goskomekologiya)* of the Russian Federation. In 2000, the Department of Natural Resources and Environment Protection of the Vologda Region was founded, and the earlier established PAs were transferred under its jurisdiction.

An important direction of the Department's activity is the process of bringing the normative basis of the PAs established in the 1960ies into agreement with the present-day legislation. Another important activity is the establishment of new PAs. In particular, at the time of the Assessment (2008) the Vologda Region had 67 nature reserves *(zakazniks)*, 82 nature monuments and 8 genetic reserves *(rezervats)*. In 2008 all the genetic *rezervats* were transferred into the category of *zakazniks*. In 2009, the establishment of 3 new PAs was decreed, including the protected natural complex "Onezhskii". With its area of 25 thousand ha, it is so far the largest RPA in the Vologda Region. Preliminary work on its establishment was carried out within the framework of the pilot project of the Vologda Region.

3.3 Analysis of regional PA management in the Vologda Region

Management situation in the RPA network was assessed for 104 out of 157 PAs, the information about which was the most complete in 2008. In addition to 102 regional PAs, two local PAs were included into the Assessment. Botanical nature monument "Old Park in Cherepovets", included in the Assessment, was later abolished.

Strengths and weaknesses of RPAs management in the Vologda Region

Each issue is followed by a number (in brackets), which is the issue's number in the Management Assessment Form. The complete version of the Form is given in the Appendix. Issues that constitute key management activities are given in bold.

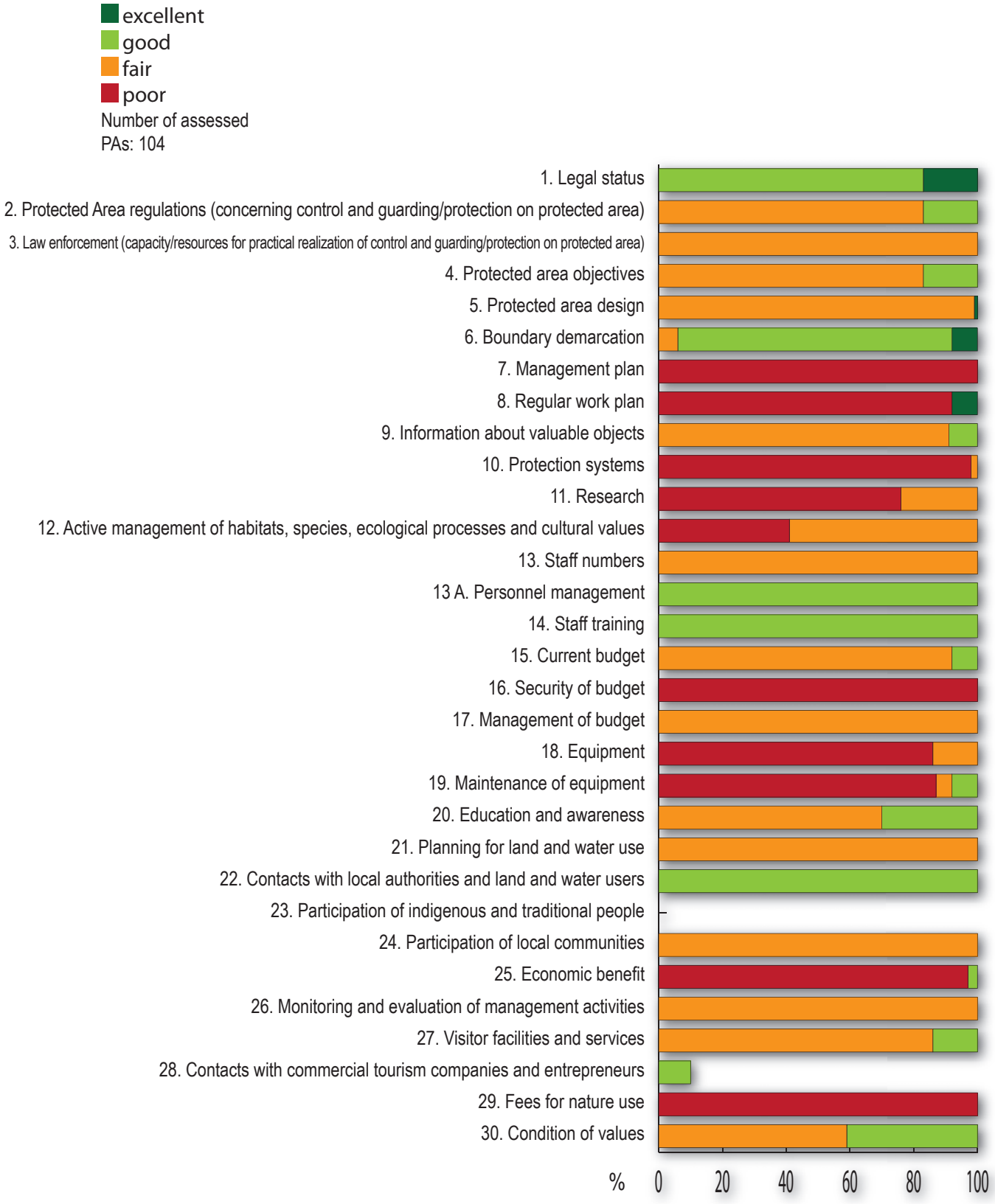
Strengths (most answers have score 3 and/or 2)	**Weaknesses** (most answers have score 1 and/or 0)
• **Legal status (1)** • **Boundary demarcation (6)** • Personnel management (13a) • Staff training (14) • Contacts with local authorities and land and water users (22)	• Regulations concerning control and guarding/protection (2) • Law enforcement (capacity/resources for practical realization of control and guarding/protection) (3) • **PA objectives (4)** • PA design (5) • **Management plan (7)** • **Regular work plan (8)** • Information about valuable objects (9) • Protection systems (10) • Research (11) • Active management of habitats, species, ecological processes and cultural values (12) • Staff numbers (13) • **Current budget (15)** • Security of budget (16) • Management of budget (17) • Equipment (18) • Maintenance of equipment (19) • Environmental education and awareness (20) • Planning for land and water use around PA (21) • Participation of local communities (24) • Economic benefit (25) • **Monitoring and evaluation of management activities (26)** • Visitor facilities and services (27) • Contacts with commercial tourism companies and entrepreneurs (28)* • Fees for nature use (29) • Condition of values (30)

Note:

* Answers were given for 10 PAs, there being no information on the others.

Most scores assigned to individual PAs were the same, which reflects the similarity of the overall management situation.

Strengts and weaknesses of RPAs management in the Vologda Region



28: The answer is only given for 10 PAs.

3.3.1 Critical management activities

Strengths of management

The fact that issue 1 (legal status) is well addressed is due to the systematic work of the Department on bringing the PA statutes *(polozheniya)* into agreement with the present-day legislation.

Scores assigned to issue 6 (boundary demarcation) differ considerably, but on the whole the issue is well addressed: though the PA boundaries are not always not appropriately demarcated, they are known by the management authority, local residents and neighbouring land users owing to well-arranged interactions with the authorities managing or owing the PA land and responsible for their protection.

Weaknesses of management

To ensure the functioning of RPAs in the Vologda Region, a departmental target programme is being developed. However, the current budget (issue 15) provides only partly for the main PA requirements and is inadequate for basic management needs. Insufficient budget limits the activities that require resources and staff, in particular, the development of management plans (issue 7). Almost all PAs lack regular work plan (issue 8); correspondingly, monitoring and evaluation of management activities (issue 26) is irregular. Most PAs have agreed objectives (issue 4), but are only partly managed according to them because of the lack of regular work plan. It should be noted, however, that a certain amount of work in this direction has been done since the Assessment. For example, regular work plans for 2010 have been developed for 24 PAs.

3.3.2 Developmental priorities of regional PA management in the Vologda Region

The Assessment results indicate that, in order to increase the efficiency of the management of the RPA network in the Vologda Region, priority consideration should be given to the following critical management activities:

- Management of PAs according to the objectives fixed in their statutes *(polozheniya)*. To note, in the two years that have passed since the Assessment, PA statutes *(polozheniya)* were brought into agreement with the existing legislation and currently undergo the process of approval.
- Development and implementation of PA management plans.
- Development and implementation of PA regular work plans.
- Development and implementation of an effective monitoring and evaluation system (management activities against performance), as well as systematisation of monitoring results and their use in management (adaptive management).
- Bringing the current budget into agreement with the basic PA management needs.

View from the nature monument “Devyatinskii Perekop”. Photo by Aleksey A. Shatunov.

3.4 Pilot project

The pilot project of the Vologda Region within the framework of the project “Development of regional PAs in the North-West Russia” was devoted to the establishment of the protected natural complex “Onezhskii” in the Vytegorskii District. In the course of the project, the survey of the area was completed, the materials for the management plan of the future PA were prepared and the positive decision of the state environmental impact assessment was obtained. A project of the decree of the Vologda Region government on the PA establishment was then prepared and submitted for approval. The decree was approved on 10 July, 2009. The newly established protected area is situated on the eastern shore of Lake Onega. Two nature monuments, Andom Mountain and Pyatnitskii Pine Forest, lie within its borders.

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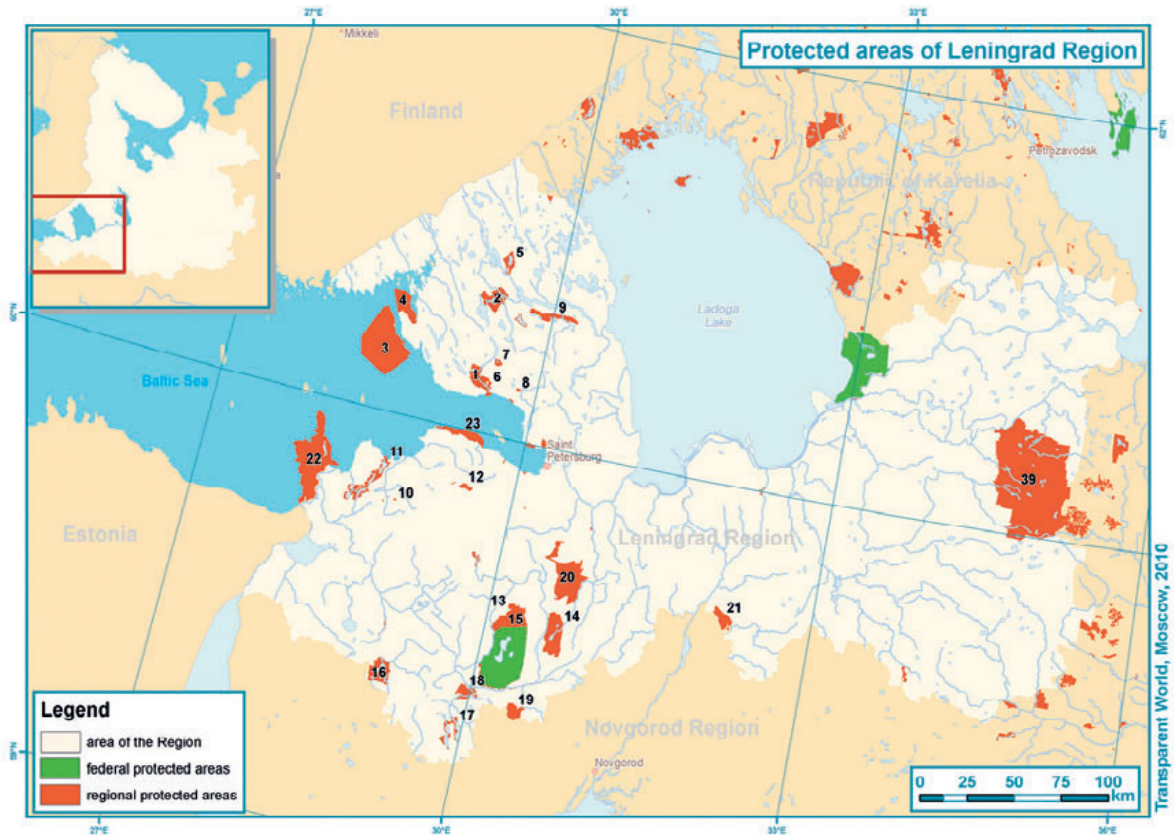
4 Leningrad Region

The area of the Leningrad Region is 8590 thousand ha. Its population is 1652.9 thousand people (according to the data of portal of the Russian Federation government, http://www.government.ru for 16.05.2010). The administrative centre of the Leningrad Region is the city of St. Petersburg, which is, however, not part of the Leningrad Region but a separate administrative unit of the Russian Federation.

Biogeographically, the territory of the Leningrad Region belongs to:

- middle taiga and southern taiga zone (Rastitel'nost' evropeiskoi chasti SSSR. - Leningrad: Nauka, 1980, 429 pp.);
- boreal region according to the map of biogeographic regions of Europe (European Environment Agency, 2005, www.eea.europa.eu).

The Leningrad Region is situated within the catchment basins of the Baltic Sea and the Caspian Sea. Within the former, it belongs to the catchment basins of the two largest European freshwater bodies, Lake Onega and Lake Ladoga).



Numbers on the map correspond to numbers in the list of RPAs of the Leningrad Region (see Appendix A).

4.1 PAs of the Leningrad Region

There are two federal PAs in the Leningrad Region: state nature reserve *(zakaznik)* "Mshinskoe Bog" and state strict nature reserve *(zapovednik)* "Nizhne-Svirskii". Their total area is 102.12 ha, which makes up 1.19% of the region's area.

The RPA network of the Leningrad Region comprises 39 PAs established in 1976-2009 (23 nature reserves *(zakazniks)*, 15 nature monuments and 1 nature park; their total area is 465.37 thousand ha, which makes up 5.42% of the region's area).

Regional PAs were established for protection of rare biological species and communities, unique landscapes, geological and hydrological objects. The main principle of the RPA network development is the preservation of the areas in their entirety. Therefore, most nature reserves *(zakazniks)* and nature monuments have the status of complex ones.

There are 4 local PAs in the Leningrad Region, with the total area of 3.90 thousand ha (0.05% of the region's area). These PAs are taken into account in the state cadastre at the regional level, but are managed, controlled and financed by the local authorities (municipalities) that established them.

In addition, the Leningrad Region has 5 out of the 35 Ramsar sites (that is, sites included in the List of Wetlands of International Importance) in Russia. Three of them ("Berezovye Islands, Gulf of Finland", "Kurgalsky Peninsula" and "Southern coast of the Gulf of Finland, Baltic Sea") coincide, correspondingly, with the regional nature reserves *(zakazniks)* "Berezovye Islands", "Kurgalskii" and "Lebyazhii". The fourth Ramsar site ("Mshinskaya wetland system") coincides with the federal nature reserve *(zakaznik)* "Mshinskoe Bog", and the fifth ("Svir Delta") partly (by 2/3) coincides with the strict nature reserve (zapovednik) "Nizhne-Svirskii".

In December of 2009, the Russian Federation nominated four coastal areas of the Gulf of Finland

Yaroslavichi, an old village in the nature park "Vepsskii Forest". Photo by Nadezhda Alexeeva.

(3 Ramsar sites and the nature reserve *(zakaznik)* "Vyborgskii") into the HELCOM network of the Baltic Sea Protected Areas (BSPA).

The Leningrad Region can be conventionally divided into three parts: the eastern part, the north-western part and the south-western part. The proximity of the megapolis (St. Petersburg) determines the high anthropogenic load upon the PAs situated in the north-western and the south-western parts. This is associated with the fact that many city residents go to the Leningrad Region for recreation, especially in the summer season. These parts are characterised by a dense road network and by numerous settlements whose generally low population increases by hundreds of times in the period of summer cottage *(dacha)* use. The south-western part differs from the north-western part (the Karelian Isthmus) by the more intensive agriculture practises. In the Gulf of Finland large ports with intense maritime traffic are situated: Ust'-Luga (south-western part), Primorsk and Vysotsk (north-western part), St. Petersburg; as well as oil-loading terminals and shipyards.

On the contrary, in the eastern part of the Leningrad Region roads and settlements are few and far between, and some of the areas can even today be said to be difficult of access. Naturally, areas most distant from St. Petersburg experience the least anthropogenic load.

Threats to PAs are considerably different in different parts of the Leningrad Region.

Elena Tropina, leading specialist of the Department of Protected Areas of the Committee for Natural Resources of the Leningrad Region:

Communication with the colleagues was extremely valuable. We could see the dynamics of development and the management problems of PAs in different regions, assess our own actions, compare them with the general tendency. A great advantage of the project was that it was carried out in six regions, not just in one region.

Threats to regional PAs of the Leningrad Region

Threats of high significance	Threats of medium significance
East and south-west of Leningrad region ● Logging and wood harvesting **North-West and South-West of Leningrad region** ● Housing and settlement ● Hunting, killing and collecting terrestrial animals ● Logging and wood harvesting ● Fishing, killing and harvesting aquatic resources ● Fire and fire suppression (including arson) ● Isolation from other natural habitat	**East and south-west of Leningrad region** ● Tourism and recreation infrastructure ● Hunting, killing and collecting terrestrial animals ● Gathering terrestrial plants or plant products (non-timber) ● Fishing, killing and harvesting aquatic resources ● Fire and fire suppression (including arson) ● Invasive non-native/alien plants (weeds)* ● Household sewage and urban waste water ● Garbage and solid waste ● Loss of cultural links, traditional knowledge and/or management practices ● Natural deterioration of important cultural site values ● Destruction of cultural heritage objects **North-West and South-West of Leningrad region** ● Roads and railroads ● Utility and service lines ● Shipping lanes and canals ● Recreational activities and tourism ● Deliberate vandalism, destructive activities or threats to protected area staff and visitors ● Increased fragmentation of natural complexes within protected area ● Loss of keystone species ** ● Invasive non-native/alien plants * ● Invasive non-native/alien animals *** ● Household sewage and urban waste water ● Agricultural and forestry effluents ● Garbage and solid waste ● Destruction of cultural heritage objects

Notes:

* Giant hogweed (Heracleum sosnowskyi), elodea (Elodea canadensis)

** European mink (Mustela lutreola), atlantic salmon (Salmo salar)

*** Canadean beaver (Castor canadensis), American mink (Neovison vison), racoon dog (Nyctereutes procyonoides).

A complete list of threats from the threat datasheet is given in the Appendix C.

4.2 Characteristic features of regional PA management in the Leningrad Region

The first regional PAs in the Leningrad Region were established in the 1970ies by decisions of the Leningrad Region Executive Committee *(Lenoblispolkom)*. Depending on the status, they were managed either by *Lenoblispolkom* or by municipal authorities. In 1996, as a result of reorganisation, RPAs were transferred under the jurisdiction of the Leningrad Region Government.

Regional PAs were transferred under the jurisdiction of the Committee for Natural Resources and Environment Protection of the Leningrad Region (hereafter referred to as the Committee), which, retaining the functions of control and supervision, delegated the functions of operational management to the specially authorised organisations. Until 2007, operational management of most RPAs was carried out by the state nature protection institutions under the jurisdiction of the Committee: Leningrad Region state institution (LOGU) "Rakovye Lakes" and Leningrad Region state nature protection institution (LOGPU) "Vepsskii Forest". In 2007, these institutions were merged into a LOGU "Board on Natural Complexes and Objects of the Leningrad Region", which managed the RPAs at the time of the Assessment.

In the end of 2009, as a result of several reorganisations, the functions of state control over RPAs were transferred to the Committee for State Control, Nature Management and Ecological Safety of the Leningrad Region. The functions of state administration remained with the Committee for Natural Resources of the Leningrad Region, which includes the department of protected areas (5 staff positions).

