Proposal for MINOR MODIFICATIONS TO THE BOUNDARIES OF WORLD HERITAGE PROPERTY

LENA PILLARS NATURE PARK

(Ref: 1299) (RUSSIAN FEDERATION)

Prepared by:

- Natural Heritage Protection Fund
- Lena Pillars Nature Park
- North-Eastern Federal University named after M.K. Ammosov
- Institute of Geography of Russian Academy of Sciences
- Biological Faculty of Moscow State University named after M.V. Lomonosov

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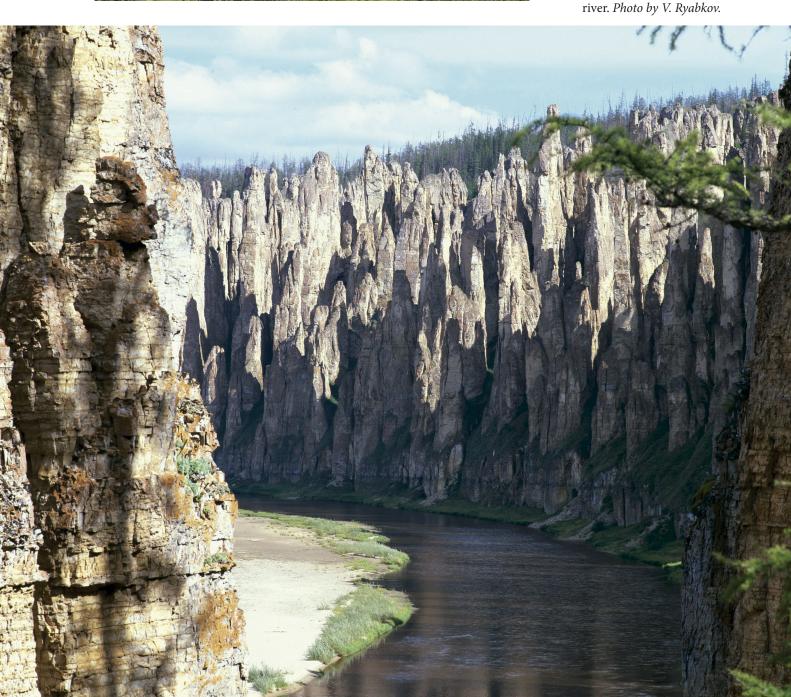
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LENA PILLARS NATURE PARK (minor modification to the boundaries)



Fig. 1. The Sinsky plot of the nature park is located within Sinyaya river catchment. *Photo by A. Butorin.*

Fig. 2. Narrow canyon in the lower course of Sinyaya river. *Photo by V. Ryabkov.*



■ 1. Area of the property (in hectares):

- a) the area of the property as inscribed: 1 272 150 ha
- b) the area of the property as proposed to be modified: 1 387 000 ha (the area may be modified in a minor way after the land survey works are done).

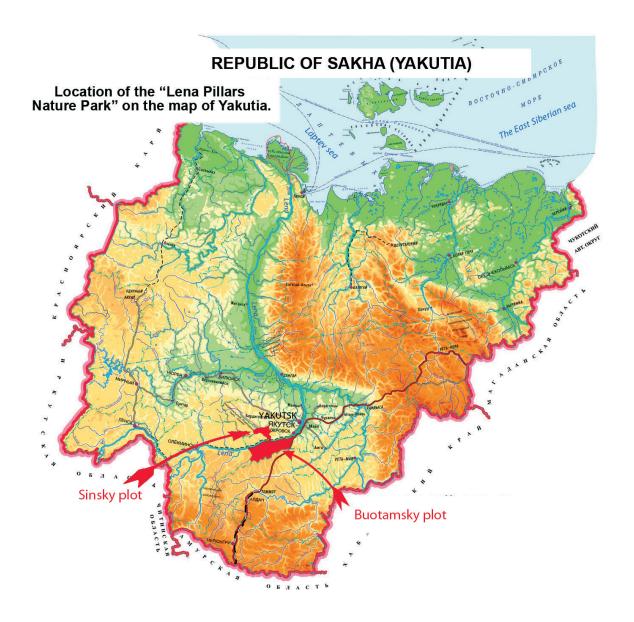
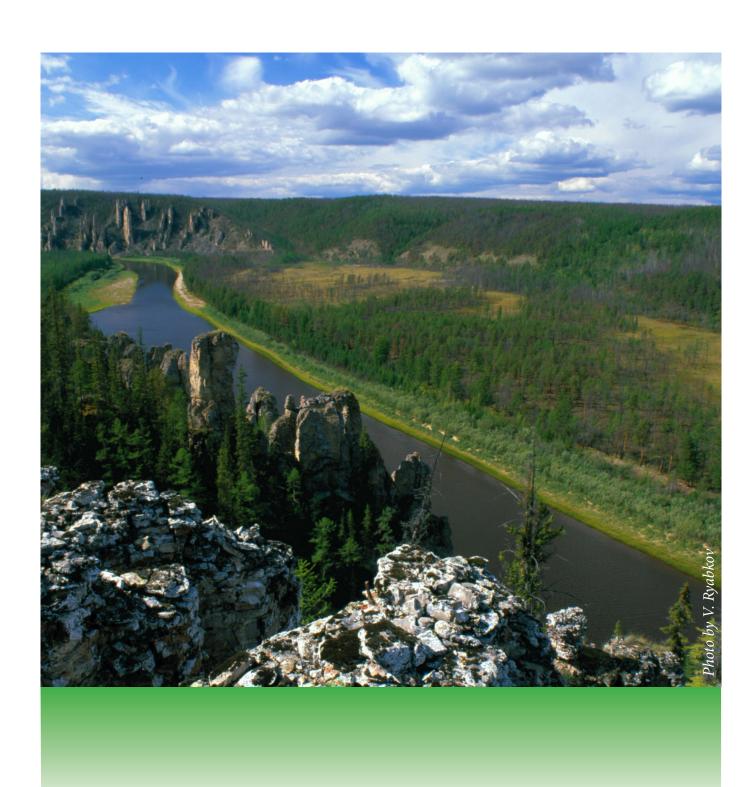


Fig. 3. Location of the Lena Pillars Nature Park on the map of Yakutia. The Buotamsky plot – an existing World Heritage property, the Sinsky plot is offered as a minor modification to the boundaries of the existing World Heritage property.



2 DESCRIPTION OF THE MODIFICATION

2. Description of the modification

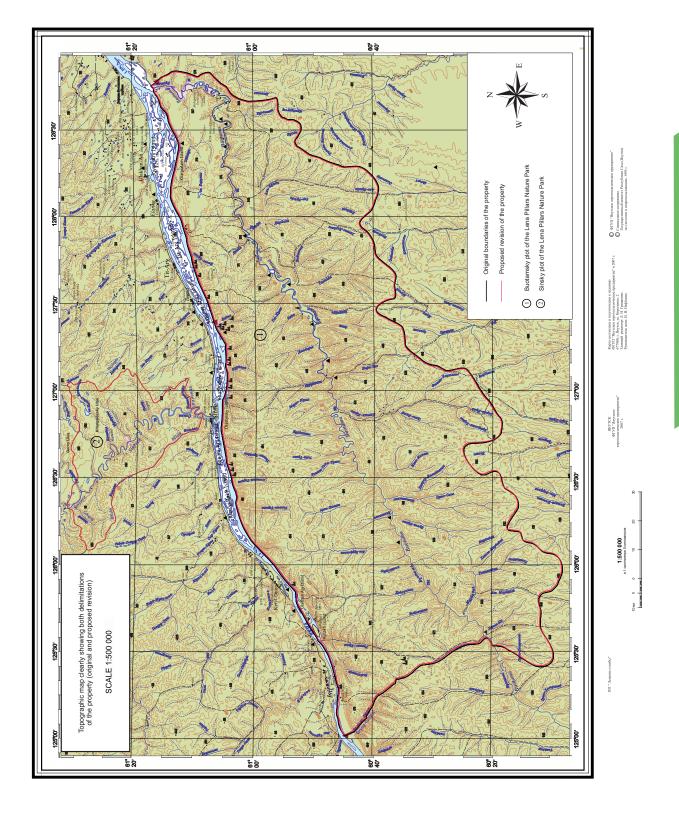
A) TEXTUAL DESCRIPTION OF THE BOUNDARIES OF THE SINSKY PLOT OF THE LENA PILLARS NATURE PARK

The Sinsky plot of the nature park, located within Sinyaya river catchment, at Lena river's left tributary, opposite the Buotamsky plot, which has been included into the List in 2012 (Fig. 4) is being offered as a minor modification to the boundaries of existing World Heritage property Lena Pillars Nature Park .

The boundary of the Sinsky plot begins at Billah river mouth and goes up its riverbed to its head, further along the administrative border of Sinsky and 4th Malzhagarsky agricultural communities (naslegs) reaching the administrative border of Hangalassk and Gornyi districts (uluses). From there it heads eastward and coincides with the administrative border of Hangalassk and Gornyi districts, reaches the administrative border of Tumulsky and Tit-Arinsky agricultural communities. Further on the border goes along the water parting line of Sinyaya river and the rivers Hatyng, Hayirgas and Bette, and from there - along the water parting line of Sinyaya river's left tributaries – Bytyrystah and Ungkur rivers comes to the river head of Bytyrystah and runs down its riverbed to Sinyaya river, crossing it and going down along its right shore to the initial point of description.

The boundaries of the Sinsky plot have the following geographical coordinates:

- The most northerly point: N 61°32'1,07", E 126°20'15,83"
- The most southerly point: N 61°9'11,41" E 126°52'42,21"
- The most westerly point: N 61°29'9,48" E 126°6'34,55"
- The most easterly point: N 61°22'33,38" E 127°9'11,69"



Puc. 4. Topographic map clearly showing both delimitations of the property (original and proposed revision).

