IUCN Conservation Outlook Assessment 2014 **(archived)**
Finalised on 21 September 2014

Please note: this is an archived Conservation Outlook Assessment for Virgin Komi Forests. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Virgin Komi Forests

SITE INFORMATION

Country:
Russian Federation
Inscribed in: 1995
Criteria:
(vii) (ix)

Site description:
The Virgin Komi Forests cover 3.28 million ha of tundra and mountain tundra in the Urals, as well as one of the most extensive areas of virgin boreal forest remaining in Europe. This vast area of conifers, aspens, birches, peat bogs, rivers and natural lakes has been monitored and studied for over 50 years. It provides valuable evidence of the natural processes affecting biodiversity in the taiga. © UNESCO

SUMMARY

2014 Conservation Outlook

Significant concern

The forest ecosystems for which the Virgin Komi Forests were inscribed on the World Heritage List are still in very good condition, particularly in Pechoro-Ilychisky Nature Reserve and the southern portion of the Yugyd Va National Park. Current protection and management at the level of component protected areas of the site could be assessed as mostly effective (areas although additional human and financial resources are required). However, the biggest threats to the site's Outstanding Universal Value and integrity can only be addressed at national level. These include gold mining in the area that was excised from the Yugyd Va NP despite several requests of the World Heritage Committee. While these boundary changes take effect at national level, they do not alter the international boundaries of the World Heritage Site. As a result, a significant part of the site has been lacking the legal protection required by the World Heritage Convention Operational Guidelines, which critically undermines the integrity of the site. In January 2014 the State Party submitted a proposal for significant boundary modification which would exclude the area of the Chudnoe gold deposit from the territory of the World Heritage site as well. However, the proposal was considered incomplete by the World Heritage Centre and therefore was not evaluated. The site is also affected by additional, relatively minor threats including poaching and other localized quarrying and infrastructure. In addition, there is a need to clarify the status and trends of wildlife populations within the property.

Current state and trend of VALUES

Low Concern
Trend: Deteriorating

Overall, the forest ecosystems for which the Virgin Komi Forests were inscribed on the World Heritage List are still in very good condition, particularly in Pechoro-Ilychisky Nature Reserve and the southern portion of the Yugyd Va National Park.

However, while the forest ecosystems are intact and there is very little evidence of impacts from human activity, the status of wildlife populations is unclear and the integrity of the tundra and freshwater ecosystems of the northern part of the site is increasingly being impacted by the Chudnoe gold mine. If continued, gold mining operations could dramatically deteriorate the overall state of the site's Outstanding Universal Value and integrity.

Overall THREATS

Very High Threat

While threats to the site have generally been limited since its inscription, it is currently under imminent threat from gold mining exploration and preparatory works pose significant environmental threats, including pollution of the rivers within the site.. The development of full-scale gold-mining operation within the site would constitute a very high threat to its Outstanding Universal Value and integrity. The site is also affected by additional, relatively minor threats, including poaching and other localized quarrying and infrastructure.

Overall PROTECTION and MANAGEMENT

Serious Concern

The 2010 UNESCO/IUCN reactive monitoring mission concluded that the management capacity of the site's staff was high, relative to the limited resources available. Current protection and management at the level of component protected areas of the site could be assessed as mostly effective (areas although additional human and financial resources are required). However, the biggest threats to the site's Outstanding Universal Value and integrity can only be addressed at national level. These include gold mining in the area that was excised from the Yugyd Va NP in opposition with several recommendations of the World Heritage Committee and local indigenous organizations. While these boundary changes take effect at a national level, they do not alter the international boundaries of the World Heritage Site. As a result, a significant part of the site lacks the legal protection required by the World Heritage Convention Operational Guidelines, which critically undermines the integrity of the site. In January 2014 the State Party submitted a proposal for significant boundary modification which would exclude this area from the territory of the World Heritage site as well. However, the proposal was considered incomplete by the World Heritage Centre and therefore was not

evaluated.