The regime of RPAs and organisation of research in them is ensured by the Directorate of Protected Areas of the Leningrad Region, a structural subdivision of the Leningrad Region state budget institution "Board on Forests of the Leningrad Region" (LOGBU *"Lenoblles")* within the jurisdiction of the Committee. The staff of the Directorate is 26 people, who mostly work directly in PAs.

Monitoring and research is carried out on a contractual basis by invited experts from other organisations, such as the Faculty of Biology and Soil Sciences of the St. Petersburg State University and the Komarov Botanical Institute (Russian Academy of Sciences). In particular, in 2002-2006 researchers from these organisations and the Zoological Institute of the Russian Academy of Sciences carried out complex field research in the state complex nature reserve *(zakaznik)* "Berezovye Islands" with the aim of updating the information about it and collecting new data. All the research results have been published.

The Leningrad Region has successful experience of economic activity carried out in PAs by outside organisations. In particular, an exclusive right for activities in the complex nature monument "Sablinskii" has been granted to the Leningrad Region Public Organisation "Preservation of Nature and Cultural Heritage" with the aim of nature protection regime maintenance and environmental tourism development. The contract stipulates that the organisation submits to the Committee quarterly reports about its activity in the PA.

The Leningrad Region is in the lead in the North-West Russia by the number of international projects focused at RPA development, which is to a great extent due to the long-standing cooperation between the Committee and the Baltic Fund for Nature (St. Petersburg charitable public organisation "Biologists for Nature Conservation"). Apart from the project "Development of Regional Protected Areas in the North-West Russia", 11 international projects were implemented from 2001 to 2010 in partnership with the Baltic Fund for Nature, among them: "Integration of Protected Areas of the Leningrad Region into European Context" (2004-2007, LIFE programme, in collaboration with Metsähallitus and the Moscow Office of IUCN), "People, Nature and Harbours" (2007-2009, TACIS programme, in collaboration with Metsähallitus and "Lenoblpriroda" Fund), "Marine Protected Areas in the Eastern Part of the Baltic Sea" (2005-2009, LIFE programme, together with the Baltic Environmental Forum), "Transboundary Red Data Species" (2004-2007, Interreg programme, in collaboration with Metsähallitus) and others. The project "GAP analysis in Northwest Russia" of the

The Gulf of Finland coast in the Bolotnaya Bay (zakaznik "Berezovye Islands"). Photo by Nadezhda Alexeeva.

Finnish Environment Institute (SYKE) was also implemented in the Leningrad Region.

At present, the Committee is also partner to the project "A long journey. Demonstration of practical approach to protection of wetland birds on migratory route: Russian-Dutch collaboration" (2008-2010) together with Wetlands International and the Land and Water Service of the Ministry for Agriculture, Nature and Product Quality of the Netherlands.

The Committee continues regular work on bringing the PA documents into agreement with the existing legislation, as well as the work on the establishment of new PAs. In particular, on 29 June 2009 a new nature monument, "N.K. Roerich's Memorial Estate" was established.

The Committee supervises the order of approval and the contents of statutes *(polozheniya)* of local PAs in the Leningrad Region and keeps their record. At present, 4 local PAs are under the jurisdiction of the municipal units that established them; these municipal units carry out protection, control and management. The Committee also cooperates with the Ministry for Natural Resources of the Russian Federation in issues concerning the adoption of normative-legal acts on the status of Ramsar sites.

The RPA management activities of the Committee and its subordinate organisations have a rather stable budget owing to the long-term regional target programme of RPA support (since 2009, long-term target programme "Support and development of Protected Areas of the Leningrad Region for 2009-2010").

4.3 Analysis of regional PA management in the Leningrad Region

The assessment of the management of the RPA network was performed for 35 best-studied PAs out of 38 PAs that existed in 2008.

Strengths and weaknesses of RPAs management in the Leningrad Region

Each issue is followed by a number (in brackets), which is the issue's number in the Management Assessment Form. The complete version of the Form is given in the Appendix. Issues that constitute key management activities are given in bold.

Strengths (most answers have score 3 and/or 2)	**Weaknesses** (most answers have score 1 and/or 0)
• **Legal status (1)** • **PA objectives (4)** • PA design (5) • **Boundary demarcation (6)** • Staff training (14) • Management of budget (17) • Condition of values (30)	• Regulations concerning control and guarding/ protection (2) • Law enforcement (capacity/resources for practical realization of control and guarding/protection) (3) • **Management plan (7)** • **Regular work plan (8)** • Information about valuable objects (9) • Protection systems (10) • Research (11) • Resource management (12) • Staff numbers (13) • Personnel management (13a) • **Current budget (15)** • Security of budget (16) • Equipment (18) • Maintenance of equipment (19) • Environmental education and awareness (20) • Planning for land and water use around PA (21) • Contacts with local authorities and land and water users (22) • Participation of indigenous and traditional peoples (23)* • Participation of local communities (24) • Economic benefit (25) • **Monitoring and evaluation of management activities (26)** • Visitor facilities and services (27) • Commercial tourism companies and entrepreneurs (28) • Fees for nature use (29)**

Notes:

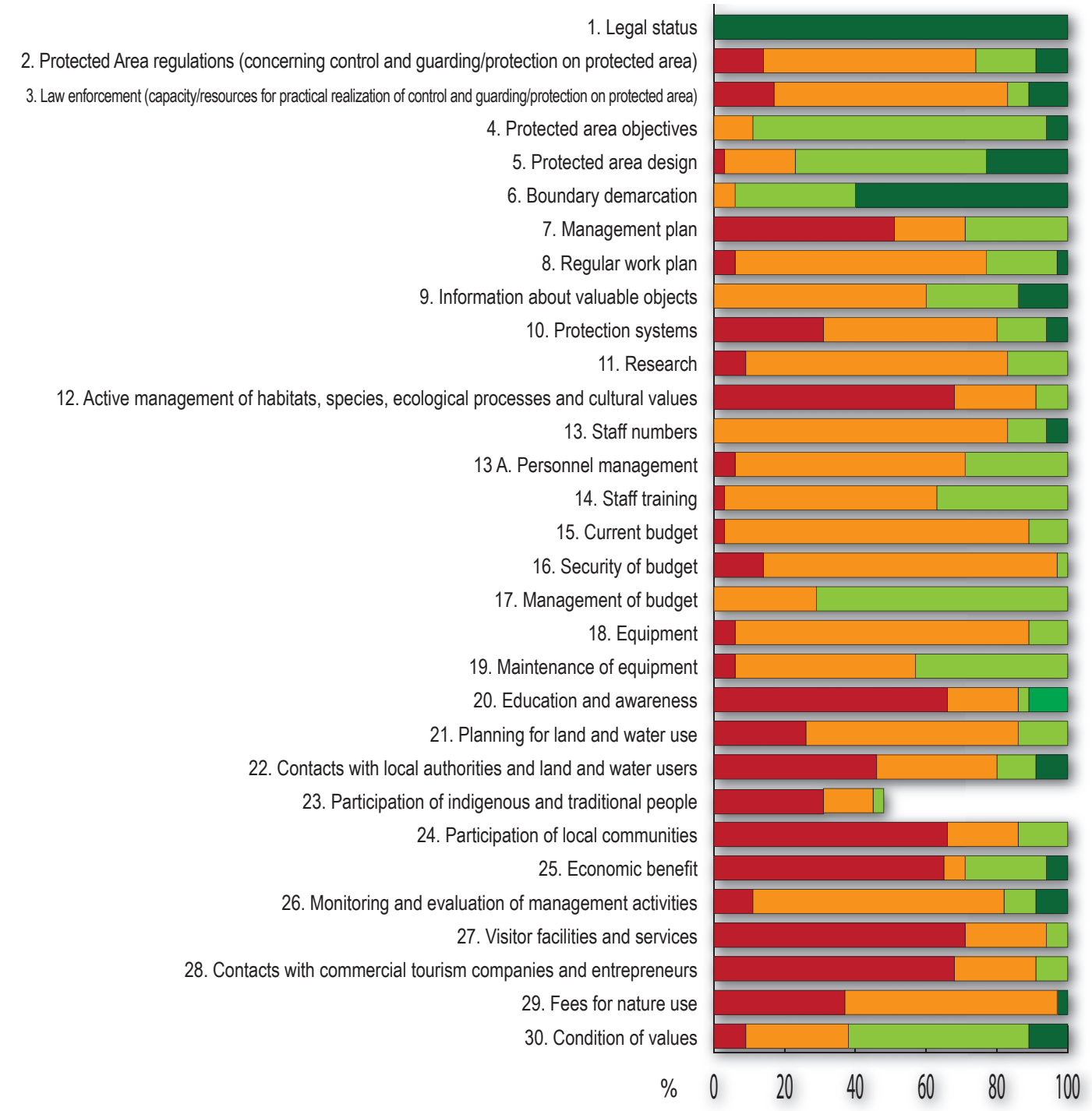
* Participation of indigenous and traditional peoples in PA management (issue 23) was not assessed for 18 out of the 35 assessed PA, where there are no indigenous and traditional peoples.

** In nature reserve (zakaznik) "Rakovye Lakes" fees for provided services are collected according to the approved budget.

On the whole, the dispersion of scores for different PAs is quite considerable (except issue 1, legal status, where score for different PAs are the same), which reflects heterogeneity of the management situation in the region.

Strengts and weaknesses of RPAs management in the Leningrad Region

excellent
good
fair
poor
Number of assessed PAs: 35



4.3.1 Critical management activities

Strengths of management

Confirmed legal status of PAs is due to the systematic work of the PA department of the Committee on bringing the PA statutes (polozheniya) into agreement with the present-day legislation.

Well-defined PA objectives (issue 4) and marked PA boundaries (issue 6) are due to the fact that, despite numerous reorganisations of the management authorities, they have always had staff members responsible for direct implementation of PA objectives. In particular, effort has been put into informing the local authorities, the local population and land users about PA regime, and into boundary demarcation of PAs.

Weaknesses of management

Despite the presence in the Leningrad Region of the long-term regional target programme of financing RPAs, current budget (issue 15) is not always adequate for the basic management needs or can be improved to achieve more successful management. Another management weakness is the implementation of management plans (issue 7); though management plans exist for most PAs, they are being implemented only partially or not at all. The same is true of the implementation of regular work plans (issue 8), since by far not all of the activities are carried out. Correspondingly, the monitoring and evaluation system (issue 26) is not always successfully implemented and monitoring results are not always systematised and used in management.

4.3.2 Developmental priorities of regional PA management in the Leningrad Region

The Assessment results indicate that, in order to increase the efficiency of the management of RPA network in the Leningrad Region, priority consideration should be given to the following critical management activities:

- Preparation and implementation of management plans for PAs.
- Preparation and implementation of an effective monitoring and evaluation system (monitoring of management activities against performance), as well as systematization of monitoring results and their use in management (adaptive management).
- Bringing current budget into agreement with the basic needs of PA management.

4.4 Pilot project

The pilot project of the Leningrad Region within the framework of the project "Development of regional PAs in the North-West Russia" was devoted to raising the level of skills of staff members of the LOGU "Board on Natural Complexes and Objects". In particular, an assessment of training needs of the 52 LOGU staff members was performed. It was aimed at identification of the skills necessary for their work and their development. In addition, a seminar on PA management practice was conducted in the information centre of the "Rakovye Lakes" nature reserve (zakaznik) for administrations working with PAs, as well as two training seminars in St. Petersburg for the rangers, authorities and other interested persons.

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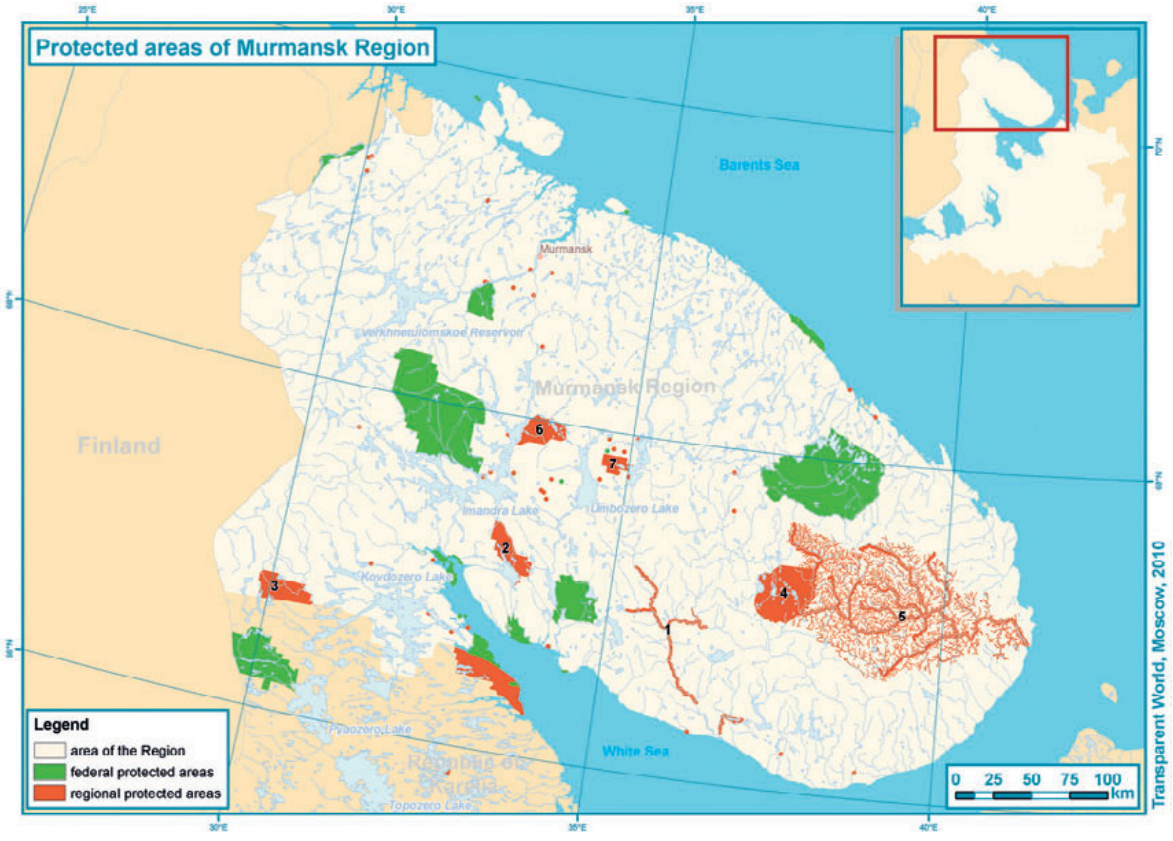
5 Murmansk Region

The area of the Murmansk Region is 14490 thousand ha. Its population is 872.8 thousand people (according to the data of portal of the Russian Federation government, http://www.government.ru for 16.05.2010). The administrative centre of the Murmansk Region is the city of Murmansk.

Biogeographically, the territory of the Murmansk Region belongs to:

- the zone of small-to-large-yernik southern (low-bush) tundras and the zone of pre-tundra open woodland and northern taiga (Rastitel'nost' evropeiskoi chasti SSSR. - Leningrad: Nauka, 1980, 429 pp.);
- arctic region and boreal region according to the map of biogeographic regions of Europe (European Environment Agency, 2005, http://www.eea.europa.eu).

The Murmansk Region is situated in the catchment basins of the White Sea and the Barents Sea.



Numbers on the map correspond to numbers in the list of RPAs of the Murmansk Region (see Appendix A).

5.1 PAs of the Murmansk Region

There are six federal PAs in the Murmansk Region: state nature reserves *(zapovedniks)* "Pasvik" and "Kandalakshskii" (a part of the latter is situated in the Republic of Karelia), state nature biosphere reserve *(zapovednik)* "Laplandskii", which is a UNESCO biosphere reserve, state nature reserves *(zakazniks)* "Kanozerskii", "Murmanskii Tundrovyi" and "Tulomskii". The total area of federal PAs is 758.05 thousand, which makes up 5.23% of the region's area.

The network of regional PAs of the Murmansk Region comprises 53 PAs: 7 nature reserves *(zakazniks)* and 46 nature monuments. Their total area is 707.27 thousand ha (4.88% of the region's area). Since the boundaries of some of the nature monuments are not officially demarcated, the above figures are approximate. In addition, 142.1 thousand ha have been reserved for the state complex nature reserve *(zakaznik)* "Laplandskii Les", whose establishment is underway.

The main objectives of the regional PAs are protection of biological resources in almost undisturbed natural areas and preservation of "reference" ecosystems. The main values of regional PAs in the Murmansk Region are large areas of old-growth forests, almost undisturbed forest massifs in the south of the region, mountain plant communities and valleys of salmon rivers as habitats of salmon (*Salmo salar*) and freshwater pearl mussel *(Margaritifera margaritifera)*.

To note, the Murmansk Region has one of the 35 Ramsar sites (that is, sites included in the List of Wetlands of International Importance) in Russia: "Kandalaksha Bay of the White Sea". The site included the state nature reserve *(zapovednik)* "Kandalakshskii" and several regional nature monuments.

Panoramic view from the geophysical station "Lovozero". Photo by Ivan Vdovin.

Rangers observing an information board in the zakaznik "Seidyavvr". Photo by Ivan Vdovin.

The Murmansk Region is one of the least disturbed areas of the North-West Russia, and its PAs are less subjected to the impact of timber industry, have fewer problems with violations of the visiting regime, destructions of biological resources and poaching than PAs in other participating regions. The Murmansk Region is the only region among those participating in the project where threats of high significance for regional PAs were not registered.

Threats to regional PAs of the Murmansk Region

Threats of high significance	Threats of medium significance
were not registered	• Tourism and recreation infrastructure • Roads and railroads • Hunting, killing and collecting terrestrial animals • Fishing, killing and harvesting aquatic resources • Recreational activities and tourism • Fire and fire suppression (including arson) • Loss of cultural links, traditional knowledge and/or management practices

Note:
A complete list of threats from the threat datasheet is given in the Appendix C.

5.2 Characteristic features of regional PA management in the Murmansk Region

The basis of the RPA network of the Murmansk Region was formed in the 1980ies-1990ies. Once the RPAs were founded, their state management and state control was delegated to the Committee of Natural Resources and Environment Protection of the Murmansk Region, which was later reorganised into the Ministry of Natural Resources and Environment Protection of the Murmansk Region and then, into the present-day Committee for Nature Management and Ecology of the Murmansk Region (hereafter refereed to as the Committee).

In 2005, to ensure the functioning of the RPAs, a state regional institution "Directorate (Administration) of the Regional Protected Areas of the Murmansk Region" (hereafter referred to as the Directorate) was founded within the jurisdiction the Committee. The Directorate is authorized to carry out operational management, protection and monitoring of the RPAs. At present, the staff of the Directorate is 14 people: 5 administrators and 9 rangers.

The main result of the Directorate's activity is the establishment of the PA protection system, that is, the organisation of the ranger service. Another important result is the provision of the latter with all the necessary transportation and communication equipment.

The monitoring of protected objects in forest nature monuments is carried out in cooperation with the forestries *(lesnichestva)*, which are under the jurisdiction of the Forestry Committee of the Murmansk Region.

Until recently, research in regional PAs was mostly carried out by solitary scientists (in particular, from the Avrorin Polar-Alpine Botanical Garden-Institute (*PABSI*) named after N.A. Avrorin of the Kola Scientific Centre of the Russian Academy of Sciences). At present, the Directorate interacts with *PABSI* and other scientific establishments at the level of organisations in connection with the preparation of state cadastre of rare plants and animals in the RPAs of the Murmansk Region, a database for assessment and forecast of the biodiversity state.