B) DESCRIPTION OF THE LENA PILLARS NATURE PARK SINSKY PLOT

Lena Pillars Nature Park is on the UNESCO World Heritage List in reliance upon the viii criterion and its Outstanding Universal Value is stated as follows: «The Lena Pillars Nature Park displays two features of significant international interest in relation to the Earth sciences. The large cryogenically modified pillars in the region are the most notable pillar landscape of their kind known, whilst the internationally renowned and important exposures of Cambrian rocks tell us key stories about our planet and the early evolution of life during the entire Cambrian Explosion, and the story of the emergence of the frozen ground karst phenomenon».

Within the description of the Sinsky plot which is being proposed as a minor modification to the boundaries of the existing World Heritage Property, in the first place it is necessary to point out the distinctive features of Cambrian period deposits and the karst phenomenon of the considered territory, both of which are of a great value to the preservation of Lena Pillars Nature Park's Outstanding Universal Value.

GEOLOGY AND RELIEF

GENERAL GEOLOGICAL CHARACTERISTICS OF THE SINSKY PILLARS

In geological terms, the Sinsky Pillars are situated at the northern slope of the Aldan Anteclise at the south-eastern corner of the Siberian Platform and represent a geological record of Cambrian, in part Jurassic, and Quaternary events in the Earth history. The Cambrian System is represented here by marine carbonates, while the Jurassic system consists of continental siliciclastics. A weak tectonic activity of this region in the Jurassic brought out an appearance of some thin dolerite dykes restricted to the northern part of the area. The Quaternary System is represented mostly by Late Neopleistocene alluvial deposits related to the development of permafrost complex and containing in places bony remains of the Ice Age fauna. The Lena River valley, including its principal tributaries such as the Aldan, Buotama, Sinyaya rivers among others started to form by the late Neogene and finally brought out the present rocky relief while the Pillars began to emerge during the Neopleistocene.

However, the principal sediments of this area are the lower to lower middle Cambrian richly fossiliferous continuous tropical carbonates of various marine genesis. This strata characterise the stages 3 and 4 (Series 2) of the International Chronostratigraphic Chart issued by the International Commission on Stratigraphy (2014) and, thus, embraces an interval of c. 535-510 Ma. Those are the rocks that build the Sinsky Pillars themselves. The Cambrian sedimentary sequence is represented here by open marine facies and commences with subtidal red argillaceous mudstones of the Pestrotsvet Formation which are concordantly overlain by deep subtidal greenish-grey mudstones of the Perekhod Formation containing spongal clotted mud mounds and following by dysoxic dark-coloured finely bedded calcareous mudstones of the Sinsk and Kutorgina formations bearing features of deep-water slope deposition. The later formations yield Cambrian faunas of extraordinary preservation. Because the Sinyaya River, in contrast to the Lena and Buotama rivers, runs submeridionally the sections of Sinsk and Kutorgina formations yielding extraordinary Cambrian faunas are most continuous and complete here.



Fig. 5. Typical profile of Cambrian period deposits within Sinyaya river. Photo P. Parkhaev.

CAMBRIAN PERIOD DEPOSITS OF THE SINSKY PILLARS

The type section on the Sinyaya River (*Fig. 7*) occurs 6 km upstream its mouth. Here in the cliffs the uppermost Pestrotsvet, the Perekhod, the Sinsk, and the lower Kutorgina formations are cropped out in the ascending order. This sequence embraces upper Stage 2 and lower Stage 3 of the Cambrian Series 2 of the International Stratigraphic Chart for 2014 (=upper Atdabanian and Botoman stages of the Russian Cambrian chronostratigraphic chart).

The Pestrotsvet Formation of 1 to 3 m in thickness is represented by a frequent alternation of red argillaceous mudstone and white mudstone with archaeocyaths and hyoliths.

The Perekhod Formation of 28 m in thickness in total comprises greenish grey thinly bedded argillaceous mudstone (member I), light grey argillaceous mudstone with small rounded algal reefs or bioherms (member II), greenish grey argillaceous mudstone and grainstone (member III), and brownish grey hummocky mottled due to bioturbation mudstone (member IV). Abundant and various trilobites, hyoliths, and lingulate brachiopods are common through the entire formation; calcified algae are represented by renalcids.

The Sinsk Formation of 33 m in thickness consists of dark brown finely laminated argillaceous limy cherts with rare thin interbeds of dark brown mudstones. All the lithologies contain numerous and diverse trilobites, hyoliths, and lingulate brachiopods. Besides, some lenses representing former mud flows are teemed with fleshy algae, intact hexactinellids and demosponges, organic-walled cnidarians, palaeoscolecidan worms, xenusians, eldoniids, and various non-trilobite arthropods. All the fossils are of extraordinary preservation due to phosphatizations of soft tissues and even distinguishable individual cells.

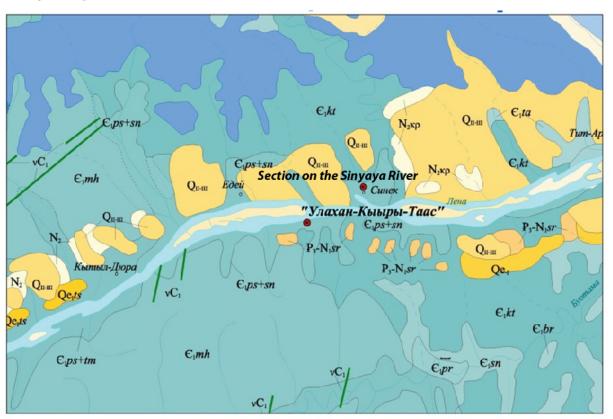
The Kutorgina Formation crowning the section is of 50 m in thickness and contains mostly light brown platy hummocky dolomitic mudstone and mottled due to intense bioturbation mudstone. Various trilobites are very common in the formation.



Fig. 6. Intact complete giant arthropods Phitophylaspis of the Sinsk Biota. Cambrian Stage 3. *Photo by V. Il'ynsky.*

The type section on the Sinyaya River

Geological map



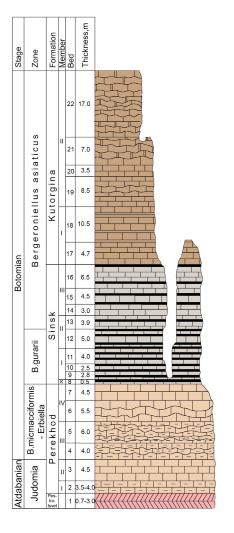


Fig. 7. Stratigraphic column of the Cambrian period deposits profile within Sinyaya River.

Legend:

- 1 light-coloured limestone;
- 2 dolostone;
- 3 argillaceous red-coloured limestone;
- 4 calcimicrobial bioherm (dendrolite);
- 5 wavy-bedded limestone with dolomitic patches;
- 6 argillaceous-calcareous chert;
- 7 -brown wavy-bedded limestone.

KARST PHENOMENA OF THE SINSKY PLOT OF THE LENA PILLARS NATURE PARK

Ground frozen karst of the Sinsky plot of Lena Pillars Nature Park and developing within continuous permafrost zone in subarctic extreme continental climate is a unique natural phenomena.

There are three representative morphological karst types within the territory of the Sinsky plot: naked, covered and soddy karst. Naked karst is mainly found within the Lena Plateau valley zone and the adjacent Sinyaya river valley bluff lines, where karst rocks are revealed onto surface due to the loose deposits wash-out. Covered karst occurs at rock-defended terraces of Sinyaya River valley, as well as within the Lena Plateau valley zone areas covered by cryogenic deposits. Turfed karst is found on valley slopes where surface loose soils are heavily washed out.

The following karst manifestations were revealed in the frame work of Sinyaya River valley nominated territory.

Superficial forms

Within the zones of naked karst, mainly right on the Sinsky Pillars and along some areas of Sinyaya River valley and its tributaries, one can find specific negative microforms of karst relief – **concavity karren formations**, developed as a result of uneven desorption (selective corrosion) of rock formations due to ice, rain and condensation water influences, as well as the activity of colonies of microorganisms. This karren formation type has developed on horizontal and subhorizontal surfaces in consequence of the process of water evaporation after a period of water stagnation. Karren formations have round and elliptic shape in plan, their diameter varies from 0.3–05 cm up to 3–4 cm, their depth generally does not exceed 1–1.5 cm. Expansion of concavities generally occurs due to high humidity of the insoluble constituent which they contain. Concavity karren formations found on the surface of rock formations are characterized by significant non-regularity: one can find both separate formations and groups of several formations merged into one large karren morphosculpture (*Fig. 8*).







Fig. 8. Concavity karren formations (Sinyaya River valley, area between Billyah River and Bytyrystah River). *Photo by E. Trofimova*.

Within naked and covered karst formations one can find most common **corallite (crystallactite) crusts** consisting of fine-fibrous spherolites — products of rigid capillary films crystallization. Crust development occurs through CaCO₃ crystallization out of water solution of mainly condensational genesis under extreme continental climate conditions of the considered territory. Corallite crusts are formed either within small cavities (mainly in cracks) or within subsurface layer and become exposed due to loose deposits denudation (*Fig.* 9).







Fig. 9. Corallite crusts: A – within a crack, B – exposed during loose deposits denudation (Unkur River valley). *Photo by E. Trofimova*.