FULL ASSESSMENT

Description of values

Values

World Heritage values

► Forest ecosystems

Criterion:(ix)

This large (almost 3.3 million ha) site runs down 320 km of the western slopes of the Arctic and Northern Urals and is Europe’s largest area of un-fragmented and un-degraded old-growth forests, which cover 51% (1,672,800 ha) of the site (UNEP-WCMC, 2011). These comprise virgin boreal forests in the South, which are mainly composed of Scots Pine Pinus sylvestris, Norway Spruce Picea abies, Siberian Larch Larix sibirica, the rare Siberian Pine Pinus sibirica and Siberian Fir Abies sibirica, as well as sub-alpine scrub woodlands of Downy Birch Betula pubescens and various willow and bird cherry species, and other forest ecosystems, with a varied undergrowth. These ecosystems are also home to a rich biodiversity of flora and fauna (UNEP-WCMC, 2011).

► Mountain and tundra ecosystems

Criterion:(ix)

The mainly eastern mountain ecosystems consist of meadows of Anemone spp., Paeonia spp., Myosotis spp. and others, while the northern tundra ecosystems are dominated by Ottertail Saxifrage Saxifraga tenuis, Dryas spp., Thymus spp., Carex spp. and others (UNEP-WCMC; 2011). They harbor a flora and fauna typical of such ecosystems.

► Wetland and freshwater ecosystems

Criterion:(ix)

Extensive wetland areas with the corresponding flora and fauna include rivers (e.g. Uniya and upper Ilych rivers), lakes and lowland peat bogs and swamps. The peat are composed of Sphagnum spp., Cranberry Vaccinium oxycoccus, Bilberry V. myrtillus and Cloudberry V. vitis-idaea, while the western lowland marshes are dominated of willow species, Salix spp., Rowan Sorbus aucuparia, Blackcurrant Ribes nigrum and Bird Cherry Prunus padus (UNEP-WCMC, 2011).

► Outstanding example of a complex of boreal ecosystems

Criterion:(vii)

Taken together the forest, mountain, tundra and wetland ecosystems of the site form a vast complex of un-fragmented, un-degraded and wildlife-rich boreal landscapes that is one of the five top examples of boreal forest ecosystems. The site also comprises areas of exceptional natural beauty such as the Manpupuner Stone Pillars (Debonnet et al., 2010).

Other important biodiversity values

► Diversity of flora and fauna

In addition to the rich flora that make up the vegetation of the forest, mountain, tundra and wetland ecosystems as described above, the site comprises a highly diverse fauna (relative to its latitude) of boreal species. The mammal fauna consists of 43 species and includes important wintering populations of Elk Alces alces and reindeer Rangifer tarandus, European Mink Mustela lutreola, Brown Bear Ursus arctos, Sable Martes zibellina and others. Notable examples of the avifauna, which counts 204 species, are Steller’s Sea-Eagle Haliaeetus pelagicus (VU), Gyrfalcon Falco rusticolus, Capercaillie Tetrao urogallus and Hazel Grouse Tetrastes bonasia (IUCN, 2012b). The ichthyofauna comprises 16 species, most notably the Atlantic Salmon Salmo salar, which spawns in rivers throughout the site (UNEP-WCMC, 2011).

Assessment information

Threats

Current Threats

High Threat

While threats to the values of the site have generally been limited since its inscription, gold mining exploration and preparatory works pose significant environmental threats, including pollution of the rivers within the site. There exist minor additional threats such as poaching, the extent and trends of which require further research.

► Mining/ Quarrying

Very High Threat
Inside site

Historically, there has been mineral exploitation in the Khozym area of the northern portion of Yugyd Va National Park since the 1930’s. At the time of the creation of the National Park and its nomination as a World Heritage Site, several alluvial gold mines were active, but these operations were closed down after the inscription of the site.
In 2012 it was noted that preparatory works for Chudnoe gold mining operation inside Yugyd Va National Park within the site had already started, including road works, drilling and blast works, and are causing environmental damage, including to rivers inside the site. (IUCN, 2012a). The 2013 SOC report noted that works continued within the 19.8 km2 Chudnoe gold mining concession located within the property (SOC report, 2013).
Mining operations within the site are likely to have far-reaching impacts on its Outstanding Universal Value and integrity, including pollution of rivers such as the Kozhym River, disturbance, habitat and reindeer pasture destruction and fragmentation for roads and other infrastructure, and improved access for poachers (Debonnet et al., 2010).
In January 2014 the State Party submitted a re-nomination with significant

boundary modifications which would exclude 3 areas from the property – the area of Chudnoe gold deposit, a quartz quarry and a granite sand extraction area – and add some areas. However, the re-nomination was not evaluated as it was considered incomplete by the World Heritage Centre (SOC report, 2014).