The Directorate is currently specifying the regime and the borders of all RPAs, first of all, nature reserves (*zakaznik*s), in order to bring them into agreement with the current legislation concerning PAs. This work is actively facilitated by the Scientific Council attached to the Directorate, which unites various scientists and nature conservation experts interested in the development of the PA network in the Murmansk Region. The development of the PA network is mostly carried out by the Kola Biodiversity Conservation Center. All activities of the Directorate are constantly supported financially by the Barents Sea Ecoregion Office of WWF Russia.

The Directorate carries out work on the establishment of new PAs. To illustrate, at the time of the Assessment, the Directorate managed 50 PAs (7 nature reserves (*zakaznik*s) and 43 nature monuments). In 2009, the RPA network of the Murmansk Region incorporated 3 new nature monuments: "Ivanovskaya Bay", "Bird Colonies of Dvorovaya Bay" and "Site of Occurrence of *Bryonia dioica* near Viddpakkh Mountain".

Besides the project "Development of Regional Protected Areas in the North-West Russia", the Directorate participated in the implementation of the projects "GAP analysis in Northwest Russia" of the Finnish Environment Institute (SYKE) (2007-2011) and TACIS Interreg project "Development of Nature Tourism in Kutsa and Sallatunturi Regions" (2006-2009) in partnership with Salla Municipality and the Kola Biodiversity Conservation Center.

5.3 Analysis of regional PA management in the Murmansk Region

Management situation was assessed in all the 7 regional nature reserves (zakazniks) of the Murmansk Region. The total number of RPAs at the time of the assessment was 50.

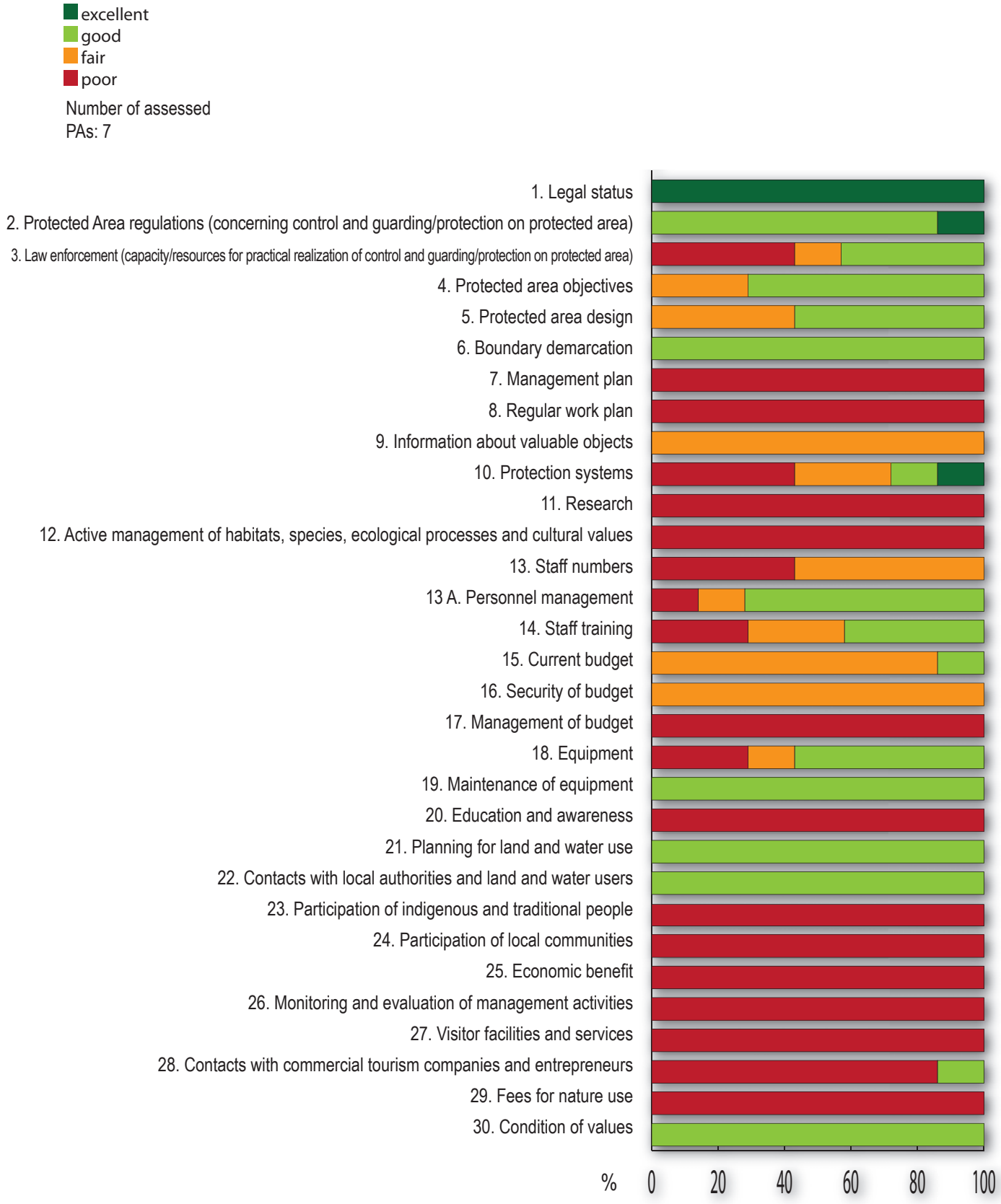
Strengths and weaknesses of RPAs management in the Murmansk Region

Each issue is followed by a number (in brackets), which is the issue's number in the Management Assessment Form. The complete version of the Form is given in the Appendix. Issues that constitute key management activities are given in bold.

Strengths (most answers have score 3 and/or 2)	**Weaknesses** (most answers have score 1 and/or 0)
• **Legal status (1)** • Regulations concerning control and guarding/ protection on PA (2) • **PA objectives (4)** • PA design (5) • **Boundary demarcation (6)** • Personnel management (13a) • Equipment (18) • Maintenance of equipment (19) • Planning for land and water use around PA (21) • Contacts with local authorities and land and water users (22) • Condition of values (30)	• Law enforcement (capacity/resources for practical realization of control and guarding/protection) (3) • **Management plan (7)** • **Regular work plan (8)** • Information about valuable objects (9) • Protection systems (10) • Research (11) • Active management of habitats, species, ecological processes and cultural values (12) • Staff numbers (13) • Staff training (14) • **Current budget (15)** • Security of budget (16) • Management of budget (17) • Environmental education and awareness (20) • Participation of indigenous and traditional peoples (23) • Participation of local communities (24) • Economic benefit (25) • **Monitoring and evaluation and management activities (26)** • Visitor facilities and services (27) • Contacts with commercial tourist companies and entrepreneurs (28) • Fees for nature use (29)

Two thirds of the issues have the same scores for all the PAs assessed, which reflects the relative similarity of the management situation. One third of issues is characterised by a considerable dispersion of scores.

Strengts and weaknesses of RPAs management in the Murmansk Region



5.3.1 Critical management activities

Strengths of management

Well-recognised legal status of PAs (issue 1) is due to the systematic work of the experts from the Kola Biodiversity Conservation Center and the Directorate on bringing the PA statutes (polozheniya) into agreement with the present-day legislation. In the first place, this work was carried out for all the nature reserves (zakazniks).

Success in managing the PAs according to agreed objectives (issue 4) is due to the presence of rangers on the Directorate staff. The rangers ensure the protection regime specified in the PA objectives.

Well-established PA boundaries (issue 6) are due to the public hearings that were conducted when the statutes (polozheniya) and boundaries of the zakazniks in all the districts of the Murmansk Region were changed. At the public hearings the local population, land users and authorities could introduce their comments and suggestions, which ensured a high awareness of the PA boundaries and regime.

Weaknesses of management

Current budget (issue 15) is not always adequate for the basic management needs or can be improved to achieve more successful management.

Management plans (issue 7) and annual work plans (issue 8) are not developed for the Murmansk Region RPAs. Monitoring and evaluation (issue 26) of PA management was not conducted at the time of the Assessment. However, since 2009 the internal report of the Directorate is published at the web-site http://ruslapland.ru/report.html, which makes it possible to compare the results of its work by several criteria (for example, annual monitoring of rare species, publications, training seminars etc.) for the last two years.

5.3.2 Developmental priorities of regional PA management in the Murmansk Region

The Assessment results indicate that, in order to increase the efficiency of the management of RPA network in the Murmansk Region, priority consideration should be given to the following critical management activities:

- Preparation and implementation of management plans for PAs.
- Preparation and implementation of regular work plans.
- Preparation and implementation of an effective monitoring and evaluation system (monitoring of management activities against performance), as well as systematization of monitoring results and their use in management (adaptive management).
- Bringing current budget into agreement with the basic needs of PA management.

5.4 Pilot project

The pilot project in the Murmansk Region within the framework of the project "Development of Regional PAs in the North-West Russia" was devoted to the organisation of three seminars. Two of them were training seminars for the rangers: one was devoted to the legal basis of the rangers' work and the other, to field identification of rare plant species; the latter was conducted in the nature reserve (zakaznik) "Seidyavvr".

The third seminar, "Interaction between federal and regional protected areas in the Murmansk Region", resulted in the most important decision about the establishment of the Scientific Council attached to the Directorate. It allowed the Directorate to increase the quality of the decision-making on regional PAs and to join the efforts of various experts, interested in the development of the PA network in the Murmansk Region.

Contacts of management authorities

State regional institution "Directorate (Administration) of the Regional Protected Areas of the Murmansk Region"
6 Pionerskaya street
Lovozero Settlement
184592 Murmansk Region
Russia
Tel.: +7-815-38-41085, fax: +7-815-38-41338,
e-mail: oopt@ruslapland.ru.
Director: Ivan V. Vdovin

Yevgenii Potorochin, scientific deputy director of the state regional institution "Directorate of Regional PAs of the Murmansk Region":

The project gave us an opportunity to make headway. This was the most important thing. We expanded a little, the scientific council was organised. And I think the training was extremely important for the new rangers to do their work competently.

As a continuation of the joint work it would be interesting to establish a pilot zakaznik, which could serve as a model for working out the solutions to the RPA problems: management plans, organization of protection and so on.

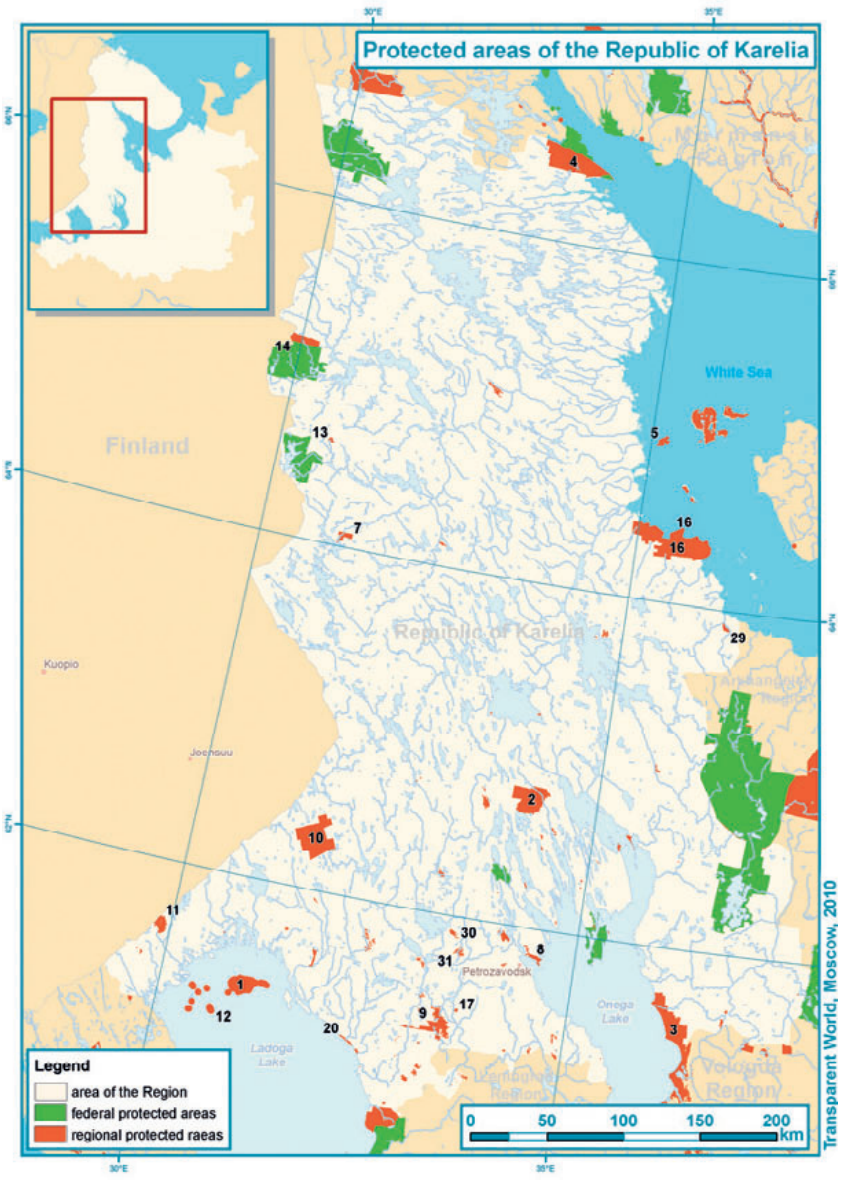
6 Republic of Karelia

The area of the Republic of Karelia is 18050 thousand ha. Its population is 687.5 thousand people (according to the data of portal of the Russian Federation government, http://www.government.ru for 16.05.2010). The administrative centre of the Republic of Karelia is the city of Petrozavodsk.

Biogeographically, the territory of the Republic of Karelia belongs to:

- northern taiga and middle taiga zones *(Rastitel'nost' evropeiskoi chasti SSSR*. - Leningrad: Nauka, 1980, 429 pp.);
- boreal region according to the map of biogeographic regions of Europe (European Environment Agency, 2005, www.eea.europa.eu).

The Republic of Karelia is situated in the catchment basins of the White Sea and the Baltic Sea. Within the latter, it lies in the catchment of the two largest European freshwater bodies, Lake Onega and Lake Ladoga.



Numbers on the map correspond to numbers in the list of RPAs of the Republic of Karelia (see Appendix A).

6.1 PAs of the Republic of Karelia

There are 8 federal PAs in Karelia: zoological nature reserves *(zakazniks)* "Kizhskii" and "Olonetskii", national parks "Paanayarvi", "Kalevalskii" and "Vodlozerskii" (the latter is a UNESCO biosphere reserve; a part of it is situated in the Arkhangelsk Region), and state strict nature reserves *(zapovedniks)* "Kostomukshkii" (which is part of the "Friendship" *(Druzhba)* Russian-Finnish international nature reserve), "Kivach" and "Kandalakshskii" (a part of the latter is situated in the Murmansk Region). The total area of federal PAs is 446.24 thousand ha, which makes up 2.48% of the republic's area.

The network of regional PAs of the Republic of Karelia comprises 134 PAs with a total area of 359.98 thousand ha (1.99% of the republic's area). There are among them:

- 1 nature park;
- 30 nature reserves (*zakazniks*), of them: 14 complex (landscape) *zakazniks*, 1 complex (marine) zakaznik, 11 botanical *zakazniks* and 4 hydrological *zakazniks*;
- 103 nature monuments, of them: 65 wetland nature monuments; 19 botanical nature monuments, 10 geological nature monuments, 8 hydrological nature monuments and 1 landscape nature monument.

To note, the Republic of Karelia has one of the 35 Ramsar sites (that is, sites included in the List of Wetlands of International Importance) in Russia: "Islands in Onega Bay, White Sea".

The fundamental criterion, underlying the formation of the Karelian PA network, is landscape representativeness, because the structure of the area's biota is determined by the landscape

View of islands in the Onega Bay of the White Sea (zakaznik "Kuzova"). Photo by Igor Georgievskiy.

features: relief and its genesis, composition of rocks, composition and thickness of quaternary sediments, degree and character of the area's bogginess, characteristics of the hydrographical network, soil cover composition, microclimatic conditions, etc. The PA system thus formed preserves parts of each of the taiga ecosystems types of landscape rank in their natural state.

The key industries of Karelia (woodworking, pulp and paper industry, ferrous metallurgy and others) do not have any considerable influence upon the regional PAs in general and the 8 assessed PAs in particular. The well-developed timber industry poses a more significant threat. Transport accessibility is a source of highly significant threats, since PAs are very attractive for tourism, recreation and hunting. Karelia being a region with a dense hydrographical network, a considerable impact is also exercised by such natural phenomena as storms and floods.

Threats to regional PAs of the Republic of Karelia

Threats of high significance	Threats of medium significance
Complex marine nature reserve *(zakaznik)* "Sorokskii" ● Hunting, killing and collecting terrestrial animals **Landscape nature reserve *(zakaznik)* "Muromskii"** ● Recreational activities and tourism ● Deliberate vandalism, destructive activities or threats to protected area staff and visitors **Nature park "Valaam Archipelago"** ● Recreational activities and tourism	**Complex marine nature reserve (zakaznik) "Sorokskii"** ● Logging and wood harvesting ● Fishing, killing and harvesting aquatic resources ● Recreational activities and tourism ● Storms and flooding **Landscape nature reserve (zakaznik) "Muromskii"** ● Housing and settlement ● Hunting, killing and collecting terrestrial animals ● Gathering terrestrial plants or plant products (non-timber) ● Logging and wood harvesting ● Fishing, killing and harvesting aquatic resources ● Fire and fire suppression (including arson) ● Garbage and solid waste ● Erosion and siltation/ deposition ● Storms and flooding ● Destruction of cultural heritage objects

Threats of high significance	Threats of medium significance
	Nature park "Valaam Archipelago" ● Housing and settlement ● Commercial and industrial areas ● Tourism and recreation infrastructure ● Roads and railroads ● Utility and service lines ● Shipping lanes and canals ● Hunting, killing and collecting terrestrial animals ● Gathering terrestrial plants or plant products (non-timber) ● Logging and wood harvesting ● Fishing, killing and harvesting aquatic resources ● Deliberate vandalism, destructive activities or threats to protected area staff and visitors ● Fire and fire suppression (including arson) ● Dams, hydrological modification and water management/use ● Household sewage and urban waste water ● Sewage and waste water from protected area facilities ● Garbage and solid waste ● Storms and flooding **Landscape nature reserve "Kuzova"** ● Shipping lanes and canals ● Recreational activities and tourism ● Garbage and solid waste ● Storms and flooding **Landscape nature reserve "Polyarnyi Krug"** ● Recreational activities and tourism ● Storms and flooding

Notes:
No threats of high or medium significance were revealed for the nature monuments "Listvennitsa Sukacheva" and "Zapovednoe Bog" and for the wetland nature reserve (zakaznik) "Bog Nyukhcha". For landscape nature reserve (zakazniks) "Kuzova" and "Polyarnyi Krug" no threats of high significance were revealed.

A complete list of threats from the threat datasheet is given in the Appendix C.

6.2 Characteristic features of regional PA management in the Republic of Karelia

State administration and state control in the sphere of organisation and functioning of regional PAs is carried out by the Ministry of Agriculture, Fish Industry and Ecology of the Republic of Karelia (hereafter referred to as the Ministry). First-hand work related to regional PAs is carried out by 2 out of the 4 specialists of the Ministry's Department of Environment Protection and Protected Areas; these specialists have the powers of state inspectors.

Protection of forests and animal objects inhabiting them is carried out in regional PAs by the competent organs in the sphere of forestry relations, protection and use of animal objects: in 2009 corresponding agreements were made about the cooperation with the Ministry of Forest Complex of the Republic of Karelia as well as with the State Committee of the Republic of Karelia for the protection of animal objects and aquatic biological resources. In issues related to protection of historical and cultural monuments, the Ministry cooperates with the Ministry of Culture and Public Relations of the Republic of Karelia.