The section of Sinyaya River valley which lies within the territory containing the denoted Pillars stretches from north-west to south-east. Within the considered territory along the denoted Pillars Sinyaya River valley stretches from north-west to south-east. The river bed in this part is characterized by circuitous course: sinuosity coefficient is 1.17–1.20, but reaching 1.29 between the river mouths of Kyra-Tas and Nachabyl-Kuellere. Taking into account the thickness of permafrost rocks in Sinyaya River valley (up to 500 m) (Geocryology ..., 1989) there is an area of suprapermafrost karst water discharge. In winter, such areas are prone to ice coating. In summer period, ice deposits are near the north-west facing slopes (*Fig. 10*); and by the south-

Fig. 10. Ice cover by the left slope of Sinyaya River valley (Ulahan-Chygyr stow), June 2013. Photo by E. Trofimova.







east facing slopes, within the area of melted aufeis glades, there grows a plant unique for northern latitudes, listed in the IUNC Red List of endangered species: Spotted Lady's Slipper also known as Cuckoos Boots (*Cypripedium guttatum Sw*) (*Fig. 11*). Obviously, during severe winters ice cover protects surface soil from substantial freezing, providing conditions for the appearance of such fragile creation of nature as Orchidaceae in warm seasons of the year.







Fig. 11. *Cypripedium guttatum Sw*, Sinyaya River valley left slope's toe, Peschanka stow. *Photo by E. Trofimova*.

Other surface karst phenomena which have already been discussed as present within the Buotamsky site are also found within the territory of the Sinsky plot of Lena Pillars Nature Park.

On the low-pitching surfaces where water flow is slow and moves along the cracks of rock formations (mainly in diagonal and orthogonal directions) one can find **fracture karren formations**, also known as "limestone paths". In separate areas there are shallow, flat-bottomed solution basins with overhanging walls – **kamenitsa**. Their development related with the limestone corrosion processes activated by water stagnation. Those solution basins are no larger than 8–10 cm in diameter with the depth being up to 2–3 cm. Separate blocks of rock formations are exposed to biokarst influences: here on the very surface

small cavities and holes (with depth of up to 1 cm) are formed due to the corrosive activities of various microorganisms (cyanobacteria, fungi, algae, lichen) (*Fig.* 12). In consequence of the active process of exposed limestone frost weathering, karren formations are rapidly deteriorating.

Fig. 12. Biogenic karren formations (Sinyaya River, right bank, 2 km up from the river mouth). *Photo by E. Trofimova*.



Karst sinkholes – closed cavities of oval, round or irregular shape, mainly conic, more rarely asymmetric and sauder-like. Their formation is caused by karst processes involving subpermafrost water, as well as by frost and cryoaquatic weathering, which expand the carbonate rocks' resorption surface and increase the activity of erosive processes. The diameter of karst sinkholes is from 1–2 up to 5 m and their depth is from 0.5 up to 2 m. Small collapsed corrosion-created sinkholes appear during the process of covering deposits' slow subsidence into corrosion-created cavity formed within top layers of karsting rocks. During warm period of the year those sinkholes don't collect water, and only within the deepest formations one can find moist diluvial cover layer. Such sinkholes get filled in with bushes and sedge covers their bottom.

Merging of several adjacent karst sinkholes under conditions of karst cavities filling with sandy-clay deposits resulted in karst lakes formation. Thermokarst processes have take part in lake formation. Lakes have frozen bottom and shores, their depth is no more than 2.0-2.5 m (*Fig. 13*). Bigger lakes are located in Kyra-Tas and Nachabyl-Kuellere River valleys and connected by short sections of river channels.



Fig. 13. Lake at the watershed of Burdobyt and Unkyur Rivers. *Photo by E. Trofimova*.

Intermittent rivers and streams are another element common for the hydrographic network of the territory considered. Except for the Sinyaya River all karst rivers and streams are characterized by the intermittent streamflow either in the upper, middle or lower current (Munduyuta, Kyra-Tas, Syulyugei rivers etc.), and rivers Bytyrystah, Unkyur and Nachabyl-Kuellere show intermittent flow along the whole length, and also have defections in their river beds in the form of funnels, cracks and sometimes with ponors. There is a significant amount of coarse deposits within river and stream beds (*Fig. 14*).





Fig. 14. Coarse deposits within river beds of Ulakhan-Chygyr stow, right bank of Sinyaya River. *Photo by E. Trofimova.*

Underground forms

Sinsky Pillars located along the bends of Sinyaya River from its right and left banks are a special form of subsurface (internal) karst opened up by Sinyaya River valley as a result of its sectional entrenchment into Lena Plateau. Sinsky Pillars are represented by separate rock pillars and also by solid castellation. Their height reaches 180–200 m. Both Lena Pillars and Sinsky stone giants were formed about 400,000 years ago (Spector, Tolstikhin, 2004). During the period of tectonic movements, Siberian platform has been raised about 200 m in height which resulted in deep entrenchment of Sinyaya River valley and activation of karst processes. On the one hand, karst process activation led to natural cracks expansion and separation of blocks from the main rock mass, and on the other hand — it has predetermined the formation of numerous cracks, holes, aprons, natural arches, as well as small caves and tunnels.

В

Stages of karst processes activation are reflected in the types of Sinsky Pillars. There are four main types of Sinsky Pillars: incipient, young, mature and old (*Fig. 15*), forming a unique natural group of karst relief, which has been greatly influenced by modern weathering processes, gravitatively-downslope movements and fluvial and abrasive influences.





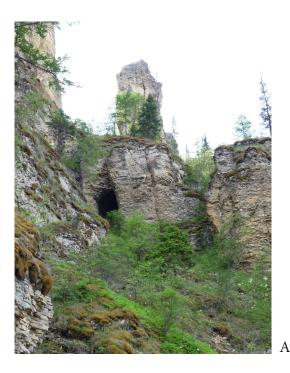




Fig. 15. Types of Sinsky Pillars: A – incipient forms, B – young, C – mature, D – old. *Photo by E. Trofimova.*

D

Inactive periods of Sinyaya River entrenchment processes have led to the appearance of numerous gallery-type caves which formation is a result of various levels of karst waters horizontal circulation. Usually overall length of the galleries doesn't exceed 8–10 m and they are of oval or irregular shape (*Fig. 16*). Levels of underground waters may be determined by cave entrances located at various elevation points.



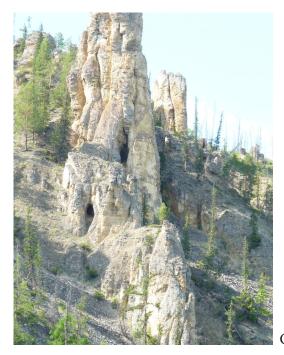




Fig. 16. Entrances into underground galleries of Sinyaya River valley: A and B — unnamed caves of the left river bank near Peschanka stows; C – variousleveled unnamed caves near Sylbah River mouth. *Photo by E. Trofimova.*

One distinctive feature of caves located within the region of ground frozen karst development is the absence of speleothems (Trofimova, 2014), i.e. secondary mineral deposits formed in the caves under the influence of water – stalactites, stalagmites, stalagmates, etc., which are considered to be remarkable objects of other caves in limestone, comprising more than 80% of the total amount of caves in the world.

It you know CaCO₃ forming limestone is almost unsolvable in distilled water. When carbon dioxide (produced by moulding plants within soil over the cave) is mixed with water, it creates a diluted carbonic acid, which in the presence of water acts as a dissolver for CaCO₃:

$$H_2O + CO_2 <-> H_2CO_3$$

 $CaCO_3 + H_2CO_3 <-> Ca(HCO_3)_2$

When the solution enters the underground cavity through various cracks, it creates the conditions for CO_2 evaporation into the atmosphere of the cave, which in its turn results in the inverse process - sedimentation of CaCO_3 and formation of speleothems. Lime sedimentation within water solution can be shown as the following reaction:

$$Ca++ + 2HCO_3 - -> H_2O + CO_2 \uparrow + CaCO_3 \downarrow$$
.

Under severe climate conditions of Sinyaya River valley due to lower activity of aerobic soil-inhabiting plants, moulding and destruction of organic matters happens very slowly, that is why the amount of carbonic acid inside the waters entering caves is quite small. On the other hand, period of time during which the solution filled with CaCO₃ may enter the underground cavity is no longer than 2 months on the average (frost-free season's duration, see above). During this period rain precipitation is about 200 mm with high evaporation as was noted by M.K. Gavrilova (1998, p. 86): evaporation in Central Yakutia, according to this author, is "4 times (or more) higher" than rain precipitation during the warm period of the year. During the performance of field geocryological works (by S.P. Varlamov and others, 2002) it was determined that within the considered region humidity conditions of soil cover depend on relief and lithological composition of soil: average humidity in summer period varies from 6–8% up to 19–38%.

That explains the absence of physiographic conditions which are necessary for the formation of such exotic natural creations as speleothems within Sinyaya River valley caves: only residual or rockfall deposits are accumulated there (*Fig. 17*).





В

Fig. 17. Sinyaya River caves deposits: A – residual, B – rockfall. Photo by E. Trofimova.

HYDROGRAPHY

The Sinsky plot lies within the boundaries of the Sinyaya river hydrographic water basin (left tributary of Lena river), in its lower current. The length of Sinyaya River, river bed of which is characterized by significant sinuosity, is 597 km (more than 140 km of its length lies within the Sinsky plot), basin area 30 900 km2. The river begins its flow from the Lena Plateau and goes along it through the territory of the three main regions of RS (Ya) - Verhnevilyuisky, Gornyi and Hangalassky regions. Main left tributaries of Sinyaya located within the considered territory are: Bytyrystah, Unkyur, Mundukta, Nachabyl, Kyra-Tas, Tas-Handa; right tributaries – Billah, Syulyugei. Sinyaya river basin contains a lot of alases, bayou lakes, suffusion knobs (bulgunnah). Ice formation on the river begins in October, the river break up happens in May. Hydrological regime of the Sinyaya River is mainly determined by snow-and river feeding. The largest flow occurs in the end of spring and in the beginning of summer during the period of intensive snow-melting and long-lasting rains. Annual average water flow in the lower current comes up to 41 m3/s. In summer the river becomes shallow and turns into almost continuous chain of river reaches and small rapids.