▶ Mining/ Quarrying

High Threat
Inside site

The Zhelannoe and Obeiz quarries have been reported to have an apparently localized and limited impact on the values of the site, but lack a plan to minimize environmental impacts (Debonnet et al., 2010).

▶ Utility / Service Lines

Data Deficient
Inside site
Outside site

The SRTO-Torzok pipeline has had localized negative erosion-related impacts on the values of the site, which could be controlled by anti-erosion measures. Additional information about the impacts of this pipeline is needed (Debonnet et al., 2010).

▶ Fishing / Harvesting Aquatic Resources, Subsistence hunting

Data Deficient
Inside site

In 2009, Yugyd Va National Park initiated 6 poaching related prosecutions. There were 45 and 50 infractions in 2009 and 2010, respectively, most of them poaching (mainly of Atlantic Salmon and Arctic Greyling) related. In Pechero-Ilychinskiy Strict Nature Reserve, 13 infractions related to illegal fishing were noted in 2006-2010. Poaching of large mammals has also been reported from the vicinity of the Pechoro-Ilychinskiy Strict Nature Reserve, but not inside it. It may be responsible for an observed decline in reindeer and elk throughout the overall area, but detailed monitoring data are missing, and needed (Debonnet et al., 2010).

Potential Threats

Very High Threat

Full-scale gold mining operation within the site would constitute a very high threat to its values. In comparison, the potential threats of a resumption of logging and increased fire frequency due to climate change are less likely and therefore of less serious concern.

► Logging/ Wood Harvesting

Low Threat
Inside site
Outside site

Logging is only a negligible threat to the site currently as its World Heritage status has been successful in diverting the risk of large-scale clear-cutting within the site. However, there is a threat of logging to parts of the buffer zone of the site, including the PL350 enclave, the Upper Ilych Basin and potentially the Unia Basin (Debonnet et al., 2010).

► Fire/ Fire Suppression

Data Deficient
Inside site
Outside site

While forest fires are considered a natural and necessary part of forest ecosystem succession in these boreal ecosystems, climate change might lead to an increased fire frequency (Debonnet et al., 2010). The exact extent and trend of this potential threat needs to be studied further.

Protection and management

Assessing Protection and Management

► Monitoring

Some Concern

The “Chronicles of Nature” of Pechoro-Ilychsky Strict Nature Reserve have

been kept since 1936, including a monitoring of key observations of natural values (MoNRE of RF, 2012d). Some monitoring of forest pathology and migratory birds and mammals is reportedly carried out in Yugyd Va National Park (MoNRE of RF, 2012e), but no concise data are available. No reliable data on trends in key wildlife species have been made available to the World Heritage Centre and IUCN. It is possible that the monitoring programmes throughout the site would benefit from a modernization and systematization. This requires further study.

► Relationships with local people

Some Concern

Several groups of indigenous reindeer herders live in and around the property, including the Komi. The relationship between indigenous groups and park management is generally good, but there are recurring tensions related to mining and its impacts on the park, and in particular on its rivers. Several NGO groups representing local indigenous people against the Chudnoe gold mining operation, including the Save the Pechora Committee, the Congress of the Komi People, and the Izvatas Public Movement, have opposed large-scale gold mining due to its likely negative effects on the tundra ecosystem and reindeer pastures that are the basis of their traditional livelihoods. The views of these indigenous groups were not considered when the gold mining area was excluded from the Yugyd Va National Park (Debonnet et al., 2010). No information about the participation of local people in the management planning process for the site is available.

► Research

Mostly Effective

Both component protected areas of the site (and particularly the Pechoro-Ilychisky Nature Reserve) conduct research and cooperate with external research organizations, including the Russian Academy of Sciences and universities (MoNRE of RF, 2012 d, e). A Web of Science search for the area yields a relatively modest 190 international peer reviewed scientific articles about the wider area (WoS, 2012). There may be room for improvement regarding the integration of scientific research at the site with the international scientific community.