Scientific research in the sphere of nature conservation is carried out by the Karelian Scientific Centre of the Russian Academy of Sciences (KSC RAS) and other organisations. The establishment of new PAs and the regime regulation of the existing ones is carried out with the active involvement of KSC RAS and NGOs, in particular, the regional environmental NGO "SPOK".

Besides the project "Development of Regional Protected Areas in the North-West Russia", the Ministry participated in the implementation of the project "GAP analysis in Northwest Russia" (2007-2011) of the Finnish Environment Institute (SYKE).

The management of the only Karelian nature park, "Valaam Archipelago", is carried out by the state nature protection recreational institution (SNPRI) Nature Park "Valaam Archipelago", which is a lower institution within the jurisdiction of the Ministry. The SNPRI has its own staff (12.5 positions), which carries out administrative, scientific and environmental education activities. To ensure effective protection, the SNPRI Nature

Ivan Kiprukhin, chief specialist of the Department of Environment Protection and Protected Areas:

Our main successes are the timely establishment of new PAs according to the Scheme of Territorial Planning, the approval of statutes and regimes, the carrying out of inventories in all regional PAs. And we are advancing, in principle, according to schedule, establishing one new PA a year — even with the present-day staff.

Park "Valaam Archipelago" cooperates with the regional departments of the Federal Fishery Agency, the Russian Ministry for Emergency Situations, as well as with the militia department of the Valaam Island, the forestry guard, the security service of the Transfiguration Valaam Monastery and other institutions.

Most Karelian protected area were established in 1960-1999ies within the jurisdiction of various institutions. In 2006, after the transformation of the Ministry of Agriculture, Fish Industry and Food of the Republic of Karelia into the Ministry of Agriculture, Fish Industry and Ecology of the Republic of Karelia, the latter was additionally entrusted with the functions of management and control in the sphere of protection and use of the regional PAs. Thus the management of regional PAs was united within one and the same institution.

Since that time, the Ministry has carried out a survey of the regional PAs in Karelia with the aim of assessing their state, protection regime and correspondence to the nature conservation criteria. The survey was financed from the regional target programme "Ecology and Natural Resources of the Republic of Karelia for 2004-2010". The survey was completed in 2009, when all the existing regional PAs were assessed.

On the basis of the survey results, special protection regimes were established for 30 PAs and their boundaries and areas were ascertained according to the latest forest regulation; statutes *(polozheniya)* were approved for 5 PAs. The following areas were excluded from the list of regional PAs: 52 nature reserves (zakazniks) of seed-production stands and 15 hunting nature reserves *(zakazniks)*, as not corresponding to the provisions of the Federal Law "On Protected Areas"; the botanical garden, because of the absence of normative documents confirming PA status; a spa resort "Martsialnye Waters", as a resort of federal significance. As the result, the existing list of 134 regional PAs was formed.

In accordance with the Scheme of Territorial Planning of the Republic of Karelia, approved by the Government of Karelia in 2007, the establishment of new regional PAs is underway. A list of 60 PAs to be established before 2025 has been defined (the first turn, before 2015; the second turn, before 2025).

Within this framework, the complex landscape nature reserve *(zakaznik)* "Voinitsa" (total area 8.3 thousand ha) was established in the autumn of 2008 and the complex landscape nature reserve *(zakaznik)* "Syrovatka" (total area 31.3 thousand ha) was established in the end of 2009. The work has been launched on the establishment in the Muezerskii District of the landscape nature monument "Vottovaara" (establishment planned for 2010). Altogether, 6 PAs are to be established before 2015.

6.3 Analysis of regional PA management in the Republic of Karelia

Management situation was assessed based on the materials from 8 PAs: nature park "Valaam Archipelago" and 7 PAs in eastern Karelia, which had been surveyed in 2007. The total number of regional PAs at the time of the Assessment was 202.

Strengths and weaknesses of RPAs management in the Republic of Karelia

Each issue is followed by a number (in brackets), which is the issue's number in the Management Assessment Form. The complete version of the Form is given in the Appendix. Issues that constitute key management activities are given in bold.

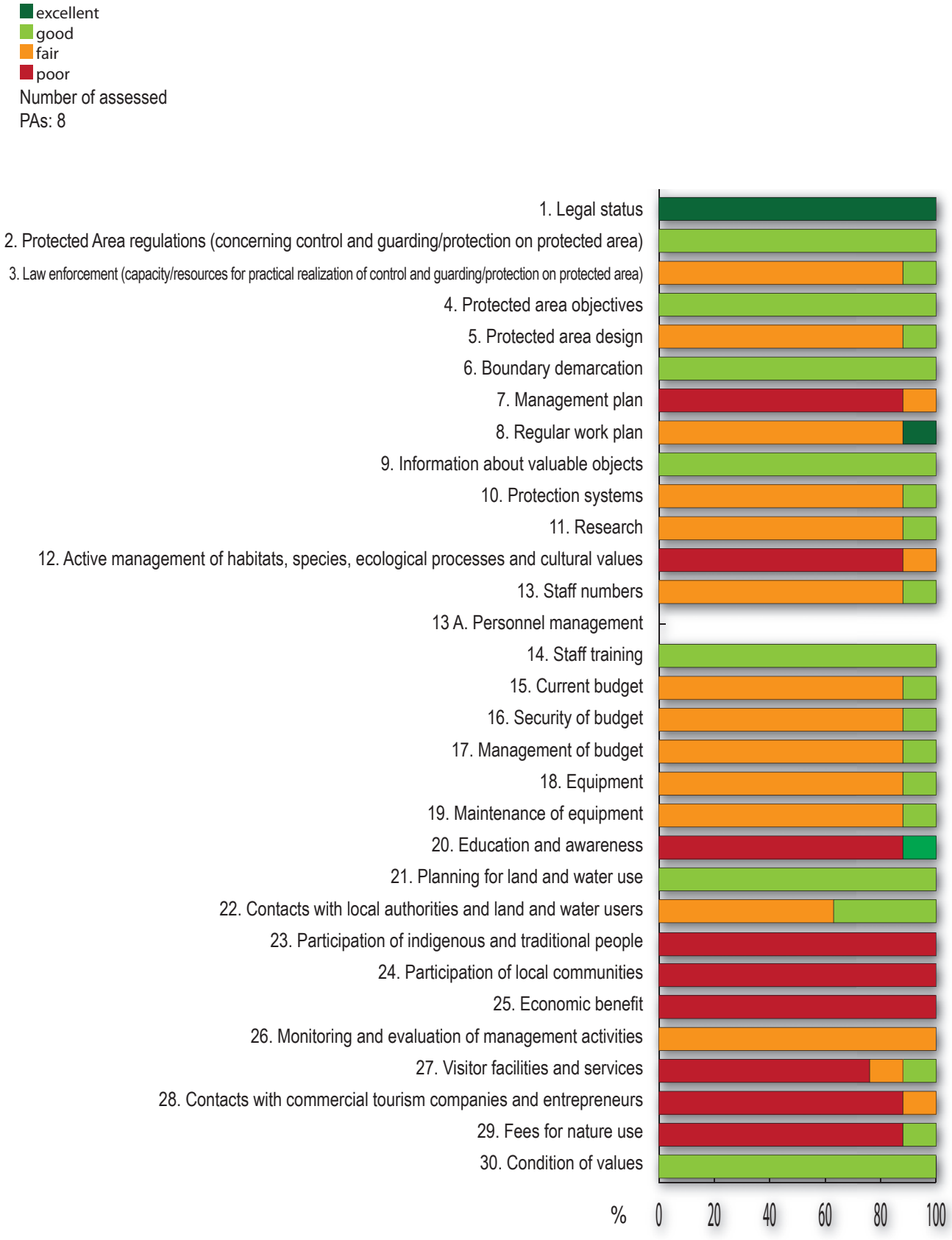
Strengths (most answers have score 3 and/or 2)	**Weaknesses** (most answers have score 1 and/or 0)
• **Legal status (1)** • Regulations concerning control and guarding/ protection (2) • **PA objectives (4)** • **Boundary demarcation (6)** • Information about valuable objects (9) • Staff training (14) • Planning for land and water use around PA (21) • Condition of values (30)	• Law enforcement (capacity/resources for practical realization of control and guarding/protection) (3) • PA design (5) • **Management plan (7)** • **Regular work plan (8)** • Protection systems (10) • Research (11) • Active management of habitats, species, ecological processes and cultural values (12) • Staff numbers (13) • **Current budget (15)** • Security of budget (16) • Management of budget (17) • Equipment (18) • Maintenance of equipment (19) • Environmental education and awareness (20) • Contacts with local authorities and land and water users (22) • Participation of indigenous and traditional peoples (23) • Participation of local communities (24) • Economic benefit (25) • **Monitoring and evaluation of management activities (26)** • Visitor facilities and services (27) • Contacts with commercial tourism companies and entrepreneurs (28) • Fees for nature use (29)*

Notes:

* The administration of the nature park "Valaam Archipelago" collects fees for the use of camping sites etc. Fines for PA regime infringement are also collected, but they go into the budget and are not used by the park.

On the whole, the dispersal of scores assigned to individual PAs was low, that is, the overall management situation in all the assessed PAs is similar. However, the nature park "Valaam Archipelago" had a higher score in most issues, which is associated with the presence of its own administration and staff.

Strengts and weaknesses of RPAs management in the Republic of Karelia



6.3.1 Critical management activities

Strengths of management

The eight PAs chosen for the Assessment have officially approved statutes (polozheniya), where the protected area objectives are clearly defined. This explains why issue 1 (legal status) is well addressed and issue 4 (protected area objectives) is rather well addressed, though management measures only partly correspond to the objectives due to insufficient financing and low numbers of PA staff.

On the whole, issue 6 (boundary demarcation) can be considered as well addressed. The boundaries of protected areas are known by management authorities, local residents and neighbouring land users owing to the fact that settlement administrations are provided with information materials for distribution to the residents (schematic maps indicating PA position, copies of documents on their establishment, etc.) and owing to the practice of agreement of land plot allotment. Some work on boundary demarcation in the nature is conducted, in particular, installation of information boards; however, this work requires the attraction of extra work force and financing.

Weaknesses of management

A gap in issue 15 (current budget) is one of the main factors determining the weaknesses in other issues, including issue 7 (management plan), issue 8 (regular work plan) and issue 26 (monitoring and evaluation). The insufficient current budget is also the cause of the absence of an independent management authority and the lack of staff. The establishment, within the jurisdiction of the Ministry, of an institution responsible for RPA management, which was stipulated for in the Scheme of Territorial Planning of the Republic of Karelia, has not been carried out because of the global recession. To note, the recession also "amended" the regional target programme "Ecology and Natural Resources of the Republic of Karelia for 2004-2010". The programme, which even originally was far from covering all the expenses for the main needs of protected areas, was curtailed. Currently, a ministerial short-term target programme on PAs is being developed.

While scores of most issues are in general similar, the management of the nature park "Valaam Archipelago" got a higher score that other PAs in issues 7, 8 and 15. A management plan has been elaborated for this PA (though it is not being implemented); there is an annual work plan and it is being implemented; current budget is, on the whole, satisfactory, though it can be improved in order to increase the management efficiency. This success is associated with the presence of the separate management organisation and staff.

6.3.2 Developmental priorities of regional PA management

The Assessment results indicate that, in order to increase the efficiency of the management of the RPA network in the Republic of Karelia, priority consideration should be given to the following critical management activities:

- Preparation and implementation of management plans for PAs.
- Preparation and implementation of regular work plans.
- Bringing current budget into agreement with the basic needs of PA management
- Preparation and implementation of an effective monitoring and evaluation system (monitoring of management activities against performance), as well as systematization of monitoring results and their use in management (adaptive management).

Old-growth mixed forest in the zakaznik “Voinitsa”. Photo by Nadezhda Alexeeva.

Contacts of management authorities

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Republic of Karelia
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e-mail: mincx@onego.ru

Minister: Grigory N. Manuilov
Department of Environment Protection and Protected Areas, tel.: +7-8142-78-55-69
Deputy minister overseeing the Department of Environment Protection and Protected Areas: Irina V. Guzova

SNPRI Nature Park “Valaam Archipelago”
4 Tsentralnaya street
Valaam Settelement, Sortavala
Republic of Karelia
186756 Russia
Tel.: +7-81430-38-247,
e-mail: valaam_park@onego.ru
Director: Vladimir A. Vysotsky

7 St. Petersburg

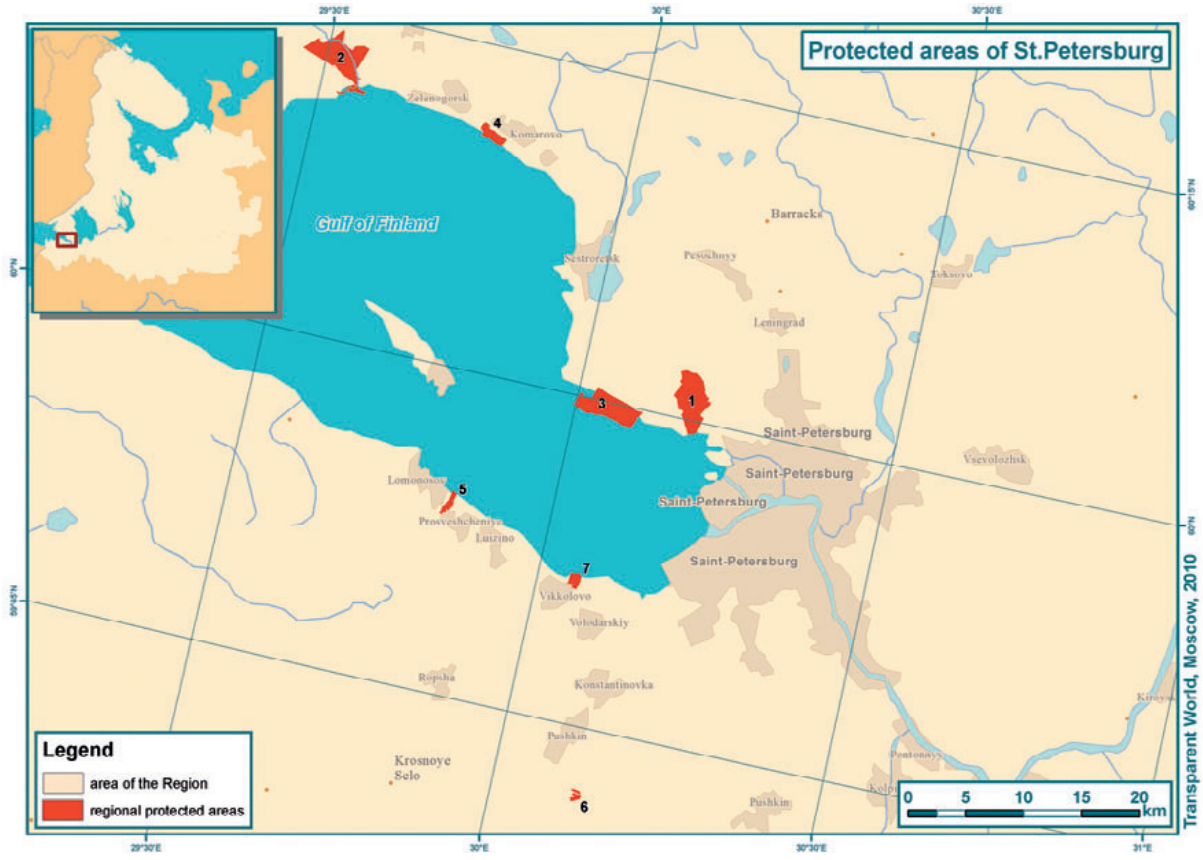
St. Petersburg is a federal city (a separate subject of the Russian Federation), the administrative center of the Leningrad Region and the administrative center of the North-West Federal District of the Russian Federation. It is the second largest city in the Russian Federation after Moscow.

St. Petersburg has an area of 70 thousand ha and the population of 4600.2 thousand people (according to the data of portal of the Russian Federation government, http://www.government.ru for 16.05.2010). According to the official portal of the St. Petersburg city administration (http://www.gov.spb.ru), the area of the city together with the subordinate administrative areas is 143.9 thousand ha, and it is this figure will be used to denote the area of St. Petersburg in this chapter.

Biogeographically, the territory of St. Petersburg belongs to:

- southern taiga zone (Rastitel'nost' evropeiskoi chasti SSSR. - Leningrad: Nauka, 1980, 429 pp.);
- boreal region according to the map of biogeographic regions of Europe (European Environment Agency, 2005, http://www.eea.europa.eu).

St. Petersburg is situated within the catchment basin of the Baltic Sea, in the easternmost part of the Gulf of Finland, in the lower reach of the Neva River.



Numbers on the map correspond to numbers in the list of RPAs of St. Petersburg (see Appendix A).

7.1 PAs of St. Petersburg

There are 7 regional protected areas in St. Petersburg (3 state nature reserves *(zakazniks)* and 4 nature monuments). Their total area is 2.48 thousand ha (1.72% of the city's area). There are no federal PAs in St. Petersburg.

The present-day PA network of St. Petersburg conserves a mire massive, a river system, areas of the Neva Bay shore with different landscape and vegetation types, and some elevated areas (a landscape uncharacteristic of St. Petersburg). In comparison with regional PAs of the other regions participating in the project, St. Petersburg PAs are very small (from 40 to 976.8 ha) and extremely vulnerable; all of them are more or less anthropogenically transformed. At the same time, some of the objects valuable for biodiversity conservation (for example, old parks) owe their existence to human activity. Under such conditions, the maintenance of their present-day value often requires special management approaches and solutions.

Under conditions of a huge megapolis, all landscapes and ecosystems that have escaped considerable anthropogenic modification should be considered as valuable. The principle of priority is implemented: the PA status is assigned in the first place to natural complexes and objects that are threatened with a forthcoming loss of value or complete extinction. The most important areas in this respect are unbroken forested areas, suffering under urban conditions from illegal felling and high recreational load.

Apart from the natural value, some PAs have a cultural and historical significance. Nature monuments "Dudergofskie Heights" and "Park Sergievka" are on the UNESCO World Heritage List as part of the Historic Centre of Saint Petersburg and Related Groups of Monuments.

St. Petersburg is an important economic and scientific center; it is also a major transportation node at the crossroads of the sea, river and land routes. St. Petersburg has a high density of road network, population and construction. The position within the megapolis determines the major threats to its PAs, which are associated with the extremely high anthropogenic pressure and are reflected, among other things, in a high degree of fragmentation of natural landscapes.

Aerial view of the nature monument "Dudergofskie Heights" to the south of St. Petersburg. Photo by Directorate of RPAs of St. Petersburg.

Threats to regional PAs of St. Petersburg

Threats of high significance	Threats of medium significance
● Housing and settlement ● Commercial and industrial areas ● Roads and railroads ● Logging and wood harvesting ● Gathering terrestrial plants or plant products (non-timber) ● Fishing, killing and harvesting aquatic resources ● Recreational activities and tourism ● Deliberate vandalism, destructive activities or threats to protected area staff and visitors ● Household sewage and urban waste water ● Garbage and solid waste ● Air-borne pollutants	● Tourism and recreation infrastructure ● Utility and service lines ● Hunting, killing and collecting terrestrial animals ● Fire and fire suppression (including arson) ● Other 'edge effects' on park values * ● Loss of keystone species ** ● Invasive non-native/alien animals *** ● Industrial, mining and military effluents and discharges ● Erosion and siltation/deposition ● Storms and flooding ● Destruction of cultural heritage objects

Notes:

* The presence of large urban and cottage residential areas, infrastructure objects (roads and railroads) and industrial objects (heat power stations, Northern Aeration Station) close to the boundaries of most PAs.