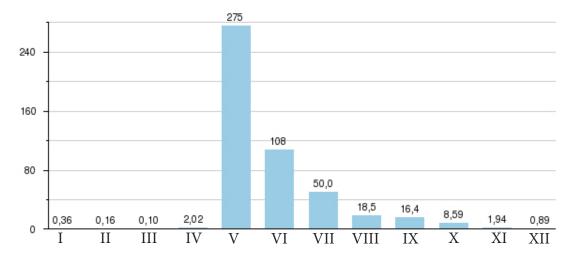
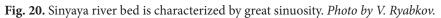


Fig. 18. Sinyaya river monthly average water flow (m3/s), 38 km from its mouth.



Fig. 19. Average annual duty of water in Sinyaya River's lower course comes up to 41 m2 sec. Photo by V. Ryabkov.





CLIMATE

Considering its geographical location, the Sinsky plot of Lena Pillars Nature Park is situated in Central Yakutia with a severe and peculiar climate. Annual temperature difference reaches 100°C, precipitation is low (like in steppes or semi deserts), and the solar energy in summertime is as high as in the regions of Central Asia. All these factors result in a unique sharply continental climate. Large water masses of the Lena River also contribute their share in formation of unique meso-climatic conditions.

Winter in Central Yakutia is rather long (over 6 months) and cold (-40, -60°C). In this season a severe winter Siberian anticyclone prevails here. Under the conditions of anticyclone a clear, frosty, dry and calm weather occurs. Stagnation of air stipulated by light breeze and clear sky produces great cooling and sharp temperature inversion. Under the conditions of clear and calm weather air temperature falls down to -60°C (Gavrilova, 1973).

Spring is very short and late here. It is characterized with unstable weather, wind gain and relatively more often precipitation. In spring the temperature grows quickly owing to supply of warm air from the south and intensive income of solar energy.

Summer lasts for 3 months (from June until August). The continentality of the climate plays a great role. In this period mean daily temperature of the air exceed +10°C. At daytime in summer the temperature can reach +30, +35°C. Due to significant warming up a diffuse depression forms here. As a result of strengthening of cyclonic activity and enhancement of absolute air humidity summer is the time of maximum precipitation, though it is rather modest – about 120 mm a year (Gavrilova, 1973).

Autumn is also very short like spring lasting from late August till September. It is characterized by strengthening of anticyclone activity that produces establishing of clear and frosty weather. Cyclones are accompanied with arctic air masses causing immediate lowering of temperature.

Mean annual temperature registered at weather station Sinskoye, located in the limits of Sinsky plot is -8,8°C, amount of precipitation falling in the territory equals to below 300 mm, mean perennial height of snow cover is 32 cm.



Рис. 21.



Рис. 22.



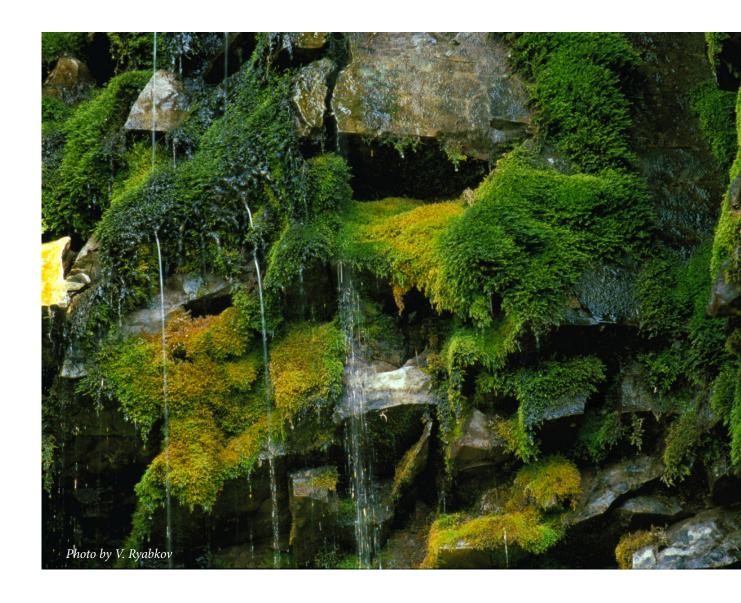


Fig. 21, 22, 23. Winter scenes of Sinyaya river valley.

SOILS

The Sinsky plot soil cover includes several subtypes of cryogenic soil, and shall be seen as a complex structure consisting of floodplain soils, developed on a ground of climatic soils combination. Climatic type of soil is cryogenic humus-carbonate soil (in combination with residual carbonite soil).

As can be seen from the soil map chart (*Fig. 24*), humus-carbonate soils (including degraded and eluviated types) are spread over the right bank of Sinyaya River. Its left bank mostly contains floodplain soddy soils and pine-forest sands, as well as floodplain forest and alluvial stratified soils. And humus-meadow (including gley and gleyic types), meadow-boggy and humus fen soils are spread throughout the valleys of the minor rivers.



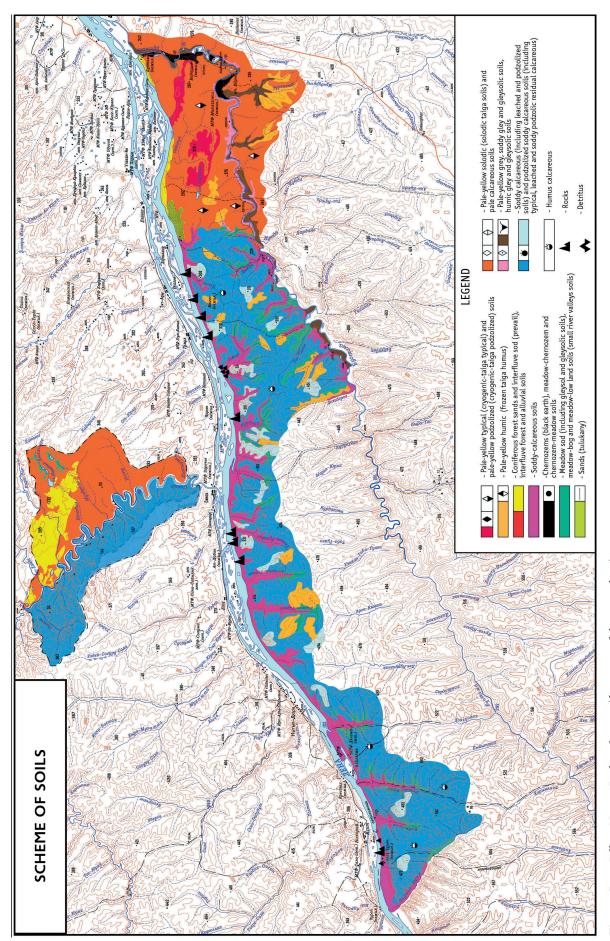


Fig. 24. Lena Pillars Nature Park soil cover (fragment of the map chart).

FLORA

According to the forest growth zoning offered by I.P. Sherbakov (1975), the Sinsky plot territory belongs to Aldano-Lensky region of Central Yakutia, middle taiga subprovince of middle taiga forest subzone. The territory has a relatively wide biological diversity, which is determined by landscape contrast, soil cover heterogeneity and microclimate.

The forest coverage of the Sinsky plot is high and exceeds 90%. Most of the forest cover is represented by larch forests consisting of *Larix cajandery Mayr*. (88%), pine forests consisting of *Pinus sylvestris L*. (3,5%), and the rest 8% of forest cover contains spruce forests (*Picea obovate Lebed*) and birch forests (*Betula platyphylla Sucacz*.). Average forest density is not high: 111 m3/ha – for larch forests, 100 m3/ha – for pine forests. Middle current of minor rivers and streams contain dwarf birch thickets of *Betula fruticosa Pall*.

Larch forests as the largest formation within forest cover and is represented by many types of trees, limited to a variety of sites from dry to wet (swamped). Most of those are Vaccinium type larch forests, growing within the forest sites of average humidity and representing regional features of the park territory. Larch forests are incredibly diversified and are full of the most important economic resources: wood, berries, mushrooms, commercial animal and bird species. Their holocoenotic, water and soil/subsoil protective value shall not be underestimated.



Fig. 25. Larch taiga forest land in Sinyaya river valley. Photo by V. Ryabkov.

Pine forests are mainly represented by common bearberry pine forests which tend to spread along riverine areas, choosing dry, more rarely freshly formed, well warmed sites. The pine forests territory lower Matty river mouth has almost completely burnt out during forest fires that happened 10-20 years ago.

Spruce forests form belt-type solid wood sites within the areas next to river mouths of Sinyaya, Maty, Chiry and some other river valleys. They do not make up for a large part of the forest cover, though within Sinyaya river valley and the valleys of its tributaries spruce forests grow in a thin line throughout the site.

Small solid wood areas of *poplar trees* rare for Central Yakutia can be found on the territory of Sinyaya river valley growing on the ground of young river alluvium. There are also some small areas of *aspen forest* of pyrogenic origin spread throughout the territory of the Sinsky plot, as well as some types of *birch forests*.

Willow woods are spread at floodplains near their river beds and within islands. The mostly common type of willow wood consists of basket willows, which form pure thickets along river banks stretching for many kilometers.