► Legal framework and enforcement

Serious Concern

The site is governed by national protected area legislation, in particular the federal law “On environmental protection” dating back to 1991 but updated in 2002, and the federal law “On specially protected areas” of 1995. The first law defines the standards for environmental quality, makes provisions for the protection of biota and provides a basis for federal protected areas and activities permitted in them. The protected area law regulates the organization, protection and use of protected areas. This legislation recognizes different types of protected areas such as at the federal level strict nature reserves, national parks and nature monuments and the regional level nature parks, nature reserves and nature monuments (Debonnet et al., 2010).

The two protected areas that make up the property are Yugyd Va National Park (YVNP) to the North and the Pechoro-Illychsky Strict nature Reserve (PISNR) to the South. PISNR is a federal protected area benefiting from a strict protection regime with no economic uses are allowed. The PISNR buffer zone on its southern and western boundary, which is also part of the World Heritage Site, benefits from the same high protection status guaranteed under federal law. YVNP, established in 1994, is also a federal protected area with the status of National Park, corresponding to IUCN protected area category II. The national park has different zones with different land use regimes, including a number of nature reserves and nature monuments. YVNP also possesses a buffer zone along its western border, but established under regional law. As a result, the federal national park authorities do not have the authority to actively manage the buffer zone.

The Russian Federation currently lacks a framework law to define the unified management of World Heritage sites. The recent Federal Law No. 365-FZ on “Special economic zones in the Russian Federation” further weakens the legal basis for effective conservation of protected areas, though it is not currently applied to the site (IUCN, 2012a).

In 2008, the national boundaries of Yugyd Va National Park were changed to exclude four areas, including the Chudnoe gold mining area, from the site. As a result, a significant part of the site has been lacking the legal protection required by the World Heritage Convention Operational Guidelines, which critically undermines the integrity of the site (Debonnet et al., 2010, IUCN,

2012a). In August 2013, however, the Supreme Court of the Russian Federation declared inoperative Order No. 3 of the Ministry of Natural Resources and Ecology which constituted the basis for the boundary changes of the Yugyd Va National Park, thereby confirming the original boundaries of the park which coincide with the northern part of the World Heritage site (SOC report, 2014).

► Integration into regional and national planning systems

Data Deficient

While there is limited information available on the level of integration of the World Heritage site into regional and national planning systems, the development of a major gold mining operation within the site strongly suggests that the objective of “conservation and management of the values of the site”, required by the World Heritage Convention Operational Guidelines, is not sufficiently integrated and mainstreamed into regional and national planning systems, particularly those dealing with mineral extraction planning.

► Management system

Some Concern

Yugyd Va National Park has a management plan (2008-2013) and is drafting a business plan. The management plan for Pechoro-Ilychisky Strict Nature Reserve is under review, and the reserve also has a business plan.. There is no overall management plan for the entire site, which would include both reserves, buffer zones, and regional forest authorities, which is a requirement of the World Heritage Convention Operational Guideline (Debonnet et al., 2010).

► Management effectiveness

Mostly Effective

The 2010 UNESCO/IUCN reactive monitoring mission concluded that the management capacity of the site’s staff was high, relative to the resources available, but no formal management effectiveness assessment for the two protected areas making up the site has been carried out (Debonnet et al., 2010). The mission noted that it was impressed by the high standards and capacity of management of both Yugyd Va National Park and Pechoro-

Ilychisky Nature Reserve, despite the limited budget and staffing.

► Implementation of Committee decisions and recommendations

Serious Concern

Key recommendations and decisions of the World Heritage Committee relating to halting ongoing gold mining operations within the site and reversing boundary changes to Yugyd Va National Park, which excised the gold mining site and several other areas from the Park, have not been implemented (IUCN, 2012a, 33 COM 7B.31, 34 COM 7B.25, and 35 COM 7B.25). In its most recent report (2014), the State Party, however, noted that now works were conducted at the Chudnoe gold deposit in 2013 (SOC report, 2014).