** Loss of keystone species is an important problem in the nature reserve *(zakaznik)* "Gladyshevskii", which was established for protection of the system "Atlantic salmon (*Salmo salar*) —freshwater pearl mussel (*Margaritifera margaritifera*)" (the latter mollusc is in the Red Data Book of the Russian Federation). The population of salmon in the PA rivers is currently low and that of the freshwater pearl mussel is close to extinction.

*** The problem is important for the nature monument "Dudergofskie Heights": ratan goby (*Neogobius ratan*, a predatory fish), introduced into a pond in the PA, affects negatively the populations of amphibians, including the crested newt *(Triturus cristatus*), rare in St. Petersburg.

A complete list of threats from the threat datasheet is given in the Appendix C.

7.2 Characteristic features of regional PA management in St. Petersburg

The history of protected areas in St. Petersburg started in 1990, when "Yuntolovskii" nature reserve *(zakaznik)* was established in the Lakhta lowland, in the direct vicinity of the urban residential areas. Most of the St. Petersburg protected areas were established in 1990-1992 by the decision of the deputies of the St. Petersburg City Council.

Until 2004, the control over the regional PAs was exercised by the federal authorities. PA management as such was not carried out at all until the mid 1990ies, when the Administration of Environment Protection (at present, the Committee for Nature Management, Environmental Protection and Ecological Safety, hereafter referred to as the Committee) was established.

In 2001, in order to optimise the PA administration and management, the Committee established within its jurisdiction a state institution "Directorate of Protected Areas of St. Petersburg". At present the staff of the Directorate is 23 people. The Directorate consists of three departments:

- Department of PA functioning (maintenance of the protection regime; land-law relations with PA boundaries; functioning of PAs according to their status) — 7 staff members;
- Department of PA network development (activities related to organisation of new PAs; execution of special and complex

research in PA; environmental education; international collaboration in the field of nature protection) — 6 staff members;

- Organisational-legal department (legal support of the Directorate's activities; office work; personnel management; material-technical and information-technical support of the Directorate's activities) — 4 staff members.

There are no research workers on the staff. The Directorate cooperates successfully with the leading scientific research establishments of St. Petersburg, including the Faculty of Biology and Soil Sciences and the Faculty of Geography and Geoecology (St. Petersburg State University) and the St. Petersburg Scientific Centre of the Russian Academy of Sciences.

To ensure protection regime and maintenance of the PAs, every year a tender is conducted and state contracts with outside contractors are concluded. The work by such contracts is carried out by organisations within the jurisdiction of the executive authorities of St. Petersburg (the Committee for Nature Management, the Committee for Provision of Amenities and Road Maintenance, district administrations) or by commercial security companies.

Several international nature conservation projects concerning protected areas have been carried out in St. Petersburg. Among them there are the project "GAP analysis in Northwest Russia" (2007-2011) of the Finnish Environment Institute (SYKE), a joint project with the Ministry of Environment of Denmark on the development of the nature reserve (*zakaznik*) "Yuntolovskii" (2002-2004); Environmental and Safety Management Cooperation on Shoreline Oil Spill Response Project (EnSaCo, St.-Petersburg - Porvoo), 2008-2009, coordinated by HAAGA-HELIA University of Applied Sciences.

Since its foundation, the Directorate has established a system of protection and technical maintenance of the PAs, carried out inventories in all the PAs, laid the basis for systematic monitoring and launched the process of establishment of new PAs.

According to the General Plan of St. Petersburg (the document on the territorial planning of the city, approved in 2005), 21 regional protected areas are to be established before 2015. The first in the list are the nature reserves (*zakazniks*) "Zapadnyi Kotlin", "Sestroretskoe Bog", "Shchyuchye Lake", "Southern Shore of the Neva Bay" and nature monuments "Petrovskii Pond" and "Spring Lakes in Morisa Toresa Prospect".

Wintery sunset in the zakaznik "Northern Shore of the Neva Bay". Photo by Directorate of RPAs of St. Petersburg.

7.3 Analysis of regional PA management in St. Petersburg

Since the St. Petersburg PAs are few in number and very well studied, most of them (5 out of the 6 that existed at the time when the Assessment was carried out) were included into the Assessment. The only excluded PA was the nature monument "Strelninskii Coast", whose territory is currently controlled by the federal authorities because of the proximity to the Konstantinovskii Palace (a state residence) and whose practical management is therefore almost impossible. Regional nature reserve (zakaznik) "Northern Shore of the Neva Bay" was founded on 25 November, 2009, after the Assessment had already been conducted.

Strengths and weaknesses of RPAs management in St. Petersburg

Each issue is followed by a number (in brackets), which is the issue's number in the Management Assessment Form. The complete version of the Form is given in the Appendix. Issues that constitute key management activities are given in bold.

Strengths (most answers have score 3 and/or 2)	**Weaknesses** (most answers have score 1 and/or 0)
• **Legal status (1)** • **PA objectives (4)** • PA design (5) • **Regular work plan (8)** • Information about valuable objects (9) • Protection systems (10) • Research (11)* • Staff numbers (13) • Personnel management (13a) • Staff training (14) • **Current budget (15)** • Security of budget (16) • Maintenance of equipment (19)** • Condition of values (30)	• Regulations concerning control and guarding/ protection (2) • Law enforcement (capacity/resources for practical realization of control and guarding/protection) (3) • **Boundary demarcation (6)** • **Management plan (7)** • Active management of habitats, species, ecological processes and cultural values (12) • Management of budget (17) • Equipment (18) • Environmental education and awareness (20) • Planning for land and water use around PA (21)*** • Contacts with local authorities and land and water users (22) • Participation of local communities (24) • Economic benefit (25) • **Monitoring and evaluation of management activities (26)** • Visitor facilities and services (27) • Contacts with commercial tourism companies and entrepreneurs (28) • Fees for nature use (29)****

Notes:

* Some management-oriented research is carried out.

** Most equipment belongs to contracted service organizations, and the Directorate does not control the equipment maintenance.

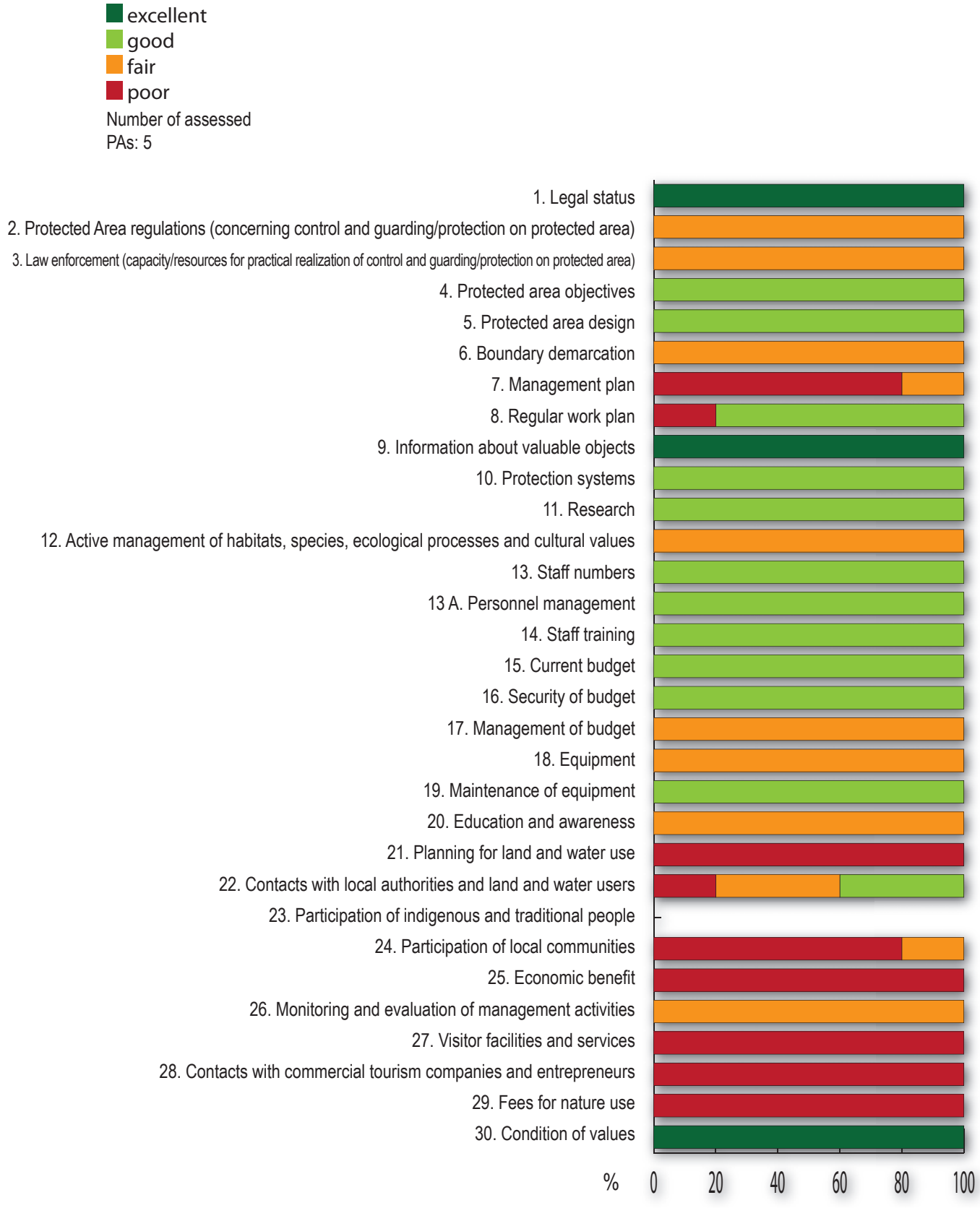
*** Planning does not take into consideration PA needs, which is injurious for PAs.

**** Fees and fines are not collected.

Participation of indigenous and traditional peoples in management (issue 23) was not assessed, since there are no such peoples in St. Petersburg PAs.

Most issues got the same scores for individual PAs, which means that the overall management situation in all the assessed PAs is similar.

Strengts and weaknesses of RPAs management in St. Petersburg



7.3.1 Critical management activities

Strengths of management

The fact that issue 1 (legal status) and issue 4 (PA objectives) are well addressed is due to the presence of official decisions on PA establishment and the presence of statutes *(polozheniya)* on all PA. Successful solution of these issues is also explained by the timely activities of the Directorate in respect to updating these documents and bringing them in correspondence with the existing legislation.

Considerable success in issue 8 (regular work plan) and 15 (current budget) is due to the three-year planning of budget, which is practiced by the Government of St. Petersburg. Accordingly, the activities of the Committee for Nature Management, Environmental Protection and Ecological Safety (which acts as customer for all the contracts on works on regional PAs) and the Directorate (which is the lower organization within the Committee) are also planned for 3 years ahead. In this way, regular planning of activities, with the corrections made early in the second and the third year, is ensured, and so is the financing sufficient for carrying out the major activities included in the annual plan.

Weaknesses of management

In order to address issue 6 (boundary demarcation), which was assessed as a weakness, some work has already been conducted since the Assessment. In particular, a project of boundary demarcation was developed for the nature monument "Dudergofskie Heights" and some of the projected activities (fencing of certain areas, installation of information boards) were carried out. At present, an analogous work is being carried out for the nature reserve *(zakaznik)* "Yuntolovskii" (in 2009 a project of boundary demarcation was developed).

Lag in issue 7 (management plan) was partly compensated for in the pilot project on the development of management plan for the nature reserve (zakaznik) "Gladyshevskii". The document obtained as the result of the project will be used as a basis for preparation of management plans for other St. Petersburg PAs.

The first experience of monitoring and evaluation of management practices (issue 26) was obtained by the Directorate in 2009, when the results of the work planned for 2008 were summarised. At present, planning and reporting forms on PA management monitoring are being improved, which would allow successful addressing of this issue.

7.3.2 Developmental priorities of regional PA management in St. Petersburg

The Assessment results indicate that, in order to increase the efficiency of the management of St. Petersburg RPA network, priority consideration should be given to the following critical management activities:

- Demarcation of PA boundaries and making this information known to interested people and organizations: authorities, local residents and land users.
- Preparation and implementation of management plans for PAs.
- Development and introduction of an efficient monitoring and management evaluation system (monitoring of managing activities against performance) with the aim of its improvement, as well as systematization of monitoring results and its application to management (adaptive management).

7.4 Pilot project

The pilot project of St. Petersburg within the framework of the project "Development of Regional Protected Areas in the North-West Russia" was devoted to optimisation of operational PA management. On the basis of the pilot project's results, a management plan for nature reserve *(zakaznik)* "Gladyshevskii" was prepared. An inventory of the data available about the zakaznik was made, the analysis of Finnish PA management methods and methods used in management practice of Russian federal PAs was carried out and consultations with Russian and foreign experts were conducted. This work, carried out by the staff of the Directorate, resulted in increased efficiency of the zakaznik's management; it is also important as the first

Tatiana Kovaleva, director of the state institution "Directorate of Protected Areas of St. Petersburg":

Our big accomplishment is an almost 5-fold increase in the staff numbers of the Directorate in 2008: from 5 to 23 people. We do our best to recruit young specialists, mostly graduates of the biological and geographical faculties, and really motivated people. In decision-making, we try to rely on science. We have formed a circle of scientists who share our ideas and are interested in the applied aspect of their research. This allowed us to publish research materials on almost all our PAs as a series of popular publications as well as the album "Protected Areas of St. Petersburg".

experience of planning PA management in the region. This document will be used as the basis for preparation of management plans for the existing St. Petersburg PAs as well as those whose establishment is planned in the following years.

In addition, a standard statute *(tipovoe polozhenie)* was developed within the framework of the pilot project. It was used for preparing the statute of the newly established nature reserve *(zakaznik)* "Northern Shore of the Neva Bay"

Contacts of management authorities

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8 Conclusion

Assessment of the management state and needs of regional protected areas (RPAs) (hereafter also referred to as the Assessment) was one of the results of the Finnish-Russian project "Development of regional PAs in the North-West Russia", implemented in 2006-2010. Within the framework of the Assessment, information on threats to RPAs was collected and the state of RPA management was examined in six NWR regions participating in the project (Arkhangelsk, Vologda, Leningrad and Murmansk Regions, Republic of Karelia, St. Petersburg) with the use of the Management Effectiveness Tracking Tool (METT) (see Chapter 1). The Assessment was mostly conducted in 2008, though some aspects were verified until 2010.

It should be noted that the RPA network in the participating regions has been somewhat changed in the past two years. Several new RPAs were established, several RPAs were excluded from the RPA lists, categories of some others were changed, etc. These modifications were aimed at increasing the functionality of RPA networks, and such work is expected to be continued. However, the basis of the RPA network remained the same. In December 2008, the total number of RPAs in the six regions participating in the project was 554, and in June 2010, when the present report was prepared, this number was 495 (173 nature reserves *[zakazniks]*, 317 nature monuments, 2 nature parks, 2 tourist-recreational areas and 1 protected nature complex). Therefore, the results of the Assessment, conducted mostly in 2008, can be considered valid.

The combined list of high and medium significance threats to RPAs in the participating regions, compiled on the bases of the questionnaires completed in the regions[12], is presented below.

Abbreviations: AR - Arkhangelsk Region, VR - Vologda Region, LR - Leningrad Region, MR - Murmansk Region, RK - Republic of Karelia, SPb - St. Petersburg.

12 In Arkhangelsk, Vologda and Murmansk Regions and St. Petersburg a common list of threats for all RPAs was made. In the Leningrad region, the experts filling the questionnaire thought it relevant to make three separate lists of threats for three parts of the region. In the Republic of Karelia, the experts thought it relevant to make threat lists for concrete PAs. (See chapters devoted to the assessment results in the participating regions.)

The combined list of high and medium significance threats to RPAs in the participating regions

Fishing, killing and harvesting aquatic resources	all regions
Fire and fire suppression (including arson)	all regions
Hunting, killing and collecting terrestrial animals	all regions except VR
Logging and wood harvesting	all regions except MR
Roads and railroads	all regions except AR
Housing and settlement	VR, LR, RK, SPb
Tourism and recreation infrastructure	LR, MR, RK, SPb
Utility and service lines	LR, VR, RK, SPb
Recreational activities and tourism	LR, MR, RK, SPb
Garbage and solid waste	VR, LR, RK, SPb
Loss of cultural links, traditional knowledge and/or management practices	AR, VR, LR, MR
Destruction of cultural heritage objects	VR, LR, RK, SPb
Gathering terrestrial plants or plant products (non-timber)	LR, RK, SPb
Deliberate vandalism, destructive activities or threats to protected area staff and visitors	LR, RK, SPb
Increased fragmentation of natural complexes within protected area	AR, VR, LR
Invasive non-native/alien animals	VR, LR, SPb
Household sewage and urban waste water	LR, RK, SPb
Commercial and industrial areas	RK, SPb
Shipping lanes and canals	LR, RK
Isolation from other natural habitats	VR, LR
Other ‘edge effects’ on park values (apart from increased fragmentation of natural habitats within protected area and isolation from other natural habitats)	AR, SPb
Loss of keystone species	LR, SPb
Invasive non-native/alien plants (weeds)	VR, LR
Erosion and siltation/deposition	RK, SPb
Storms and flooding	RK, SPb
Natural deterioration of important cultural site values	AR, LR
Wood and pulp plantations	VR
Mining and quarrying	AR
Dams, hydrological modification and water management/use	RK
Sewage and waste water from protected area facilities	RK
Industrial, mining and military effluents and discharges	SPb
Agricultural and forestry effluents	LR
Air-borne pollutants	SPb

On the whole, these threats reflect the global tendencies of late 20th - early 21st centuries, expressed in a more intensive exploitation of natural resources, urbanisation, expansion of built-up areas and transportation networks, environmental pollution and increased recreational load. Destruction or deterioration of non-protected natural areas (due to intensive non-sustainable use) makes PAs considerably more attractive as tourism and recreation destinations, as stocks of resources for the developing business and as the source of livelihood for the local population. At the same time, the relative value of PAs for conservation of landscape and biological diversity increases as well. Some extremely valuable habitats disappear with the traditional agricultural practices. Last but not least, the loss of the traditional rules of behaviour in the nature, an inevitable consequence of the alienation of humans from their original environment, results in a further increase of anthropogenic load on the natural complexes. Under these circumstances, recognising and scaling threats to PAs may prove useful for channelling management activities towards more effective protection of PA values.

Effective management is the key to the harmonisation of diverse and often contradictory PA aims. A broad range of activities constituting the notion of "PA management" is addressed in the second METT questionnaire, the management assessment form.

The regions participating in the project differ not only in the number and area of their RPAs, but also in the form of RPA management organisation and the staff structure of the managing authorities (see Table below). To illustrate, RPA management authorities in Arkhangelsk, Leningrad and Murmansk Regions and St. Petersburg are represented by state institutions (directorates or administrations of RPAs) responsible for managing the whole RPA network in the region. These state institutions were established within the jurisdiction of the competent executive state authorities. In the Leningrad Region, there are experts working directly with RPAs also on the staff of the state authority itself. In the Vologda Region, the RPA management remains entirely the responsibility of the state authority. The situation in the Republic of Karelia is similar to that in the Vologda Region, the only exception being that "Valaam Archipelago" nature park is managed by a special state institution founded under the jurisdiction of the state authority.

RPA management in the participating regions: staff resources in comparison with the number and area of RPAs[13].