Shrub vegetation is mostly represented by community of thin birch (*Betula exilis*), less often by dwarf birch (*B. fruticosa*), and within stream and river valleys – narrow lines of meadowsweet (*Spiraea*), willow (*Salix*). Within wide meadow areas there are many willow tree formations consisting mainly of Bebba willows (*Salix bebbiana*).



Fig. 26. Forest coverage of the Sinsky plot exceeds 90%. Photo by A. Butorin.

Meadows. Alas meadows are spread within basins, and along the waterline of river and lake banks one can find narrow lines (1-2 m) of sedge grass (*Carex schmidtii*, *C. Minuta*, *C. Rostrata*) which length varies from 60 up to 70 cm, with plant cover up to 60%. Among the most commonly spread wild grass is Equisetum arvense. Within floodplain meadows there are three main association groups: herb-graminous, gramenous-herb and herb.

Swamps. Within Sinyaya river floodplain before the Maty river inflow, there are bayou lakes with bogged up shores. Also some of the bogged areas mostly occupied by moss-suffrutious associations can be found within the territory touched by the fire.

Petrophyte steppes are unique type of vegetation typical for the Sinsky plot. They occupy steep slopes of Sinyaya river valley sides with exposition to south, southeast and south-west. Steppes' vegetation is sparse; plant cover varies from 60 up to 80%. Prevailing plants are Lena fescue grass, Yakutia wheat-grass, vicarian sage, resinous thyme, yellow eastern pasque flower. The amount of plant species within one site often comes up to 25-30, mainly xerophytes.

All in all there are 25 rare species of plants within the considered territory. The highest attention is paid to beautifully blossoming types, such as Pennsylvanian lily (*Turk's cap lily*), lady's slippers, bouquet larkspur, but the most interesting species may be bipinnate Redowskia (*Redowskiya sophiifolia Cham. Et Schlecht.*) – closely endemic species of Central Yakutia. Up to the year of 2000 it was considered to be spread only at Lena Pillars. But lately it has been found on the rocks along Sinyaya River. Its wide spread within this region allows suggesting that Cambrian period deposits along Sinyaya River are the historical center of this species dispersal.



Fig. 27. Redowskiya sophiifolia Cham. Et Schlecht. – closely endemic species of Central Yakutia. Photo by V. Ryabkov.

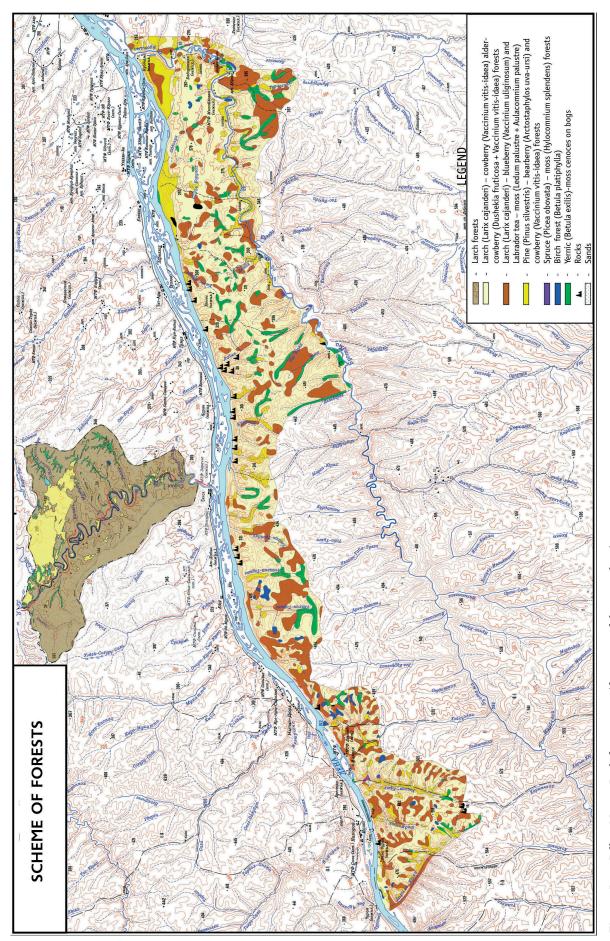


Fig. 28. Lena Pillars Nature Park forest cover (fragment of the map chart).

FAUNA

It is necessary to mention the results latest scientific research on vegetation and animal life of the Lena Pillar Nature Park Sinsky plot which have shown that this territory is an integral part of the nature complex containing right bank Buotamsky plot and a great contribution to its biological value. Within the Sinsky plot there is only one animal species which is not found on the right bank site. It is the long-tailed Siberian ground squirrel *Citellus undulates L.* Field vole *Microtus argesis L.*, which has been noted by the scientists in 1926 and in the end of the 60ties, might still be present within the region, but this fact is unconfirmed.

On the whole the left bank has a larger variety of steppe mammal species. This is proved by the domination of large narrow-skulled voles and the recent restoration of long-tailed ground squirrel population. As for the game animal species, during the last decades sable has boosted its population, far eastern red deer has entered the left bank territory, the amount of musk and roe deer has significantly increased and red fox has been more frequently seen within the Sinsky plot.

As for the rest, the faunal description of Lena Pillars Nature Park is identical for both Buotamsky and Sinsky plots:

The region containing the Lena Pillars has a unique combination of faunal complexes. Filled with prevailing forest formations it is also inhabited by representatives of mountain taiga and mountain steppe complexes: musk deer, far eastern deer and northern pika respectively.

ICHTHYOFAUNA

Ichthyofauna of the Park comprises 21 forms and includes all species inhabiting Central Yakutia region. Two of them (Lake Minnow (*Phoxinus percnurus*) and Yakut crucian carp) are lake forms and another 19 – river forms. The last group includes 15 species of nonmigratory fishes (Siberian lamprey, Siberian sturgeon, taimen, East-Siberian lenok, Coregonus tugun, Siberian whitefish, pilot fish, Thymallus arcticus pallasi, pike, Siberian roach and dace, East-Siberian idus, burbot, perch, ruff), 4 species of semi-anadromous fishes (Siberian white salmon, Siberian cisco, Arctic cisco, whitefish).

AMPHIBIANS AND REPTILES

Amphibians and reptilians are presented with two species: Siberian salamander *Salamandrella keyseplingii*, *Dybowski*, 1870 and Siberian frog *Rana amurensis Boul*, 1888, common lizard *Lacerta vivipara Jacquin*, 1787 and common northern viper *Vipera berus Linnaeus*, 1758. The territory of the Lena Pillars is the northern boundary of habitat of few reptiles of this cold region.

AVIFAUNA

Ornitho-complexes of meadow, skirt and forest birds are presented here completely or almost completely. Wetlands' complex is rather modest, however, after the introduction of a protection regime a considerable increase of their numbers and diversity has been registered. The basis of winter avifauna of the studied region is formed with nonmigratory birds (26 species). Baikal teal, osprey, golden eagle and peregrine are listed into the Annex to CITES Convention being protected species of international importance.

MAMMALS

The territory of Park is inhabited by 42 species of animals. On the whole, complex of mammals' species presents a typical fauna of middle-taiga subzone of Palaearctic, with background species: sable, brown bear, squirrel, elk, chipmunk, etc. Among inhabitants of mountain-taiga complex there are: musk deer, northern cony (*Ochotona hyperborean*), and mountain-forest form of wild reindeer. A number of species - maral, some representatives of Cheiroptera and Insectivora – are typical for the southern-taiga fauna and here lies the northern boundary of their habitats. Long-tailed (Siberian) souslik occurs in left-bank part of the Park. Lakes and wetlands are inhabited with common water-meadow species - musk beaver, water vole, root vole. House mouse is a synanthropic form.

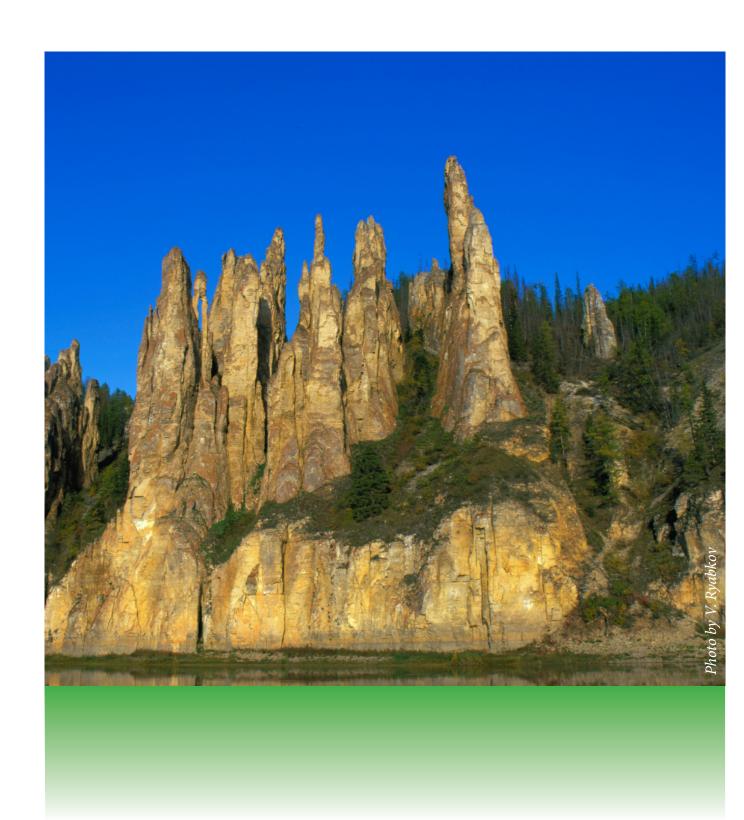
Among Insectivora and small rodents the most common species according to their distribution and numbers are: *Sorex daphaenodon*, *Sorex tundrensis* and *Laxmann's shrew*, northern red-backed and narrow-skulled voles, chipmunk; also usual: water bat, lepus, squirrel, musk beaver, large-toothed redback vole, root vole, water vole. Among carnivores species-dominants are: common weasel, sable and brown bear. Considering the population density of ungulates inhabiting the Lena Pillars NP there prevail roe deer, musk deer and maral. After introduction of protection regime in this territory their number has increased.