► Boundaries

Serious Concern

Two separate protected areas make up the Virgin Komi Forests World Heritage Site: Yugyd Va National Park (YVNP) to the North and the Pechoro-Illychsky Strict nature Reserve (PISNR) to the South. The original boundaries of the site were considered appropriate (IUCN, 1995), although a number of potential additions to the site has been identified including the Upper Illych Basin forest located between the two component protected areas of the property, an eastern buffer zone, the PL350 enclave on the western boundary of YVNP, and the Unia Basin south of PISNR (Debonnet et al., 2010). However, on 18 January 2012, changes to the national boundaries of Yugyd Va National Park were approved, which excluded four areas, including the Chudnoe gold mining area, from the national park (while these boundary changes take effect at a national level, they do not alter the international boundaries of the World Heritage Site). As a result, a significant part of the site lacks the legal protection required by the World Heritage Convention Operational Guidelines, which critically undermines the integrity of the site (Debonnet et al., 2010, IUCN, 2012a). In August 2013, however, the Supreme Court of the Russian Federation declared inoperative Order No. 3 of the Ministry of Natural Resources and Ecology which constituted the basis for the boundary changes of the Yugyd Va National Park, thereby confirming the original boundaries of the park which coincide with the northern part of the World Heritage site (SOC report, 2014). In January 2014 the State Party

submitted a re-nomination with significant boundary modifications which would exclude 3 areas from the property – the area of Chudnoe gold deposit, a quartz quarry and a granite sand extraction area, as well as a linear area in the south of YVNP around the existing SRTO-Torzhok gas pipeline – and would add three areas in the PL350 enclave and the Upper Illych basin. However, the re-nomination was not evaluated as it was considered incomplete by the World Heritage Centre (SOC report, 2014).

► Sustainable finance

Some Concern

The 2010 annual budgets of Yugyd Va National Park and Pechoro-Ilychinsky Strict Nature Reserve were 650,000 USD (20 million roubles) and 500,000 USD (15.9 million roubles), respectively. About 25% of the National Park income is raised by the park itself, through fees, booklets and sales of souvenirs. The budgets are essentially spent on staff salaries. There has been additional funding from a UNDP/GEF project (55,300 USD or 900,000 roubles in 2009/10) and in-kind contributions from Gazprom and other stakeholders. The 2012 UNESCO/IUCN mission was informed by park management that 60 million roubles would be required to adequately manage the 1.9 million ha of YVNP, the northern component of the site. Increased funding would improve management effectiveness, but the funding gap has not been quantified (Debonnet et al., 2010).

► Staff training and development

Mostly Effective

Staff numbers of Yugyd Va National Park and Pechoro-Ilychisky Nature Reserve are 44 and 71, respectively. No information is available about staff training or development programmes, although the capacity of the staff was considered high in 2010 (Debonnet et al., 2010).

► Sustainable use

Mostly Effective

While natural resource use in Strict Nature Reserves of the Russian Federation is largely prohibited, Yugyd Va National Park includes a traditional use zone which is used by local indigenous people for reindeer herding

(Debonnet et al., 2010).

▶ Education and interpretation programs

Mostly Effective

Both Yugyd Va National Park and Pechoro-Ilychinsky Strict Nature Reserve have educational programmes, which include museums/visitor centres, work with media, schools and teachers, production of booklets, videos and exhibitions, and implementation of special campaigns (MoNRE of RF, 2012b, c).

▶ Tourism and interpretation

Mostly Effective

Annual visitor numbers to Yugyd Va National Park and Pechoro-Ilychisky Strict Nature Reserve are ca. 4,000 and between 300 and 600, respectively. There is basic tourism infrastructure and tour products available within the National Park, but not the Reserve. A programme for ecological tourism is underway there (MoNRE of RF, 2012a). There is clearly a potential to further develop ecological tourism in the site, based on its outstanding wilderness values. A comprehensive tourism development strategy for the Komi Republic (with the site as its centerpiece) would greatly enhance utilization of this potential (Debonnet et al., 2010).

Overall assessment of protection and management

Serious Concern

The 2010 UNESCO/IUCN reactive monitoring mission concluded that the management capacity of the site’s staff was high, relative to the limited resources available. Current protection and management at the level of component protected areas of the site could be assessed as mostly effective (areas although additional human and financial resources are required). However, the biggest threats to the site’s Outstanding Universal Value and integrity can only be addressed at national level. These include gold mining in the area that was excised from the Yugyd Va NP in opposition with several recommendations of the World Heritage Committee and local indigenous organizations. While these boundary changes take effect at a national level, they do not alter the international boundaries of the World Heritage Site. As a

result, a significant part of the site lacks the legal protection required by the World Heritage Convention Operational Guidelines, which critically undermines the integrity of the site. In January 2014 the State Party submitted a proposal for significant boundary modification which would exclude this area from the territory of the World Heritage site as well. However, the proposal was considered incomplete by the World Heritage Centre and therefore was not evaluated.