Region	Number of people directly responsible for PAs on the staff of the state authority of the RF subject	Number of people on the staff of the subordinate state institution (if any)	Total number of RPAs	Total area of RPAs, thousand ha
Arkhangelsk Region	-	42	99	1679,05
Vologda Region	2	-	163	219,75
Leningrad Region	5	26	39	465,37
Murmansk Region	-	14	53	707,27
Republic of Karelia	2	12,5	134	359,98
St. Petersburg	-	23	7	2,48

13 All the data are given for 01.06.2010.

The conclusions about the state of RPA management in the six participating regions characterise the state of affairs only in the most general way, deeper analysis currently being impossible. In part, this is associated with the fact that a different number of PAs was included into the Assessment in different regions. In other words, the management situation is reflected unevenly. It was decided from the very beginning that the Assessment should focus on the nature reserves (zakazniks) and nature parks, since these RPAs usually have a larger area and are more important for the preservation of landscape and biological diversity. In some regions the experts responsible for the Assessment thought it relevant to include also some nature monuments and reserves (rezervaty).

Naturally, only reasonably well-surveyed PAs were included in the Assessment. This means that the conclusions drawn from the Assessment can be extrapolated to other PAs only with the greatest possible caution. Besides, it should be borne in mind that the Assessment was performed by different teams of experts in different regions.

Number and area of the assessed RPAs in comparison with number and area of all RPAs[14] in the participating regions

Region	Total number of RPAs (01.06.2010)	Number of assessed RPAs	Percentage of number of assessed RPA	Total area of RPAs 01.06.2010), thousand ha	Areas of assessed RPAs, thousand ha	Percentage of area of assessed RPAs
Arkhangelsk Region	99	32	32%	1679,05	1515,71	90%
Vologda Region	163	101	62%	219,75	167,84	76%
Leningrad Region	39	35	90%	465,37	463,25	99,5%
Murmansk Region	53	7	13%	707,27	693,19	98%
Republic of Karelia	134	8	6%	359,98	167,01	46%
St. Petersburg	7	5	71%	2,48	2,11	85%

14 Data about all RPAs are given for 01.06.2010.

The most common RPA management weaknesses in the participating regions (that is, weaknesses revealed in 5 or 6 regions) were as follows:

- **Law enforcement (capacity/resources for practical realization of control and guarding/protection) (issue 3)** (except Arkhangelsk Region)
- **Management plan (issue 7)**
- **Protection systems (issue 10)** (except St. Petersburg)
- **Research (issue 11)** (except St. Petersburg)
- **Active management of habitats, species, ecological processes and cultural values (issue 12)**
- **Staff numbers (issue 13)** (except St. Petersburg)
- **Environmental education and awareness (issue 20)**
- **Participation of local communities (issue 24)**
- **Economic benefit (issue 25)**
- **Monitoring and evaluation of management activities (issue 26)**
- **Visitor facilities and services (issue 27)**
- **Contacts with commercial tourism companies and entrepreneurs (issue 28)**
- **Fees for nature use (issue 29)**

The state of things with other issues is different in different regions. The following aspects deserve special mention:

- Only a few issues were assigned the highest score for all the PAs assessed. These issues are: "Legal status" (in all the regions except Vologda Region), "Information about valuable objects" and "Condition of values" (in St. Petersburg).
- Rather often an issue was noted as a weakness for some concrete RPAs but considered as strength at the level of all RPAs in the region. In such cases, it would be, of course, premature to consider the issue as well-addressed.
- On the other hand, positive tendencies in the solution of some issues have been observed in all the six regions. For example, many issues were mostly assigned the score "2". Moreover, some further improvements have been noted after the Assessment was mainly completed, that is, since 2008.
- On the whole, the management situation appears to be slightly better in the regions where subordinate state institutions (directorate or administrations of RPAs), completely or mostly responsible for work with RPAs, are functioning. In other words, this experience can be considered as fruitful.

It goes without saying that in order to improve the general situation with RPA network management it is necessary, in principle, to consistently address all the issues at all the PAs. However, it is also evident that in practice PA managers face the need to determine priority directions of their activity. These priorities are to a great extent dictated by the situation in the concrete region. Nevertheless, when sorting the priorities, it is advisable to pay special attention to the **critical management activities**[15] (legal status — issue 1, boundary demarcation — issue 6, management plan — issue 7, regular work plan — issue 8, current budget — issue 15, monitoring and evaluation of management activities — issue 26). Some of these issues are commented below.

Legal status (i.e. the presence of official decisions about PA establishment and PA statutes [polozheniya]) was naturally considered as a well-addressed issue, since only the existing RPAs were included in the Assessment. It should be noted, however, that the agreement of the above-mentioned documents with the current legislation remains an important part of the work in all the regions; moreover, the agreement process appears to be never-ending due to the constantly changing legislation (both at the regional and at the federal level).

A management weakness common for all the six regions is lack or incomplete implementation of **management plans**. The situation with **regular work plans** is somewhat better (in St. Petersburg and the Arkhangelsk Region this issue was even considered as a strength), but for a considerable number of RPAs even regular work plans are lacking or incompletely implemented. Another weakness shared by the

six participating regions is lack of the system of **monitoring and evaluation of management activities**. Management plans, which link together various management activities, have been recognised as important guiding documents for implementing successful PA management. Management planning is broadly used, for example, in Finland. Adaptive management (constant improvement of management practices based on one's own experience or, in other words, learning from analysis of management successes and failures) is a relatively new approach to the management of PAs, and PA managers throughout the world are becoming increasingly interested in it. This approach is especially promising when the situation calls for quick response to the undergoing changes, which is so often the case with PA management. Gradual introduction of management plans and adaptive management approaches opens new vistas for increasing the effectiveness of RPA management and allows a more effective use of the limited resources available, thus compensating, in a way, for their scarcity.

Setting aside the discussion of critical management activities, we now proceed to another management weakness revealed in all the regions — **interactions with local communities and visitors**. This weakness concerns a number of issues: environmental education and awareness, involvement of local communities and indigenous and traditional peoples into PA management, economic benefit of RPAs for the local community, visitor facilities and services, and contacts with tourist companies and entrepreneurs. By not addressing these issues, RPA managers often loose the invaluable chance to enlist the support of the major RPA "users" and neighbours. Incomprehension as to the significance of PAs, ignorance of the rules of behaviour in the nature as well as inability to foresee the injurious consequences of certain economic activities result in a careless if not outright barbarous attitude to PAs or, in a broader context, in underestimation of their social value. If gradually and consistently addressed, these issues would allow the integration of RPAs into local socio-economic context, facilitating their harmonious management.

Another issue deserving special discussion is **condition of RPA values**. On the one hand, according to the Assessment, the most important biological, ecological and cultural values of RPAs are preserved rather well, which is certainly a sanguine and inspiring result. On the other hand, even though in most regions this issue was considered as a strength, maintenance and improvement of the condition of values in RPAs remains vitally important. It was noted that the values of some assessed PAs are to some extent, sometimes seriously degrading — and it is appropriate to remind here that the PAs included in the Assessment were usually those receiving the most attention of the managers. Moreover, RPA survey conducted in some of regions showed that some protected objects had disappeared over the years (or their value had been lost); as a result of the work aimed at bringing the RPA network in agreement with the current legislation, several items were excluded from the list of regional PAs.

It should also be noted that the area of individual RPAs in the participating regions varies considerably, from 0.1 to 438723 ha, with some nature monuments represented by solitary trees. It is evident that PA size depends to a great extent on the state of the surrounding lands and their economic use. On the whole, however, when planning the expansion of the PA network, it is to be recommended **to think twice before establishing small PAs** (in other words, small PAs should be established only after sound analysis). This recommendation is grounded in the fact that PAs with a small area are much more vulnerable than larger ones, and the maintenance of their values sometimes requires as much, if not more efforts and resources as the management of vast protected areas. Besides, large PAs may offer better possibilities

15 Critical management activities are the activities that were shown to best correlate with the overall management effectiveness in a large-scale worldwide assessment of PA management effectiveness, conducted by WWF with the use of METT in 2004.

for various non-exhaustive, rational ways of nature use, including nature tourism, as well as for organisation of environmental education and awareness programmes etc. The amount of administrative work also often correlates with the number of PAs, and not their area. Therefore, it seems expedient to consider the establishment of vast PAs, comprising several smaller valuable objects. (This was achieved, for example, in the Vologda Region, where protected natural complex "Onezhskii" was established.)

There are good reasons to hope that the Assessment would serve as a starting point for further improvement of the RPA management. **The use of METT can be considered as promising** for tracking the progress in this work both at individual RPAs and in the RPA network, as well as for checking the input against performance. On the other hand, the project in general and the Assessment in particular served as a **forum for the development of collaboration** between the RPA management authorities, where best practices in RPA management were presented and discussed, and the basis for the improvement of the management was thus created. Seen from this angle, the Assessment process in itself can be said to have been an important result.

Summing up, the project "Development of regional PAs in the North-West Russia" has vividly demonstrated the **importance of collaboration and information exchange between the Russian Federation subjects** in the field of RPA management. Continuation of this collaboration and **harmonisation of RPA management practices within and between the regions** seem to be important steps towards optimisation of RPA management in the North-West Russia. In a number of issues, the experience of federal PAs in the North-West Russia may prove highly useful. Last but not least, the development of international collaboration holds much promise — in particular, practical cooperation and experience exchange between organisations and experts responsible for PA management in Russia and Finland.

Appendix A

List of regional PAs

* Assessed protected areas are marked with an asterisk.

Arkhangelsk region

No.	Name of protected area	Area, ha	Year of establishment
STATE NATURE RESERVES (ZAKAZNIKS)			
	Landscape zakazniks:		
1*	Primorskii	438723	2004
2*	Mudyugskii	2514	1996
3*	Puchkomskii	11870	1996
4*	Verkolskii	46521	1988
5*	Kozhozerskii	201605	1992
6*	Chugskii	7973	1996
7*	Lenskii	16707	1993
8*	Ust-Chetlasskii	2157	1987
Biological zakazniks:			
9*	Dvinskoi	7200	1973
10*	Belomorskii	65345	1998
11*	Unskii	51507	1996
12*	Soyanskii	315910	1983
13*	Kuloiskii	24700	1994
14*	Monastyrskii	15900	1975
15*	Surskii	13500	1975
16*	Yarenskii	38000	1975
17*	Onskii	20600	1976
18*	Lachskii	8800	1971
19*	Filatovskii	23600	1975
20*	Vazhskii	16500	1976
21*	Vilegodskii	26600	1986
22*	Klonovskii	37100	1980
23*	Konoshskii	9 000	1976
24*	Kotlasskii	13400	2002
25*	Solvychegodskii	6400	1970
26*	Shilovskii	23900	1969
27*	Shultusskii	11500	1975
28*	Plesetskii	20000	1981
29*	Ustyanskii	6200	1988
30*	Selenginskii	6400	1975
Geological zakazniks:			
31*	Zheleznye Vorota	8074	1991
Hydrogeological zakazniks:			
32*	Permilovskii	17500	1994
NATURE MONUMENTS			
33	Lakhtinskii Forest	24.8	1989
34	Shirshinskii Forest	455	1989
35	Talazhskii Pine Forest	36.2	1989

36	Urochishche Kurtyaevo	150	1989
37	Pikhty (silver firs) near Arkhangelsk	1	1991
38	Area of pine forest	30	1987
39	Area of larch forest marked with an expression ”Slava KPSS” at the plan	1	1987
40	Area of larch forest marked with an expression ”Leninu slava” at the plan	5	1987
41	Area of larch forest near Lyamtsa Village	50	1987
42	Sosnovaya Growth (northern edge of Onega Town)	3	1987
43	Talitskii Spring (eastern edge of Onega Town)	0.3	1987
44	Area ”Padun”	6	1987
45	Voronovskaya Growth	5	1987
46	Argunovskii Pine Forest	3	1987
47	Rylkovskii Pine Forest	120	1987
48	Komsomolskii Pine Forest	163	1987
49	Korenevskii Pine Forest	166	1987
50	Bereznikovskii Pine Forest	42	1987
51	Shunemskii Pine Forest	118	1987
52	Tegrinskii Forest	287	1987
53	Blagoveshchenskii Pine Forest	35	1987
54	Zelenyi Pine Forest	82	1987
55	Pine Forest ”Kryazh”	240	1989
56	Kachaevskii Pine Forest	22	1989
57	Tarasovskii Pine Forest	102	1989
58	Pine Forest ”Myandach”	23	1989
59	Palkinskii Pine Forest	10	1989
60	Ispolinovskii Pine Forest	89	1989
61	Timanevskii Pine Forest	247	1989
62.	Forest cultures of cedar ”Sovii Mountains”	17	1991
63	Growth ”Zelenaya”	39	1991
64	Urochishche ”Igumenikha”	30	1991
65	Ena River with a strip of river bank	200	1991
66	Mineral Spring	2	1991
67	Chernyi Island	162	1991
68	Lake Maloe Shuiskoe	700	1991
69	Pine near Churyega Village	single tree	1991
70	Birch near Lokhovo Village	single tree	1991
71	Pine Growth near Medvedevo Village	not defined	1991
72	Pine Plantings near Nikiforovo Village	not defined	1991
73	Lake Churozero	13	1991
74	Natural plantings of spruce near Churozero	72	1991
75	Forest cultures of pine, planting of 1958	3	1991
76	Forest cultures of pine, planting of 1959	41	1991
77	Forest cultures of cedar, planting of 1956	4	1991
78	Forest cultures of cedar, planting of 1965	1	1991
79	Forest cultures of pine, planting of 1939	8	1991
80	Natural plantings of pine	58	1991
81	Forest cultures of pine, planting of 1964	15	1991
82	Twelve Springs	33	1991
83	Natural plantings – pine forest with admixture of spruce plantings	118	1991
84	Natural plantings – spruce with admixture of birch and alder	14	1991

85	Pine Forest	42	1991
86	Linden alley in the valley of Severnaya Dvina River	2	1991
87	Kedrovyi Garden	0.5	1991
88	Shegmas (botanical)	5	1989
89	Listvennichnaya Growth	65	2004
90	Experimental forest cultures of pine laid by S.V. Alekseev in 1927-1930	32	2004
91	Experimental forest cultures of pine laid by S.V. Alekseev in 1949	14	2004
92	Experimental forest cultures of pine laid by S.V. Alekseev in 1951	5.6	2004
93	Kal-ozero	201	2004
94	"Pikovo" Bog	1100	1991
95	"Vakkhannik" Bog	46	1991
96	"Vodnaya" Cave	6.6	1987
97	"Kulogorskaya-5" Cave	17	1987
98	"Kulogorskaya Troya" Cave	50.8	1987
99	Golubinskii Karst Massif	210	2005

Vologda Region

No.	Name of protected area	Area, ha	Year of establishment
STATE NATURE RESERVES (ZAKAZNIKS)			
1*	Azletskii Forest	752	1987
2*	Andogskii Forest	830	1984
3*	Atleka	3370	2000
4*	Bobrishnyi Ugor	375	1985
5*	Pine Forest "Kozlikha"	391.5	1997
6*	Brusenskii Forest	610	1986
7*	Vaganikha	189	1987
8*	Vanskaya Luka	2489.6	1989
9*	Verdengskii	1245	1987
10*	Verkhne-Andomskii	4038	1983
11*	Verkhnyaya Strelna	6703	1997
12*	Verkhvazhskii Forest	1785	1987
13*	Verkhvinskii Forest	959	1985
14*	Verkhovskii Forest	890	1993
15*	Voronovo	733	1989
16*	Vyazy	213	2000
17	Gladkii Pine Forest	1492	1990
18*	Gorodishchenskii Forest	11286	1991
19*	Gorskii	365	1989
20*	Dikovskii Forest	243	1997
21*	Ezhozerskii	2295	1983
22*	Entalskii Forest	1032	1985
23*	Zaozerskii	10691	1990
24*	Izonikha	334	1987
25*	Ikonnyi Pine Forest	2494	1993
26*	Ilezskii	954	1993
27*	Ikhalitskii	1537.5	1987

28	Klavdinskii	754	1994
29*	Klyuchi	650	1985
30*	Kobozhskii	2069	1989
31*	Koloshemskii Forest	1622	1986
32*	Circular Structure ”Chermzha”	2026	1985
33*	Kushtozerskii	1107	1983
34*	Listvennichnyi Pine Forest	2258	1978
35*	Lukhtozerskii	2185	1983
36*	Mazskii Pine Forest	636.5	1996
37*	Melgunovskii	535	1984
38*	Mikhalevo	852	1994
39*	Modno	994	1963
40	Mologa	1006.7	2008
41*	Nyushmenskii Pine Forest	1787	1990
42	Ozerikha	1330	1994
43*	Olenevskii Pine Forest	2538	1993
44*	Otnenskii	6937	1989
45*	Padun	1213	1994
46*	Palemskii Forest	2130	1988
47*	Pinga	2216	1999
48*	Pochinkovskii Forest	3549	1997
49*	Ramenskii Forest	1353.28	1986
50*	Rattsa	3201	1994
51*	Selmengskii Forest	1549	1986
52*	Sigskoe Bog	1378	1994
53	Smorodinka	206	1994
54*	Soidozerskii	2242	1985
55*	Sondugskii	10219	1987
56*	Spasskii Pine Forest	4558	1993
57*	Strelkinskii Forest	1563	1996
58*	Sudskii Pine Forest	2816.8	1996
59*	Sysoevskii Pine Forest	2436	1993
60*	Talitskii Forest	1608	1985
61*	Unzhenskii Forest	1969	1985
62*	Urochishche ”Lopata”	756	1993
63*	Urochishche ”Orlovskaya Growth”	1276	1988
64*	Urochishche ”Strelna”	3750	1985
65	Urochishche ”Khazovo”	202	1994
66*	Urochishche ”Sharma”	505	1988
67*	Kharinskii	4734	1989
68*	Chadogoshchenskii	4172	1989
69	Chernozerskii	1875.8	2009
70*	Chuchkin Pine Forest	1890	1993
71	Shalgo-Bodunovskii Forest	1511	1984
72*	Shelomovskoe Bog	730	1996
73*	Shilengskii Pine Forest	924	1988
74*	Shimozerskii	8169	1983
75*	Shichengskii	13610	1987

76*	Sholskii Forest	1984	1985
77*	Yansorskii	830	1984
78	Yarbozerskii Pine Forest	2445	1999
NATURE MONUMENTS			
79*	Andomskii Geological Section	360	1978
80*	Baranovskii Pine Forest	180	1978
81	Belyi Stream	41	1983
82	Bobrovskii Salt Spring	200	1985
83*	Pine Forest "Berezhok"	245	1987
84	Pine Forest "Chernye Peski"	175	1983
85	Boulder "Dvugorbyi"	0.1	1963
86	Vaskin Pine Forest	175	1978
87*	Viktorovskii Pine Forest	326	1978
88*	Waterfall "Vaskin Klyuch"	50	1987
89	Elm Forest "Veksa"	2	1963
90	Elm Forest "Temnyi Mys"	106	1963
91*	Geological Outcrop on Sharzhenga River near Vakhnevo Village	175	1991
92*	Geological Outcrop "Aristovo"	50	1985
93*	Geological Outcrop "Myakolitsa"	142	1985
94*	Geological Outcrop on Shardenga River near Skorodum Village	52,6	1991
95	Geological Outcrop near Ozerki Village	300	1989
96*	Geological Outcrop near Purtovino Village and Isady Village	300	1989
97	Maura Mountain	36.35	1966
98	Sandyreva Mountain	15.53	1966
99	Tsipina Mountain	89.96	1966
100	Devyatinskii Perekop	300	1983
101	Dendropark in Ustyuzhna Town	4	1966
102	Patrov Stream Valley	20	1983
103	Druzhinskie Pits	4	1984
104*	Dyakonovskaya Glade	4.5	2006
105	Spruce Forest near Kiriki-Ulity Village	51.2	1963
106*	Oak Growths (Dubnya).	8.8	1966
107*	Zakharovskii Pine Forest	70	1978
108	Isakova Mountain	427	1989
109	Kamennaya Mountain	32	1963
110	Cedar Growth in Chagrino Village	3.7	1963
111	Kodozero	231	1991
112*	Kontakt (geological outcrop)	10	1988
113*	Kudrinskii Pine Forest	666	1978
114	Glacial Boulder "Los"	0.1	1963
115	Glacial Boulder "Utyug"	0.3	1987
116*	Lipovaya (Petryaevskaya) Growth	1	1963
117	Malakhov Pine Forest	185	1978
118*	Markinskii Pine Forest	2.36	1988
119*	Maryinskii Pine Forest	333	1994
120	Mikhaltsevskaya Growth	36	1982
121*	Cape "Byk"	64.7	1987
122*	Odomchenskii Pine Forest	329	1978
123	Lake Bolshoe-Volkovo	95	1982