Fig. 29. Maral. Photo by V. Stepanova.

Fig. 30. Roe deer. Photo by A. Isaev.



3 JUSTIFICATION FOR THE MODIFICATION

■ 3. Justification for the modification

This work was performed in accordance with paragraph 4 of the World Heritage Committee Decision No 36 COM 8B.11: «The World Heritage Committee request the State Party to consider including the Sinyaya component of LPNP, and relevant areas of the Lena River that are necessary to assure integrity within the nomination».

A) CAMBRIAN PERIOD DEPOSITS

The Sinsky plot is a valuable supplement to the Cambrian sections of the major territory of the Lena Pillars Nature Park. Along the Sinyaya River, from its mouth upstream the uppermost Pestrotsvet, the Perekhod, the Sinsk, and the Kutorgina formations are outcropped. Because the Sinyaya River cuts the Cambrian strata immediately approaching the reefal belt, the thickest and most complete section of the Sinsk Formation (30 m) is represented here for the entire Siberian Platform. This is the Sinsk Formation that is famous by its early Cambrian fossil fauna of an extraordinary preservation, and the Sinyaya River outcrops are the most prospecting for future search of such fossils.

Additionally, the Sinsky Pillars themselves, which are built by Cambrian limestones and dolostones and shaped as isolated columns and continuous walls up to 200 m in height, are one of most picturesque landscapes in the world due to graceful bends of the river. In places, the rock surface is covered with Neolithic figures.

B) GROUND FROZEN KARST

There are four karst plateaus inscribed on the World Heritage List, each having an Outstanding Universal Value (Williams..., 2008), namely: the cultural landscape of Hallstatt-Dachstein – Salzkammergut (Austria), Yulong (Chongqing) in South China, Henderson Island (Great Britain) and the Phong Nha-Ke Bang Nature Park (Vietnam). Karst development on the territory of all of four plateaus occurs under humid climate conditions: for the cultural landscape of Hallstatt-Dachstein – Salzkammergut it is the subhumid climate, for the Yulong – the continental humid climate, for Henderson Island – the tropical humid maritime climate and for the Phong Nha-Ke Bang Nature Park – the humid subtropical monsoon climate. There is no permafrost within the territory of the abovementioned plateaus.

The only one unique example of recent ground frozen karst development within a stratified plateau is the karst of the Lena Pillars Nature Park in limestone and dolomites of Low Cambrian Period. Under conditions of continuous permafrost, with rock thickness of 100–500 m, karst process occurs throughout all cryogenic formations, in subarctic extreme continental dry climate.

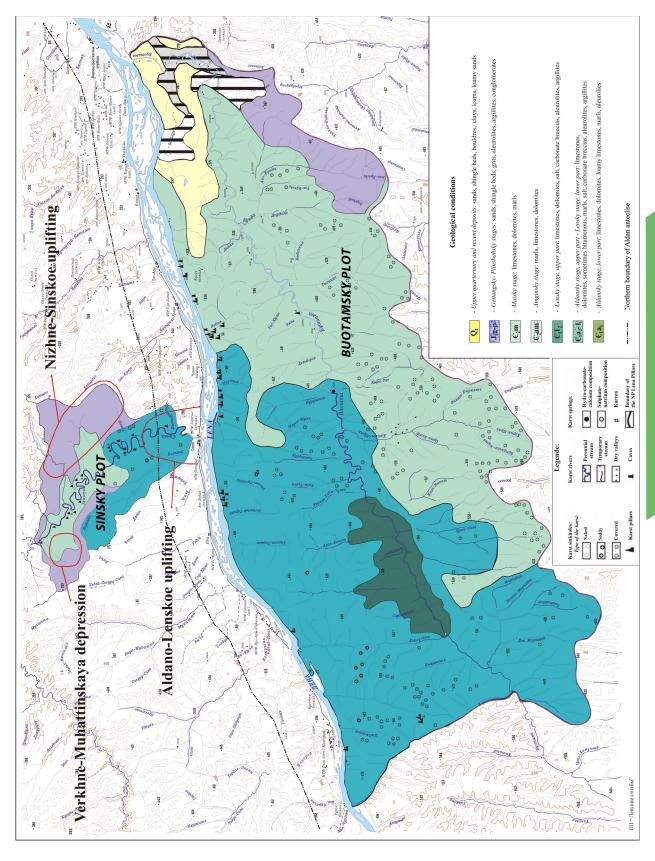


Fig. 31 Karstic phenomenon of Lena Pillars Nature Park.

But if the ground frozen karst of the Lena Pillars Nature Park's Buotamsky plot has been developing within structurally and tectonically homogenous area - the northern slope of Aldanskaya anticlise, which is represented by a homocline gently going down to north-west, north-east and north to Vilyuyskaya syneclise, the Sinsky plot's karst is related to major tectonic structures: the collision of Aldanskaya anticlise and Vilyuyskaya syneclise (Ref. To Fig 31). Moreover, the results of research performed by M.V.Mikhailov (1963) show that the Sinsky plot's territory is also complicated by minor tectonic structures of different nature and direction: positive ridgelike rises – Aldano-Lensky and Low-Sinsky rises, and negative structures – High-Mukhattinsky depression, that determines a prominent amplitude of Sinyaya river valley (and its tributaries) entrenchment into Lena Plateau. Therefore, surface (influenced by superpermafrost waters) and subsurface karst (influenced by inter- and subpermafrost waters) of the Sinsky plot has much greater structural diversity than the Buotamsky site's karst. Apart from the earlier described karst holes, ponors, blind creeks, intermittent rivers, lakes and caves common for the Buotamsky site, the Sinsky plot has various forms of concavity karren, numerous and wide (especially within subsurface karst, exposed during loose cover soil removal) corralite plots, innumerable amount of superpermafrost water discharge areas, drained by unevenly entrenched valleys of Sinyaya river and its tributaries. Within Sinyaya River characterized by its meandering river bed it is possible to find superpermafrost water discharge in several areas at one bending section: at its beginning, middle part and ending. But the most remarkable objects of the Sinsky plot are multiple-aged Sinsky Pillars, infused with numerous caves, holes, creeks, located at various heights.

Thus, expansion of Lena Pillars Nature Park by adding the Sinsky plot to the number of its sites, due to its unique development under complex structural and tectonic conditions (location at the borderline of Aldanskaya anticlise and Vilyuyskaya syneclise), shall expand our views on the outstanding universal value of Lena Pillars Nature Park's ground frozen karst introducing new karst forms and make it possible to improve their protection.

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■ 4. Contribution to the maintenance of the Outstanding Universal Value

The Sinsky plot is the one and only example of ground frozen karst development within such complex structural and tectonic conditions. That is why during the period of region development, expansion of Lena Pillars Nature Park by adding the Sinsky plot to its sites will ensure preservation of its Outstanding Universal Value. Karst systems developed within the regions of permafrost formations are especially sensitive to various types of human activities and the status of UNESCO World Heritage Property will help to preserve this unique territory in its natural state.

On the whole, expansion of World Heritage Property by adding to its territory the Sinsky plot where the Outstanding Universal Value is brightly demonstrated (notably by both of its main components – Cambrian period deposits and ground frozen karst) will obviously contribute to preservation of the Lena Pillars Outstanding Universal Value.

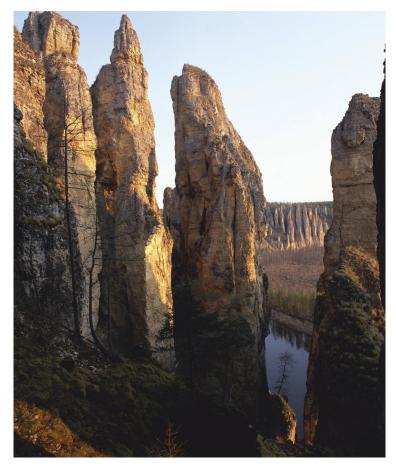


Fig. 32. The picturesque Sinsky pillars are stretched along Sinyaya River for 10s of kilometers. *Photo by V. Ryabkov.*

■ 5. Implications for legal protection

The Republic of Sakha (Yakutia) Lena Pillars Nature Park contains two plots: the Buotamsky plot (1 272 150 ha) and the Sinsky plot (115 000 ha). In 2012 the Buotamsky plot was included into the World Heritage List. Currently the Sinsky plot is offered as a minor modification to the boundaries of the existing World Heritage property. As the Buotamsky and the Sinsky plots are parts of one specially protected area, they both are covered by all federal and republican laws, rules and regulations which were stated in the nomination of 2012 to the same extent, more specifically by:

Extract from the Federal Law of the Russian Federation «On specially protected natural areas» of 14.05.1995 (read with the Federal Law of 29.12.2004 N 199-FL) (Annex A1);

Law of the Republic of Sakha (Yakutia) On Specially Protected Natural Areas in the Republic of Sakha (Yakutia). Enacted by Ordinance of State Assembly (IL Tumen) of the Republic of Sakha (Yakutia) No.3N 214-II of December 25, 2003 (Annex A2);

Resolution of Government of the Republic of Sakha (Yakutia) «On establishment of the National Lena Pillars Nature Park on the territories of Khangalassky and Olekminsky Uluses» of 10.02.1995 N 39 (Annex A3);

Resolution of Government of the Republic of Sakha (Yakutia) «On rename of National Nature Parks into Nature Parks of the Republic of Sakha (Yakutia) and approval of the Standard Statute of a Nature Park of the Republic of Sakha (Yakutia)» of 6.11.2006 N 495 (Annex A4);

Regulation of the Government of the Republic of Sakha (Yakutia) "On "Lena Pillars" Nature Park boundaries statement" of January 25, 2011 N21 (Annex A6).