▶ **Assessment of the effectiveness of protection and management in addressing threats outside the site**

Some Concern

The main potential threats to the site arising from outside its boundaries are geological prospecting to the east of the site and logging around its periphery, particularly in the southern Unia Basin. The State Party has expressed its intention to create an eastern buffer zone for the site and to upgrade protection status of the PL 350 forest plot, which would address the first of these issues and secure the site's integrity over the long term (IUCN, 2012a).

State and trend of values

Assessing the current state and trend of values

World Heritage values

▶ **Forest ecosystems**

Good
Trend:Stable

The overall integrity of the vast majority of the site's forests can be considered excellent (Debonnet et al., 2010). The ongoing Chudnoe mining operation is situated in the tundra portion of Yugyd Va National Park and does not directly affect the integrity of the forest ecosystems.

▶ **Mountain and tundra ecosystems**

Low Concern
Trend:Deteriorating

The gold mining preparatory works have begun to negatively affect the northern portion of Yugyd Va National Park with its tundra ecosystem, in particular its rivers. Much more extensive negative impacts are expected if gold mining continues (IUCN, 2012a). Likely impacts include the contamination of the Kozhym River, as well as more widespread environmental impacts beyond the site, including knock-on effects on the Kosju River and Usa River, which is an important tributary of the Pechora River. Moreover, associated infrastructure will have to be in place which will affect the tundra ecosystem (roads, bridges over the Kozhym River, base camp, open pit mine, treatment facilities for concentrate of the ore etc.)

► Wetland and freshwater ecosystems

High Concern
Trend:Deteriorating

The gold mining preparatory works have begun to negatively affect the northern portion of the Kohzym river basin, located in Yugyd Va National Park, and much more extensive negative impacts on this freshwater system are expected if the mining operation continues (IUCN, 2012a).
Past alluvial gold mining between the 1930’s and mid-1990’s in the northern portion of Yugyd Va National Park had significant impacts on the Khozym River, located within the site. The river was devoid of fish for close to 10 years due to mercury contamination stemming from the mines, and salmon and other fish are only beginning to return to the river Former mining sites are still easily visible in the landscape and devoid of vegetation. Efforts at ecological restoration have met with limited success (Debonnet et al., 2010).

► Outstanding example of a complex of boreal ecosystems

Low Concern
Trend:Deteriorating

The mining operation within the site can significantly impair the values of the tundra portion of the site and therefore of the site’s entire ecosystem complex. More extensive negative impacts are expected if the mining operation continues (IUCN, 2012a).

Other important biodiversity values

► Diversity of flora and fauna

In addition to the rich flora that make up the vegetation of the forest, mountain, tundra and wetland ecosystems as described above, the site comprises a highly diverse fauna (relative to its latitude) of boreal species. The mammal fauna consists of 43 species and includes important wintering populations of Elk Alces alces and reindeer Rangifer tarandus, European Mink Mustela lutreola, Brown Bear Ursus arctos, Sable Martes zibellina and others. Notable examples of the avifauna, which counts 204 species, are Steller's Sea-Eagle Haliaeetus pelagicus (VU), Gyrfalcon Falco rusticolus, Capercaillie Tetrao urogallus and Hazel Grouse Tetrastes bonasia (IUCN, 2012b). The ichthyofauna comprises 16 species, most notably the Atlantic Salmon Salmo salar, which spawns in rivers throughout the site (UNEP-WCMC, 2011).

Summary of the Values

► Assessment of the current state and trend of World Heritage values

Low Concern

Trend: Deteriorating

Overall, the forest ecosystems for which the Virgin Komi Forests were inscribed on the World Heritage List are still in very good condition, particularly in Pechoro-Ilychisky Nature Reserve and the southern portion of the Yugyd Va National Park. However, while the forest ecosystems are intact and there is very little evidence of impacts from human activity, the status of wildlife populations is unclear and the integrity of the tundra and freshwater ecosystems of the northern part of the site is increasingly being impacted by the Chudnoe gold mine. If continued, gold mining operations could dramatically deteriorate the overall state of the site's Outstanding Universal Value and integrity.