124	Lake Mitvorovo	400	1978
125*	Lake Okunevo	36	1996
126	Lake Chernoe	304	1991
127	Olarevskaya Ridge	159	1987
128*	Opoki	1	1963
129*	Park Dudorova	3.5	2001
130	Podsosenye	100	1982
131*	Pustoramenskii Pine Forest	7	1987
132	Pyatnitskii Pine Forest	79	1978
133*	Severnye Orkhidei	74	1982
134	Sulphury Springs near Shelokhach Village	10.9	1963
135	Sokolskii Pine Forest	800	1978
136	Sonsovaya Alleya	4.1	1963
137	Old Park in Borisovo-Suda Village	30	1963
138*	Old Park in Gorka Village	0.75	1966
139	Old Park in Bolshoe Vosnoe Village	5,5	1963
140	Old Park in Danilovskoe Village	3.9	1963
141	Old Park in Ermolovo Village	9	1982
142*	Old Park in Kuznetsovo Village	0,5	1963
143	Old Park in Mikhailovskoe Village	6.65	1963
144	Old Park in Pokrovskoe Village	11.65	1963
145	Old Park in Yunosheskoe Village	5	1966
146	Old Park in Yurovo Village	5	1982
147	Old Park in Gribtsovo Village	2.1	1966
148	Old Park in Kraskovo Village	1.2	1963
149	Old Park in Mozhaiskoe Settlement	2.8	1963
150	Old Park in Nikolskoe Village	12	1963
151*	Old Park in Svyatogorye	0.2	1963
152	Old Park in Kurkino Village	5	1963
153*	Old Park "Spirino"	0.63	1988
154	Part of Tagazhma River Valley	1000	1983
155*	Tsarev Pine Forest	78	1994
156*	Tsevnye Kremni	100	1985
157	Lake Chaikino	88	1982
158	Chudotvornyi Spring	73	2006
159	Shishkina Niva	194.83	1963
160*	Yashkin Pine Forest	138	1963
PROTECTED NATURAL COMPLEX			
161	Onezhskii	25139.5	2009
TOURIST-RECREATIONAL AREAS			
162	Karpovo	89	2009
163	Zelenaya Growth	3713.5	2007

Leningrad Region

No.	Name of protected area	Area, ha	Year of establishment
STATE NATURE RESERVES (ZAKAZNIKS)			
1*	Complex zakaznik ”Gladyshevskii” (a part of it is situated in St. Petersburg)	Total area 8419, of them 7654 in the Leningrad Region	1996
2*	Complex zakaznik ”Rakovye Lakes”	9700	1976
3*	Complex zakaznik ”Berezovye Islands”	55295	1996
4*	Complex zakaznik ”Vyborgskii”	11295	1996
5*	Zoological (ornithological) zakaznik ”Lake Melkovodnoe”	3900	1976
6	Botanical zakaznik ”Lindulovskaya Grove”	986	1976
7*	Hydrological (wetland) zakaznik ”Ozernoe Bog”	1044	1976
8*	Hydrological (wetland) zakaznik ”Lammin-Suo Bog”	380	1976
9*	Complex zakaznik ”Vaaramaenselka Ridge”	7279	1996
10*	Complex zakaznik ”Oak Groves near Velkota Village”	375	1996
11*	Complex zakaznik ”Kotelskii”	12 681	1996
12*	Botanical zakaznik ”Gostilitskii”	1595	1976
13*	Botanical zakaznik ”Rakitinskii”	777	1976
14*	Hydrological zakaznik ”Glebovskoe Bog”	14700	1976
15*	Hydrological zakaznik ”Northern Part of Mshinskoe Bog”	14700	1996
16*	Complex zakaznik ”Syaberskii”	11400	1976
17*	Landscape zakaznik ”Cheremenetskii”	7100	1976
18*	Complex zakaznik ”Shalovo-Perechitskii”	5272	1976
19*	Complex zakaznik ”Belyi Kamen’”	3000	1979
20*	Complex zakaznik ”Lisinskii”	28413	1976
21*	Complex zakaznik ”Chistyi Mokh”	6434	1976
22*	Complex zakaznik ”Kurgalskii”	59 950	1994
23*	Complex zakaznik “Lebyazhii”	6344.65	2007
NATURE MONUMENTS			
24	Geological nature monument ”Gustoi Island”	54	1976
25*	Complex nature monument ”Lake Yastrebinoe”	629.5	1976
26	Hydrological nature monument ”Lake Krasnoe”	1012.2	1976
27*	Complex nature monument ”Source of Oredezh River in Dontso Tract”	950	1976
28*	Hydrological and geological nature monument ”Radon Springs and Lakes in Lopukhinka Village”	270	1996
29*	Geological nature monument ”Devonian Outcrops on Oredezh River near Belogorka Village”	120	1976
30*	Geological nature monument ”Devonian and Ordovician Outcrops on Saba River”	650	1976
31*	Geological nature monument ”Devonian Outcrops on Oredezh River near Yam-Tesovo Village”	225	1976
32*	Geological nature monument ”Devonian Outcrops and Galleries on Oredezh River near Borshchovo Village (Lake Antonovo)”	270	1976
33*	Complex nature monument ”Sablinskii”	220	1976
34*	Complex nature monument ”Lava River Canyon”	160	1976
35*	Complex nature monument ”Staroladozhskii”	220	1976
36*	Complex nature monument ”Ragusha River”	1034	1996
37*	Geological nature monument ”Shcheleiki”	117.5	1995

38	Nature monument ”Memorial Estate of N.K. Roerich”	58.7	2009
NATURE PARKS			
39*	Nature Park ”Vepsskii Forest”	189,100	1970

Murmansk Region

No.	Name of protected area	Area, ha	Year of establishment
STATE NATURE RESERVES (ZAKAZNIKS)			
1*	Biological (fishery) zakaznik “Varguzskii”	45093	1982
2*	Complex zakaznik “Kolvitskii”	40900	1983
3*	Zakaznik “Kutsa”	52000	1994
4*	Zoological zakaznik “Ponoiskii”	117023	1981
5*	Biological (fishery) zakaznik “Ponoiskii”	380637	2002
6*	Biological zakaznik “Simbozerskii”	39568	2003
7*	Complex zakaznik “Seidyavvr”	17972	1982
NATURE MONUMENTS			
	Botanical (forest) nature monuments		
8	Biogruppa Elei (Biogroup of spruce at the border of distribution area)	0.50	1986
9	Kedr Sibirskii (Siberian Cedar in Nikelskoe Lesnichestvo)	0.20	1986
10	Cedars in Kovdskoe Lesnichestvo	2	1986
11	Cedars and Larches near Khibiny Station	2	1980
12	Cedars of Krivets Forest Cordon	2	1986
13	Cedars on Zapadnaya Litsa River	3	1980
14	Cedars of Okunevskoe Urochishche	20	1980
15	Kovdskie Larches	1	1986
16	Larches of Nizhne-Tulomskoe Reservoir	4	1986
17	Siberian Larches in Lovozerskii Leskhoz	12	1980
18	Larch Growth in Taibola	1	1980
19	Junipers of Magazin-Musyur Height	3000	1980
20	Nyamozerskie Cedars	5	1980
21	Pines at the border of northern distribution area	4.60	1986
22	Site of Cedar of Artificial Origin	0.40	1986
23	Site of Forest Cultures of Siberian Larch	5.60	1986
24	Site of Siberian Larch of Artificial Origin	0.90	1986
Botanical (species-protection) nature monuments			
25	Arnicas and poppies of Indichyok Gorge	1	1980
26	Arnicas of Gorge near Lake Palga	1	1980
27	Flora Mountain	10	1980
28	Kitkuai River Valley	3	1980
29	Kriptogrammovoe Gorge	2	1980
30	Aikuaivenchorr Gorge	2	1980
31	Yuksporrlak	3	1980
32	Eutrophic Bog of South Prikhibinye	10	1980
33	Malyi Punkaruaiv	5	1980
34	Site of Occurrence of Bryonia dioica near Viddpakkh Mountain	1500	2009
Hydrological nature monuments			
35	Waterfall on Chavanga River	100	1986

36	Waterfall on Chapoma River	200	1986
37	Waterfall on Shuniiok River	1	1986
38	Komsozero and 500-m wide shore strip	250	1983
39	Therapeutic Muds of Palkina Bay	400	1980
Geological nature monuments			
40	Amazon Stones of Parusnaya Mountain	1	1980
41	Amethysts of Korabl Cape	5	1986
42	Basaltoid Lavas on Granite-Gneiss Basement near Rizh-Bay	9	1980
43	Cowstone near Lake Semenovskoe	0.50	1980
44	Granitoids of Mikkov Island	10	1980
45	Pegmatites of Malyi Punkaruaiv Mountain	2	1980
46	Fluorites of Elokorgovskii Navolok	2	1980
47	Glacial Boulder	0.10	1980
Natural-historical nature monuments			
48	Ekostrovskoe Kintishche	105	1980
49	Rock Carvings near Chalnmy-Varre Settlement	1	1980
Complex nature monuments			
50	Ivanovskaya Bay	7480	2009
51	Bird Colonies of Dvorovaya Bay	610	2009
Geological-geophysical polygons			
52	Geophysical station “Lovozero”	4	1980
53	Geological-geophysical polygon “Shuoni-Kuets”	300	1980

Republic of Karelia

No.	Name of protected area	Area, ha	Year of establishment
NATURE PARKS			
1*	Valaam Archipelago	24700	1999
STATE NATURE RESERVES (ZAKAZNIKS)			
Complex (landscape) zakazniks:			
2	Shaidomskii	29600	1981
3*	Muromskii	32600	1986
4*	Polyarnyi Krug	28300	1990
5*	Kuzova	3600	1991
6	Andrusovo	890	1991
7	Yudalskii	1524	1991
8	Zaozerskii	2710	1991
9	Vazhozerskii	9492	1994
10	Tolvoyarvi	41900	1995
11	Iso-Iiyarvi	5778	1995
12	Zapadnyi Archipelago	19527	1996
13	Podkova	659	1997
14	Voinitsa	8376	2008
15	Syrovatka	31342	2009
Complex (marine) zakazniks:			
16*	Sorokskii	72900	1996

Biological (botanical) zakazniks:			
17	Deciduous and dark coniferous forests	392	1972
18	Highly productive plantings with participation of Siberian larch and black alder	110.4	1976
19	Sortavalskii	100	1978
20	Toloknyanka obyknovennaya (Bearberry)	1359	1981
21	Lake Beloye	7.5	1984
22	Lake Kovshozero	60	1984
23	Porozhki	0.17	2001
24	Kakkorovskii	26	1984
25	Anisimovshchina	5.4	1984
26	Zakaznik near Tsarevichi Village	0.1	1984
27	Zakaznik in Spasogubskii Leskhoz	5.7	1984
Hydrological (lacustrine) zakazniks:			
28	Lake Taloye	1.5	1984
Hydrological (wetland) zakazniks:			
29*	Bog near Nyukhcha Village	3539	1974
30	Bog Chuvnoi-suo	1400	1974
31	Bog Koivu-Lambasuo	1800	1976
NATURE MONUMENTS			
Landscape nature monuments:			
32	Klim-mountain	617	1993
Botanical nature monuments:			
33	Kedr sibirskii (Siberian cedar) - 64	2.4	1981
34	Kedr sibirskii (Siberian cedar) - 65	1.9	1981
35	Natural plantings with tillet and mountain elm	5	1981
36	Natural plantings with mountain elm	1.1	1981
37	Area of deciduous forest with tillet and mountain elm	23	1981
38	Sosna Murreya (murrayana) - 62	3.6	1984
39	Sosna gornaya (mountain pine)	0.6	1984
40	Sosna Murreya (murrayana) - 71	0.1	1984
41	Listvennitsa sibirskaya (Siberian larch) - 72	49	1984
42	Listvennitsa sibirskaya (Siberian larch) - 73	3.7	1984
43	Kedr sibirskii (Siberian cedar)	1	1984
44*	Listvennitsa Sukacheva (Sukachev's larch) - 76	6	1984
45	Listvennitsa Sukacheva (Sukachev's larch) - 77	4	1984
46	Listvennitsa Sukacheva (Sukachev's larch) - 78	5	1984
47	Listvennitsa Sukacheva (Sukachev's larch) - 79	30	1984
48	Topol belyi (white poplar)	not defined	1984
49	Tuya zapadnaya (American arborvitae)	not defined	1984
50	Kedry sibirskie (Siberian cedars) - 84	not defined	1984
51	Near Kurkieki Settlement	8.3	1995
Geological nature monuments:			
52	Girvasskii Section of Suna River Canyon	6	1981
53	Yuzhnyi Olenii Island	75	1981
54	Shungskii Section	10	1981
55	Sundozerskii	30	1981
56	Chertov Stul	75	1981
57	Uksinskaya Esker Ridge	1245.4	1984
58	Dulmek Islan	0.35	1984

59	Severin-Saari Island	0.54	1984
60	Kintsisiemi Cape	50	1984
61	Chelmuzhnaya Spit	900	1984
Hydrological nature monuments:			
62	"Solyanaya Yama" Spring	not defined	1984
63	"Kroshnozerskii" Spring	not defined	1984
64	"Lososinskii" Spring	not defined	1984
65	"Sulazhgorskii" Spring	not defined	1984
66	"Onezhskii" Spring	not defined	1984
67	Karasozerskii "Tri Ivana" Spring	125	1993
68	Urozero	2301	1997
69	"Belye Mosty" Waterfall	87.9	1999
Wetland nature monuments:			
70	Pairetskoe Bog	545.5	1989
71	Oigoretskoe Bog	513	1989
72	Bog near Lake Nurdas	454.4	1989
73	Bog near Lake Volgielambi	278.4	1989
74	Vazhinskoe Bog	7235.1	1989
75	Posadsko-Navorozhskoe Bog	1120.8	1989
76	Sulansuo Bog	125.1	1989
77	Bog near Vendyury Village	1115.3	1989
78	Konye Bog	86.2	1989
79	Razlomnoye Bog	39	1989
80	Bog near Lake Elmus	1918	1989
81	Pigma Bog	525	1989
82	Pala Bog	204	1989
83	Dikino Bog	213	1989
84	Tambitskoe Bog	51	1989
85	Komarnitskoe Bog	510	1989
86	Tiksha Bog	531	1989
87	Ladvinskoe Bog	166.2	1989
88	Bog near Lake Rzhanoe	30	1991
89	Selga Bog	134	1991
90	Verkhovoe Bog	65.6	1991
91	Lesnoye Bog	20.8	1991
92	Yuzhno-Gabozerskoe Bog	228.3	1991
93	Mikkelskoe Bog	493.7	1991
94	Merisuo Bog	487.4	1991
95*	Zapovednoe Bog	1361	1995
96	Shomba Bog	365	1995
97	Shubinskoe Bog	22	1995
98	Sambalskoe Bog	430	1995
99	Monastyrskoe Bog	22	1995
100	Posadsko-Navorozhskoe Bog XI	2082	1995
101	Posadsko-Navorozhskoe Bog VIII	870	1995
102	Posadsko-Navorozhskoe Bog IX	286	1995
103	Bog near Somba River	559	1995
104	Sosnovoye (Zhidkoe) Bog	860	1995
105	Alen Bog	149	1995

106	Savorozhenskoe Bog	560	1995
107	Akonyarvskoe Bog	68	1995
108	Ozovoe Bog	79	1995
109	Bog near Olonka River	42	1995
110	Chimilskaya Glade	25	1995
111	Papinoya Bog	99	1995
112	Bog near Lake Utozero	24	1995
113	Konzozerskoe Bog	123	1995
114	Terga Bog	44	1995
115	Kovera Bog	14	1995
116	Lebyazhye Bog	700	1995
117	Nivikovskoe Bog	32	1995
118	Medvezhye Bog	131	1995
119	Bog near Lake Medvezhye	15	1995
120	Porucheinoe Bog	158	1995
121	Mikhailovskoe Bog	29	1995
122	Maloe Sarmyagskoe Bog	280	1995
123	Vostochno-Segezhskoe Bog	761	1995
124	Ropaki Bog	995	1995
125	Levotsuo Bog	943	1995
126	Chilim Bog	608	1995
127	Kokhtusuo Bog	812	1995
128	Kalegubskoe Bog	168	1997
129	Bog near Lake Lelikozero	200	1997
130	Bog along Lel-Rechka River	95	1997
131	Zamoshye Bog	178	1997
132	Bog near Petrikova Bay	43	1997
133	Bog near Boyarshchina Village	24	1997
134	Shirokoe Bog	259	1997

St. Petersburg

No.	Name of protected area	Area, ha	Year of establishment
STATE NATURE RESERVES (ZAKAZNIKS)			
1*	Yuntolovskii	976.8	1990
2*	Gladyshevskii (the area of the St. Petersburg part is given; a part of the zakaznik is situated in the Leningrad Region)	765	1996
3	Northern Shore of the Neva Bay	330	2009
NATURE MONUMENTS			
4*	Komarovskii Coast	180	1992
5*	Park ”Sergievka”	120	1992
6*	Dudergofskie Heights	65	1992
7	Strelninskii Coast	40	1992

APPENDIX B

List of assessors and contributors to the report

Arkhangelsk Region

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APPENDIX C

Threat datasheet

Threats (factors having negative influence) to protected areas

1. Residential and commercial development within a protected area
1.1 Housing and settlement
1.2 Commercial and industrial areas
1.3 Tourism and recreation infrastructure
2. Agriculture and aquaculture within a protected area
2.1 Annual and perennial non-timber crop cultivation
2.1a Drug cultivation
2.2 Wood and pulp plantations
2.3 Livestock farming and grazing
2.4 Marine and freshwater aquaculture
3. Energy production and mining within a protected area
3.1 Oil and gas drilling
3.2 Mining and quarrying
3.3 Energy generation
4. Transportation and service corridors within a protected area
4.1 Roads and railroads
4.2 Utility and service lines (e.g. electricity cables, telephone lines,)
4.3 Shipping lanes and canals
4.4 Flight paths
5. Biological resource use and harm within a protected area
5.1 Hunting, killing and collecting terrestrial animals
5.2 Gathering terrestrial plants or plant products (non-timber)
5.3 Logging and wood harvesting
5.4 Fishing, killing and harvesting aquatic resources
6. Human intrusions and disturbance within a protected area
6.1 Recreational activities and tourism
6.2 War, civil unrest and military exercises
6.3 Research, education and other work-related activities in protected areas
6.4 Activities of protected area managers
6.5 Deliberate vandalism, destructive activities or threats to protected area staff and visitors
7. Natural system modifications
7.1 Fire and fire suppression (including arson)
7.2 Dams, hydrological modification and water management/use
7.3a Increased fragmentation of natural complexes within protected area

7.3b Isolation from other natural habitat
7.3c Other 'edge effects' [apart from increased fragmentation of natural habitats within protected area and isolation from other natural habitats] on park values
7.3d Loss of keystone species
8. Invasive and other problematic species and genes
8.1 Invasive non-native/alien plants (weeds)
8.1a Invasive non-native/alien animals
8.1b Pathogens
8.2 Introduced genetic material (e.g. genetically modified organisms)
9. Pollution entering or generated within a protected area
9.1 Household sewage and urban waste water
9.1a Sewage and waste water from protected area facilities
9.2 Industrial, mining and military effluents and discharges
9.3 Agricultural and forestry effluents
9.4 Garbage and solid waste
9.5 Air-borne pollutants
9.6 Excess energy
10. Geological events
10.1 Volcanoes
10.2 Earthquakes/Tsunamis
10.3 Avalanches/ Landslides
10.4 Erosion and siltation/ deposition
11. Climate change and severe weather
11.1 Habitat shifting and alteration [as a result of climate change and severe weather]
11.2 Droughts
11.3 Temperature extremes
11.4 Storms and flooding
12. Specific cultural and social threats
12.1 Loss of cultural links, traditional knowledge and/or management practices
12.2 Natural deterioration of important cultural site values
12.3 Destruction of cultural heritage buildings, gardens, sites etc

In the practice of assessment, threat datasheet should contain four additional columns allowing the assessors to identify the level of significance of each threat. Threats of high significance are those threats that seriously degrade PA values; threats of medium significance are those that have some negative impact; threats of low significance are those threats that are present but do not seriously impact the values. The fourth possibility of threat impact assessment, "no answer", means that the threat is absent or not applicable to the protected area in question.