The legal instruments of the Park territory protection are specified by the Regulations on the Nature Park established by the government of the Republic of Sakha (Yakutia). The Regulations cover: legal regime of protection, rights of people responsible for the territory protection, liability for the violation of protection regime.

The Nature Park protection is performed by special inspection responsible for the Nature Park territory protection according to functional zoning. For the aim of the Park protection it is also possible to involve internal affairs bodies, public environment protection inspectors from amongst the representatives of Evenki ancestral communes and other Nature Park land property users.

Special inspection is included into the Nature Park staff and is appointed by the park manager. According to the established staff schedule, inspection consists of 11 people: 6 government district police officers, 4 senior government inspectors and head of inspection.

Within the scope of functional responsibilities inspector performs control over:

- the performance of fire-prevention, sanitary and epidemiologic activities;
- gathering of collection and other materials necessary for the performance of scientific research activities;
- traffic and parking of admitted vehicles within the road-path and river network, as well as transit passage along the fixed routes of technical equipment and vehicles, owned by the members of personnel and lownumbered peoples of North communes, separate farms, local residents and tourists, who have obtained a special permission;
- performance of traditional economic activities by low-numbered peoples of North communes members within fixed territory, as well as by local residents;
- production structures activities, subsidiary farming, sales points and etc., located within the area of economic use, included into the Nature Park territory.

Peschanyi cordon is located within the boundaries of the Sinsky plot. Security patrolling is performed all-the-year-round. During summer – water patrolling along the route of 280 km length. During winter – snow-mobile patrolling along the route Eyim – Peschanaya – Eyim of 40 km length. Aerial observation is performed upon the terms of lease agreement with State-financed institution "Avialesoohrana" and aero-club "Osa".

It is necessary to note that according to the Government executive order No2322 of 22.12.2011 "On the Conception of specially protected nature territories of federal importance for the period up to 2020" and Activity plan for Conception, implementation the scheduled creation period of Lena Pillars National Park of Federal importance – the year of 2015.

Currently the preparation of materials justifying the Lena Pillars Nature Park's status of specially protected nature territory of federal importance is fulfilled by the Federal State Budgetary Institution "All-Russia Scientific Research Institute on Ecology" under the jurisdiction of the Russian Federation Ministry of Natural Resources and Environmental Protection.

Interagency working group for the creation of the Lena Pillars National Park of Federal importance has been established by the Executive order of the Republic of Sakha (Yakutia) in order to speed-up the materials preparation process.

The promotion of conservation status of the designated territory from republican to federal will definitely have a positive effect on both the territory legal protection and the management organization.



Fig. 33. Sinyaya River – the favorite spot for tourist rafting. Photo by V. Ryabkov.

■ 6. Implications for management arrangements

The Sinsky plot, which is offered as a minor modification to the boundaries of the existing World Heritage Site "Lena Pillars", is a part of a specially protected area of the Republic of Sakha (Yakutia) – the Lena Pillars Nature Park. It is covered by the same management system as the Buotamsky plot of the Nature Park, which is already included into the List.

Nature Park is the nature conservation institution of the Republic of Sakha (Yakutia) and is under the jurisdiction of Ministry of Nature Conservation of the Republic of Sakha (Yakutia):

Russian Federation,

The Republic of Sakha (Yakutia)

677000, Yakutsk, Dzerzhinskogo st. 3/1.

Tel.: (4112) 34-12-90, 34-49-15

Fax: 42-13-72

e-mail: sterh@sakha.ru

At local level the site management is executed by the Lena Pillars Nature Park:

Russian Federation,

The Republic of Sakha (Yakutia)

678010, Pokrovsk, Ordzhonikidze st., 56

Tel.: (411244) 43-896

Fax: (411244) 45-289 E-mail: nppls@mail.ru

Daily activities of the Nature Park are subjected to the terms of the following legal documents:

Statute of the State Enterprise Nature Park (Aan Aiylgy) «Lena Pillars» of the Republic of Sakha (Yakutia) of 6.11.2006 N 495 (Annex A5);

Management plan of the Lena Pillars Nature Park for the period 2012-2016 (Annex A7).

The Nature Park is under the jurisdiction of Federal Ministry for Nature Conservation of the Republic of Sakha (Yakutia), which performs general management and coordinates the Nature Park activities.

The Nature Park is headed by a director. Director manages the Nature Park on the basis of undivided authority and bears sole responsibility for its activities, provides observance of lawfulness, state discipline and fulfillment of the Nature Park functional aims.

Science and Engineering Board will be created in order to observe the matters of scientific, nature protection, recreational and outreach activities under the control of the Nature Park direction. Members of the Science and Engineering Board shall be chosen by the Federal Ministry for Nature Conservation of the Republic of Sakha (Yakutia).

Nature Park committee will be created under the control of the direction in order to solve the issues related to Evenki ancestral communes' activities. The members of committee shall consist of the authorized representatives of each Evenki ancestral community, Nature Park administration, representatives of the Nature Park Hangalassky ulus administration and the Federal Ministry for Nature Conservation of the Republic of Sakha (Yakutia) may also be invited, as well as the scientific institution employees. The Committee will be responsible for the discussion of any disputable questions related to commercial hunting, licensing, tourism, territorial zoning, additional transportation routes preparation and management, usage of natural resources by the local residents in amounts excessing the approved ones, matters of traditional natural territory management, employment policy and other Nature Park activity matters which are related to interests of Evenki ancestral communes. The Committee shall be gathered when necessary.

Personnel chart shall be developed for direct on-site activities. According to the approved personnel chart, the total amount of the Nature Park direction employees is 33 people: including the director, 2 deputy directors, 1 main accountant, 5 main specialists, 11 inspection members, 13 technical service representatives.

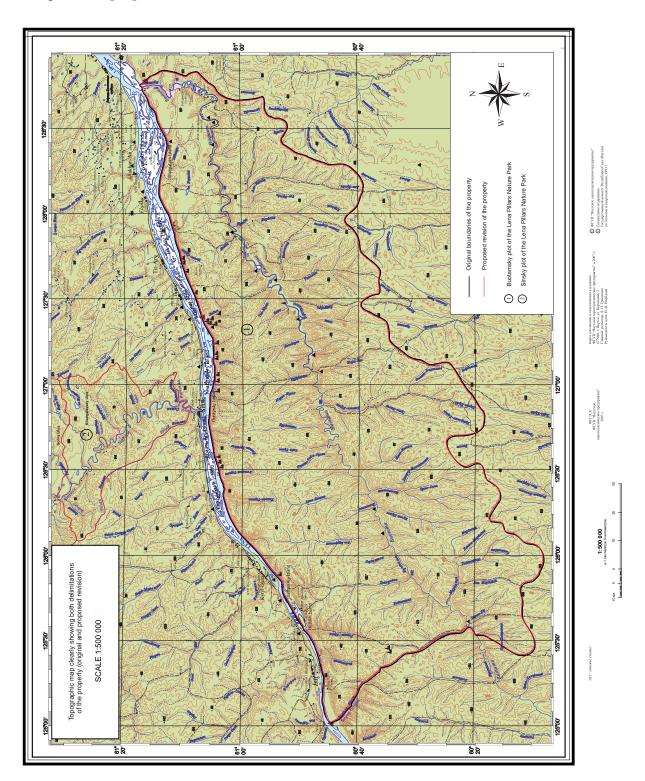
Interdepartmental commission on preservation, conservation and facilitation of public access of Lena Pillars Nature Park has been established upon the executive order of the Republic of Sakha (Yakutia) President in order to perform single practice and coordination of executive bodies in relation to the Lena Pillars Nature Park inclusion into the World heritage List.

Funding of the Nature Park activities is provided from federal budget of the Republic of Sakha (Yakutia), extrabudgetary sources and environmental institution sponsor support.

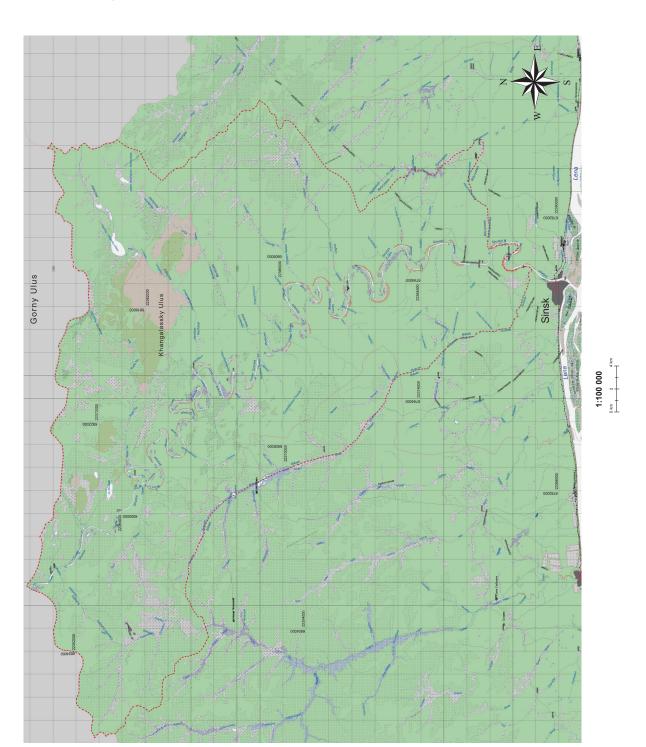
The promotion of conservation status of the designated territory from republican to federal (National Park) planned for the year of 2015, shall result in the raise of budget funding and the Park personnel chart expansion. New management plan will be developed for the Lena Pillars National Park according to its federal conservation status.