► Assessment of the current state and trend of other important biodiversity values

Data Deficient

Trend: Data Deficient

The biodiversity values (flora and fauna) of the site, and particularly of the

northern part of Yugyd Va National Park, are inferred to be increasingly affected by the ongoing Chudnoe gold mining operation. In addition, they may be affected by poaching and other threats, but concise data on the status of particularly the vertebrate fauna are not available (Debonnet et al., 2010). Therefore, the status of the site's fauna and flora is data deficient.

Additional information

Key conservation issues

▶ **Gold mining operations**

National

Preparatory works for an open pit gold mine at Chudnoe within the northern component of the property, Yugyd Va National Park, were noted by the 2012 SOC report. The World Heritage Committee's position is that mining exploration and exploitation is incompatible with World Heritage status. The 2010 UNESCO/IUCN mission recommended that the mining project should be immediately halted, including all preparatory activities and that the exploration and exploitation licenses already granted should be revoked or frozen.

▶ **Boundary changes**

National

The 2012 UNESCO/IUCN mission considered that the four excisions made to Yugyd Va National Park were not in accordance with the World Heritage Convention Operational Guidelines and recommended that these boundary changes be immediately reversed in order to restore legal protection to these areas, including the area of the Chudone gold mining concession.

▶ **Lack of a single management plan for the site**

Local

The site consists of a Strict Nature Reserves, a National Park and additional buffer zones without protected area status. It lacks one central management plan and one administration that is responsible for the entire site (UNEP-WCMC,

2011). This fragmentation poses a serious challenge to its overall management.

▶ **Sustainable financing and staffing**

National

The staff of the protected areas that constitute the site have insufficient resources and capacity to manage the site. Potential funding gaps and ways to address these require further study.

▶ **Lack of data about the status and trends of wildlife populations**

Local

Although monitoring is carried out in both component protected areas of the site, no reliable data on the status and trends of wildlife populations are available (Debonnet et al., 2010). This points to critical shortcomings in existing monitoring and/or reporting systems.

Benefits

Understanding Benefits

▶ **Does management of the site provide jobs (e.g. for managers or rangers)?**

The component protected areasof the site offer ca. 115 jobs, a number that could probably be increased if additional areas would be included in the site as recommended by the 2010 mission (Debonnet et al., 2010). In addition, a significant number of jobs (possibly hundreds of jobs in tourism, natural resource use etc.) could potentially be created in the course of tourism development and the development of sustainable natural resource use schemes within the site.

▶ **Sacred natural sites or landscapes**

The Virgin Komi Forests are one of the last great wildernesses in Europe, with considerable wilderness values and iconic importance.

▶ **Importance for research**

In addition to the rich local and traditional knowledge and scientific articles that have been written already about the site and its biota (WoS, 2012), the site may become a useful reference for measuring climate change impacts on forest ecosystems elsewhere. This may be supported by a re-analysis of the considerable long-term monitoring records already available from Pechoro-Ilichsky Strict Nature Reserve (MoNRE of RF, 2012d).

► Wilderness and iconic features

The site has high cultural/spiritual importance to indigenous people of the area (Debonnet et al., 2010).

► Outdoor recreation and tourism

Nature based tourism is practiced at a moderate intensity already on site. If developed in a responsible way, the site may offer a unique opportunity to experience an undisturbed wilderness of the site. This might also contribute significantly to income generation and the socio-economic development of the region (Debonnet et al., 2010).

Summary of benefits

The site already provides multiple conservation, economic and cultural/spiritual benefits and ecosystem services to local inhabitants, the citizens of Komi Republic and the Russian Federation, and also to the few interested foreigners who currently know about it. There is considerable potential to maintain and enhance these benefits through equitable participatory management of the site, particularly in areas such as combined natural and cultural tourism development, and the integration of natural and cultural values. The protection of the spiritual and cultural values of indigenous people of the region is of particular importance.

Projects

Compilation of active conservation projects

№	Organization/ individuals	Project duration	Brief description of Active Projects
1	UNDP/GEF		Strengthening Protected Area System of the Komi Republic to Conserve Virgin Forest Biodiversity in the Pechora River Headwaters Region (2006-2013)

Compilation of potential site needs

№	Site need title	Brief description of potential site needs	Support needed for following years
1	N.A.	Development of a comprehensive sustainable tourism strategy for Komi Republic, with the site as its centerpiece.	
2	N.A.	Development of wildlife monitoring programmes	

REFERENCES

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