Appendix D

Management Assessment Form

Each assessed PA is allotted a separate column to be filled in.

Additional issues specify the corresponding main issue and allow one to obtain additional information. When assessing individual PAs, every positive answer to an additional issue yields one point to the total score. In the present report, additional issues and the points scored by them were not considered.

GENERAL INFORMATION ABOUT PROTECTED AREA	**Column to be filled in**
Name	
Category	
International designation (if any)	
Management authority	
Experts responsible for assessment (name, organization, position, e-mail) (can be provided in a separate file)	
INFORMATION ABOUT MANAGEMENT SITUATION	
Asterisk (*) means that the issue was modified in comparison with the original management assessment form for better correspondence to the conditions in the North-West Russia. Four variants of answers are given for every issue. One of them should be chosen and marked with an “X” in the column devoted to the assessed PA. The variants are assigned a score according to the following scale: 0 (bad), 1 (satisfactory), 2 (good), 3 (excellent). The main issue is sometimes followed by additional issues, which verify some aspects of the main one. If none of the suggested variants corresponds fully to the situation in the PA under assessment, the best corresponding variant should be chosen, and the choice should be commented upon directly in the column with the answer, after the “X” sign. Issues that are inapplicable to the assessed PA should be left without answer, but commented upon. The same should be done in the cases when information necessary for the answer is insufficient or lacking.	

Issue (component to which the issue belongs is given in italics after the issue)	Criteria	Score	Column to be filled in
1. Legal status Does the protected area have legal status? *Context* **Comment to the English version of the report: Decision on PA establishment and PA Statute (polozhenie)are basic PA-related documents. The former "gives birth" to PA, the latter prescribes nature use regime and other aspects of functioning.*	* Decision on PA establishment and PA Statute (polozhenie) are missing	0	
	* There is agreement that PA should be established but the process has not yet began (there is agreement with land users and municipal authorities but Decision on PA establishment and PA Statute (polozhenie) are not agreed with regional bodies, PA is not included in the Development Plan for regional PA network or Territorial Development Plan)	1	
	* The protected area is in the process of being officially established but the process is still incomplete - includes sites designated under international conventions, such as Ramsar, or local/traditional law such as community conserved areas, which do not yet have national legal status or covenant [Decision on PA establishment and PA Statute (polozhenie) are in the process of agreement with regional bodies or PA is included in the Development Plan for regional PA network or Territorial Development Plan; including the situation when there is Decision on PA establishment but no PA Statute (polozhenie)])	2	
	* Decision on PA establishment and PA Statute (polozhenie) are officially approved	3	
2. * Regulations concerning control and guarding/ protection Are appropriate regulations in place to control land use and activities (e.g. hunting)? Under regulations we understand power and responsibilities of institutions and organizations, realizing control and guarding/ protection on PA, as well as procedures of interactions between these bodies *Planning*	* There are no regulations for control and guarding/protection on PA	0	
	* Some regulations for control and guarding/protection on PA exist but there are major weaknesses (bodies realizing control of certain nature use activities are not identified; there are conflicts between controlling bodies; there is no agreed procedure in case of revealing violations in nature use and land use rules on PA)		
	* Some regulations for control and guarding/protection on PA exist but there are some weaknesses or gaps (regulations exist but they are not applied in practice)	2	
	* Regulations for control and guarding/protection on PA exist and provide an excellent basis for management	3	

3. * Law enforcement (capacity/resources for practical realization of control and guarding/protection) Can staff (i.e. those with responsibility for managing the site) enforce protected area rules well enough? Hereafter in all issues under PA staff we understand all staff responsible for the work with protected areas in respective Committees/Departments/ Ministries and Directorates of protected areas (including inspectors), as well as staff of other organizations with delegated functions to implement nature conservation and other activities on PAs *Input*	The staff have no effective capacity/resources to enforce protected area legislation and regulations	0	
	There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget, lack of institutional support)	1	
	The staff have acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain	2	
	The staff have excellent capacity/resources to enforce protected area legislation and regulations	3	
4. * Protected area objectives Is management (including guarding/protection) undertaken according to agreed objectives? PA objectives should be mentioned in official documents – Decision on PA establishment and PA Statute (polozhenie); could be mentioned in the paragraph “importance” or “purpose” *Planning*	No firm objectives have been agreed for the protected area	0	
	The protected area has agreed objectives, but is not managed according to these objectives	1	
	* The protected area has agreed objectives, but is only partially managed according to these objectives (management ensures achievement of some objectives, or incomplete achievement of any objective)	2	
	The protected area has agreed objectives and is managed to meet these objectives	3	
5. * Protected area design Does protected area have the right size, shape and zoning to protect species, habitats, ecological processes and water catchments of key conservation concern? *Planning*	Inadequacies in protected area design mean achieving the major objectives of the protected area is very difficult	0	
	Inadequacies in protected area design mean that achievement of major objectives is difficult but some mitigating actions are being taken (e.g. agreements with adjacent land owners for wildlife corridors or introduction of appropriate catchment management)	1	
	Protected area design is not significantly constraining achievement of objectives, but could be improved (e.g. with respect to larger scale ecological processes)	2	
	Protected area design helps achievement of objectives; it is appropriate for species and habitat conservation; and maintains ecological processes such as surface and groundwater flows at a catchment scale, natural disturbance patterns etc	3	

6. Protected area boundary demarcation Is the boundary known and demarcated? *Process*	The boundary of the protected area is not known by the management authority or local residents/neighbouring land users	0	
	The boundary of the protected area is known by the management authority but is not known by local residents/neighbouring land users	1	
	The boundary of the protected area is known by both the management authority and local residents/neighbouring land users but is not appropriately demarcated	2	
	The boundary of the protected area is known by the management authority and local residents/neighbouring land users and is appropriately demarcated	3	
7. Management plan Is there a management plan and is it being implemented? *Planning*	There is no management plan for the protected area	0	
	A management plan is being prepared or has been prepared but is not being implemented	1	
	A management plan exists but it is only being partially implemented because of funding constraints or other problems	2	
	A management plan exists and is being implemented	3	
Additional points: Planning			
7a. Planning process	The planning process allows adequate opportunity for key stakeholders to influence the management plan	+1	
7b. Planning process	There is an established schedule and process for periodic review and updating of the management plan	+1	
7c. Planning process	The results of monitoring, research and evaluation are routinely incorporated into planning	+1	
8. * Annual work plan (=Regular work plan) Is there a regular work plan and is it being implemented? *Planning/Outputs*	* No annual work plan exists	0	
	* An annual work plan exists but few of the activities are implemented	1	
	* An annual work plan exists and many activities are implemented	2	
	* An annual work plan exists and all activities are implemented	3	
9. * Resource inventory (Information about PA valuable objects and processes) Do PA personnel have enough information about PA valuable objects and processes to manage the area? *Input*	There is little or no information available on the critical habitats, species and cultural values of the protected area	0	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is not sufficient to support planning and decision making	1	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient for most key areas of planning and decision making	2	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient to support all areas of planning and decision making	3	

10. Protection systems Are systems in place to control access/resource use in the protected area? *Process/ Outcome*	Protection systems (patrols, permits etc) do not exist or are not effective in controlling access/resource use		
	* Protection systems are only partially effective in controlling access/ resource use (do not cover 2/3 of the year or 2/3 of the area or 2/3 of activities that are in need of regulation to achieve objectives of the protected area)	1	
	* Protection systems are moderately effective in controlling access/ resource use (do not cover 1/3 of the year or 1/3 of the area or 1/3 of activities that are in need of regulation to achieve objectives of the protected area)		
	Protection systems are largely or wholly effective in controlling access/ resource use	3	
11. Research Is there a programme of management-orientated survey and research work? *Process*	There is no survey or research work taking place in the protected area	0	
	There is a small amount of survey and research work but it is not directed towards the needs of protected area management	1	
	There is considerable survey and research work but it is not directed towards the needs of protected area management	2	
	There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs	3	
12. * Active management of resources (habitats, species, ecological processes and cultural values) Is active resource management being undertaken? (E.g. feeding, introduction of species, regulation of number of individuals in the population; restoration of habitats etc.) *Process*	Active resource management is not being undertaken	0	
	Very few of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented	1	
	Many of the requirements for active management of critical habitats, species, ecological processes and, cultural values are being implemented but some key issues are not being addressed	2	
	Requirements for active management of critical habitats, species, ecological processes and, cultural values are being substantially or fully implemented	3	
13. * Staff numbers Are there enough people employed to manage the protected area including guarding/protection)? *Inputs*	There are no staff	0	
	Staff numbers are inadequate for critical management activities	1	
	Staff numbers are below optimum level for critical management activities	2	
	Staff numbers are adequate for the management needs of the protected area	3	

13 A. * Personnel management Are the staff managed well enough to achieve management objectives (including guarding/ protection)? Under the staff management we understand all activities of leaders (e.g. leaders of Directorates of Regional Protected Areas), aimed at raising effectiveness of the staff work using psychological, legal, financial and other incentives *Process*	Problems with personnel management constrain the achievement of major management objectives	0	
	Problems with personnel management partially constrain the achievement of major management objectives	1	
	Personnel management is adequate to the achievement of major management objectives but could be improved	2	
	Personnel management is excellent and aids the achievement major management objectives	3	
14. * Staff training Are staff adequately trained to fulfill management objectives (including guarding/protection)? *Inputs/Process*	Staff lack the skills needed for protected area management	0	
	Staff training and skills are low relative to the needs of the protected area	1	
	Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management	2	
	Staff training and skills are aligned with the management needs of the protected area	3	
15. * Current budget Is the current budget sufficient (including regional budget and other sources) for PA management (including guarding/protection)? *Inputs*	There is no budget for management of the protected area	0	
	The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage	1	
	The available budget is acceptable but could be further improved to fully achieve effective management	2	
	The available budget is sufficient and meets the full management needs of the protected area	3	
16. Security of budget Is the budget secure? *Inputs*	There is no secure budget for the protected area and management is wholly reliant on outside or highly variable funding	0	
	There is very little secure budget and the protected area could not function adequately without outside funding	1	
	There is a reasonably secure core budget for regular operation of the protected area but many innovations and initiatives are reliant on outside funding	2	
	There is a secure budget for the protected area and its management needs	3	

17. * Management of budget Is the budget managed to meet critical management needs? (including regional budget and other sources. Budget management also includes opportunity to make changes in the budget – redistribution of finances between budget lines, changing budget lines, increasing budget, as well as timely release of the budget for implementing activities) *Process*	Budget management is very poor and significantly undermines effectiveness (e.g. late release of budget in financial year)	0	
	Budget management is poor and constrains effectiveness	1	
	Budget management is adequate but could be improved	2	
	Budget management is excellent and meets management needs	3	
18. * Equipment Is equipment sufficient for management needs (including guarding/protection)? "Management needs" are wider than just "law enforcement" (that was considered in the point 3). Visitors facilities are considered in a separate issue. *Input*	There are little or no equipment and facilities for management needs	0	
	There are some equipment and facilities but these are inadequate for most management needs	1	
	There are equipment and facilities, but still some gaps that constrain management	2	
	There are adequate equipment and facilities	3	
19. Maintenance of equipment Is equipment adequately maintained? *Process*	There is little or no maintenance of equipment and facilities	0	
	There is some ad hoc maintenance of equipment and facilities	1	
	There is basic maintenance of equipment and facilities	2	
	Equipment and facilities are well maintained	3	
20. * Environmental education and awareness Is there a planned environmental education programme linked to the PA objectives and needs? *Process*	* There is no environmental education and awareness programme	0	
	* There is a limited and ad hoc environmental education and awareness programme and/or it is not linked to the PA objectives and needs	1	
	* There is an environmental education and awareness programme but it only partly meets PA objectives and needs and could be improved	2	
	* There is an appropriate and fully implemented environmental education and awareness programme that meets PA objectives and needs	3	

21. Planning for land and water use around PA Does land and water use planning around PA recognise the protected area and aid the achievement of objectives? *Planning*	Adjacent land and water use planning does not take into account the needs of the protected area and activities/policies are detrimental to the survival of the area	0	
	Adjacent land and water use planning does not takes into account the long term needs of the protected area, but activities are not detrimental the area	1	
	Adjacent land and water use planning partially takes into account the long term needs of the protected area	2	
	Adjacent land and water use planning fully takes into account the long term needs of the protected area	3	
Additional points: Land and water planning around PA			
21a: Land and water planning for habitat conservation	Planning and management in the catchment or landscape containing the protected area incorporates provision for adequate environmental conditions (e.g. volume, quality and timing of water flow, air pollution levels etc.) to sustain relevant habitats	+1	
21b: Land and water planning for connectivity	Management of corridors linking the protected area provides for wildlife passage to key habitats outside the protected area (e.g. to allow migratory fish to travel between freshwater spawning sites and the sea, or to allow animal migration)	+1	
21c: Land and water planning for ecosystem services and species conservation	Planning addresses ecosystem-specific needs and/or the needs of particular species of concern at an ecosystem scale (e.g. volume, quality and timing of freshwater flow to sustain particular species, fire management to maintain savannah habitats etc.)	+1	
22. * Contacts with local authorities and land and water users Is there co-operation with adjacent land and water users? *Process*	There is no contact between managers and neighbouring official or corporate land and water users	0	
	There is contact between managers and neighbouring official or corporate land and water users but little or no cooperation	1	
	There is contact between managers and neighbouring official or corporate land and water users, but only some co-operation	2	
	There is regular contact between managers and neighbouring official or corporate land and water users, and substantial co-operation on management	3	
23. * Participation of indigenous and traditional peoples Do indigenous and traditional peoples resident or regularly using the protected area have input to management decisions? If there are no indigenous and traditional people please mark that the question is not relevant. *Process*	Indigenous and traditional peoples have no input into decisions relating to the management of the protected area	0	
	Indigenous and traditional peoples have some input into discussions relating to management but no direct role in management	1	
	Indigenous and traditional peoples directly contribute to some relevant decisions relating to management but their involvement could be improved	2	
	Indigenous and traditional peoples directly participate in all relevant decisions relating to management, e.g. co-management	3	

24. * Participation of local communities Do local communities (including owners of summer cottages) resident or near the protected area have input to management decisions? *Process*	Local communities have no input into decisions relating to the management of the protected area	0	
	Local communities have some input into discussions relating to management but no direct role in management	1	
	Local communities directly contribute to some relevant decisions relating to management but their involvement could be improved	2	
	Local communities directly participate in all relevant decisions relating to management, e.g. co-management	3	
Additional points Local communities/indigenous people			
24a. Impact on communities	There is open communication and trust between local and/or indigenous people, stakeholders and protected area managers	+1	
24b. Impact on communities	Programmes to enhance community welfare, while conserving protected area resources, are being implemented	+1	
24c. Impact on communities	Local and/or indigenous people actively support the protected area	+1	
25. Economic benefit Is the protected area providing economic benefits to local communities, e.g. income, employment, payment for environmental services? *Outcomes*	The protected area does not deliver any economic benefits to local communities	0	
	Potential economic benefits are recognised and plans to realise these are being developed	1	
	There is some flow of economic benefits to local communities	2	
	There is a major flow of economic benefits to local communities from activities associated with the protected area	3	
26. * Monitoring and evaluation of management activities Are management activities monitored against performance? *Planning/ Process*	There is no monitoring and evaluation in the protected area	0	
	There is some ad hoc monitoring and evaluation, but no overall strategy and/or no regular collection of results	1	
	There is an agreed and implemented monitoring and evaluation system but results do not feed back into management	2	
	A good monitoring and evaluation system exists, is well implemented and used in adaptive management	3	
27. * Visitor facilities and services Are visitor facilities and services adequate? *Outputs*	There are no visitor facilities and services despite an identified need	0	
	Visitor facilities and services are inappropriate for current levels of visitation	1	
	Visitor facilities and services are adequate for current levels of visitation but could be improved	2	
	Visitor facilities and services are excellent for current levels of visitation	3	

28. * Contacts with commercial tourism companies and entrepreneurs Do commercial tourism companies and entrepreneurs contribute to protected area management? *Process*	* There is little or no contact between managers and tourism companies and entrepreneurs using the protected area	0	
	* There is contact between managers and tourism companies and entrepreneurs but this is largely confined to administrative or regulatory matters (including meetings, discussions without official agreements and contracts)	1	
	* There is limited co-operation between managers and tourism companies and entrepreneurs to enhance visitor experiences and maintain protected area values (e.g. there is agreement without specific rights and responsibilities)	2	
	* There is good co-operation between managers and tourism companies and entrepreneurs to enhance visitor experiences, and maintain protected area values (e.g. there is contract with specific rights and responsibilities)	3	
29. * Fees for nature use on protected area If fees (i.e. entry fees or fines) are applied, do they help protected area management? *Inputs/Process*	* Fees for nature use on PA do not differ from those on adjacent areas both in costs and use of collected money	0	
	* Fees for nature use on PA differ from those on adjacent areas in costs, but not in use of collected money	1	
	* Fees for nature use on PA differ from those on adjacent areas and small part of collected money is used for improvement of situation on this PA and its environs	2	
	* Fees for nature use on PA differ from those on adjacent areas and substantial part of collected money is used for improvement of situation on this PA and its environs	3	
30. Condition of values What is the condition of the important values of the protected area as compared to when it was first designated? *Outcomes*	Many important biodiversity, ecological or cultural values are being severely degraded	0	
	Some biodiversity, ecological or cultural values are being severely degraded	1	
	Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted	2	
	Biodiversity, ecological and cultural values are predominantly intact	3	
Additional Points: Condition of values			
30a: Condition of values	The assessment of the condition of values is based on research and/or monitoring	+1	
30b: Condition of values	Specific management programmes are being implemented to address threats to biodiversity, ecological and cultural values	+1	
30c: Condition of values	Activities to maintain key biodiversity, ecological and cultural values are a routine part of park management	+1	

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