7. Maps

Topographic map clearly showing both delimitations of the property (original and proposed revision).



Topographic map clearly showing the boundaries of Sinsky plot of the Lena Pillars Nature Park, proposed minor modifications to the boundaries of the World Heritage property.



Proposal for MINOR MODIFICATIONS TO THE BOUNDARIES OF WORLD HERITAGE PROPERTY

Lena Pillars Nature Park

(Ref: 1299) (RUSSIAN FEDERATION)

ANNEX

ANNEX A DOCUMENTS

- A1. EXTRACT FROM THE FEDERAL LAW OF THE RUSSIAN FEDERATION «ON SPECIALLY PROTECTED NATURAL AREAS» OF 14.05.1995 (READ WITH THE FEDERAL LAW OF 29.12.2004 N 199-FL);
- A2. LAW OF THE REPUBLIC OF SAKHA (YAKUTIA) ON SPECIALLY PROTECTED NATURAL AREAS IN THE REPUBLIC OF SAKHA (YAKUTIA). ENACTED BY ORDINANCE OF STATE ASSEMBLY (IL TUMEN) OF THE REPUBLIC OF SAKHA (YAKUTIA) NO.3N 214-II OF DECEMBER 25, 2003;
- A3. RESOLUTION OF GOVERNMENT OF THE REPUBLIC OF SAKHA (YAKUTIA) «ON ESTABLISHMENT OF THE NATIONAL LENA PILLARS NATURE PARK ON THE TERRITORIES OF KHANGALASSKY AND OLEKMINSKY ULUSES» OF 10.02.1995 N 39;
- A4. RESOLUTION OF GOVERNMENT OF THE REPUBLIC OF SAKHA (YAKUTIA) «ON RENAME OF NATIONAL NATURE PARKS INTO NATURE PARKS OF THE REPUBLIC OF SAKHA (YAKUTIA) AND APPROVAL OF THE STANDARD STATUTE OF A NATURE PARK OF THE REPUBLIC OF SAKHA (YAKUTIA)» OF 6.11.2006 N 495;
- A5. STATUTE OF THE STATE ENTERPRISE NATURE PARK (AAN AIYLGY) «LENA PILLARS» OF THE REPUBLIC OF SAKHA (YAKUTIA) OF 6.11.2006 N 495;
- A6. REGULATION OF THE GOVERNMENT OF THE REPUBLIC OF SAKHA (YAKUTIA) "ON "LENA PILLARS" NATURE PARK BOUNDARIES STATEMENT" OF 25.01.2011 N 21;
- A7. MANAGEMENT PLAN OF THE LENA PILLARS NATURE PARK FOR THE PERIOD 2012-2016.

ANNEX A1

EXTRACT FROM THE FEDERAL LAW OF THE RUSSIAN FEDERATION "ON SPECIALLY PROTECTED NATURAL AREAS"

Part IV. NATURE PARKS

Article 18. General provisions.

- 1. Nature parks are state environmental recreational institutions managed by regions of the Russian Federation whose areas and water bodies include natural landscapes and properties of high environment and esthetical value and which are intended for use in environmental, educational, and recreational purposes.
- 2. Nature parks occupy lands which are granted to them in unlimited (permanent) use, in some cases they are on lands of other land owners, users, holders or tenants.
- 3. Nature parks are entrusted with the objectives, as follows:
- a) Protecting environment, natural properties and complexes of high conservation, scientific, historic and cultural or esthetical value, recreational resources;
- b) Ensuring person's rights for recreation in favorable environment;
- c) Public environmental education;
- d) Developing and implementing effective methods of nature protection and sustaining ecological balance under recreational use of nature parks.

Article 19. Procedure for establishing nature parks.

1. A nature park is established by a law of executive agencies of the constituent entities of the Russian Federation on presentation of federal conservation authorities.

(item 1 read with the Federal Law of 29.12.2004 N 199-FL)

2. The establishment of nature parks related to the withdrawal of land parcels or water bodies used for national purposes is executed by the approval of the executive agencies of the constituent entities of the Russian Federation on the agreement with the Government of the Russian Federation.

Article 20. Legal status of nature parks.

- 1. Nature parks are legal entities which have no purpose of making profit, i.e. non-profit organizations, established as environment institutions financed from the budget of the region of the Russian Federation.
- 2. Means of nature parks which they command in accordance with the established procedure are the following financial means obtained by the administrations of nature parks:

- a) From the indemnification of damage done by individuals and legal entities;
- b) From recreational, advertising, publishing, and other activities which do not contradict their purposes;
- c) As gratuitous aid of natural persons and legal entities, including foreign citizens and international organizations;
- 3. Became invalid. Federal Law of 29.12.2004 N 199-FL.

Article 21. Protection regime of nature parks

- 1. Different protection and use regimes are established in nature parks, depending on environmental and recreational value of natural areas.
- 2. Based on this, conservational, recreational, agricultural, and other functional zones may be established in nature parks, including protection zones of properties of historical and cultural heritage.
- 3. Any activities causing changes of a historically formed natural landscape, reduction or destruction of environmental, esthetical, or recreational values of nature parks as well as violating the maintenance regime of properties of cultural heritage are prohibited in nature parks.
- 4. Activities reducing environmental, esthetical, cultural, or recreational value of the area may be prohibited or limited in nature parks.
- 5. Issues of social and economic activities of legal entities within nature parks and development projects of inhabited areas shall be agreed with nature parks.
- 6. Specific features, zoning and regime of every nature park is defined by its Regulation Statute approved by the authority bodies of corresponding constituent entities of the Russian Federation by agreement with the federal conservation authorities охраны and the appropriate bodies of local self-government.

In the cities of federal importance Moscow and St-Petersburg, authorities of the local self-government bodies of city municipal formations for participation in agreement of regulations on nature parks are defined in accordance with organization features of local self-government in the cities of federal importance stipulated by the Federal Law.

(item 6 read by the Federal Law of 29.12.2004 N 199-FL)

LAW
OF THE REPUBLIC OF SAKHA (YAKUTIA)
ON SPECIALLY PROTECTED NATURAL TERRITORIES
IN THE REPUBLIC OF SAKHA (YAKUTIA)

Enacted by Ordinance of State Assembly (Il Tumen) of the Republic of Sakha (Yakutia) 910-3 № 713-IV of March 1, 2011.

The Present Law is governing the relationships within the sphere of establishment, utilization, and protection of the natural territories with an account of natural climatic character of the nature of the North, and with the aim of preserving distinctive and unique natural complexes and objects, remarkable natural formations, biological resources, preserving their genetic variety, investigating global biosphere processes as well as monitoring their condition.

Chapter One. GENERAL PROVISIONS

Article 1. Legislature of the Republic of Sakha (Yakutia) on Specially Protected Natural Territories

- 1. The legislature of the Republic of Sakha (Yakutia) on specially protected natural territories is based upon the Constitution of the Russian Federation, federal laws, other statutory acts of the Russian Federation, the Constitution (basic law) of the Republic of Sakha (Yakutia), laws of the Republic of Sakha (Yakutia), other statutory acts of the Republic of Sakha (Yakutia).
- 2. Relationships referring to utilization of earth, water, forest, air, and other natural resources of specially protected natural territories are also governed by the corresponding legislature of the Russian Federation and the Republic of Sakha (Yakutia).

Article 2. Types and Categories of Specially Protected Natural Territories

1. Specially protected natural territories can be of federal, republican or local value.

Specially protected natural territories of republican value are the state property of the Republic of Sakha (Yakutia) and under the jurisdiction of public authorities of the Republic of Sakha (Yakutia).

Specially protected natural territories of local value are the public property of municipal communities and under the jurisdiction of local government authorities.

- 2. With due account for peculiar properties and the status of nature-conservative institutions thereon, specially protected natural territories have the following categories:
- 1) Specially protected natural territories of republican and local values are established in accordance with the republican legislature. They form the republican system of specially protected natural territories (ytyk kere sirder), are under the jurisdiction of the Government of the Republic of Sakha (Yakutia) and local authorities. Their functions are regulated by the present Law and statutory acts issued in terms of such. The republican system of specially protected natural territories (ytyk kere sirder) includes:
 - Natural parks (aan aiylgylar);
 - Resource reserves (erkeeiy sirder);
 - Protected landscapes (uluu tuelbeler);
 - Natural monuments (aiylha menelere);
 - Traditional nature management territories of indigenous peoples of the North;
 - Botanical gardens;
 - Sacral natural objects.
- 2) Health-improving recreational funds established and functioning in accordance with the legislature of the Republic of Sakha (Yakutia). Health-improving recreational funds comprise the following establishments:
 - City and district gardens;
 - Parklands and water protection areas;
 - Health resorts and therapeutic sanitary localities.
- 3. Legal regulation of establishment, protection, and utilization of traditional nature management territories of indigenous peoples of the north is carried out in accordance with the legislature of the Russian Federation and the Republic of Sakha (Yakutia).
- 4. The Government of the Republic of Sakha (Yakutia) and local governments, in accordance with the legislature of the Republic of Sakha (Yakutia), have the right of defining other categories of specially protected natural territories (unique lakes, relaxation zones, children's environmental parks etc.).
- 5. Specially protected natural territories are taken into consideration at elaboration of integrated territorial plans, land management patterns, and district planning. On the basis of plans of development of specially protected natural territories, the Government of the Republic of Sakha (Yakutia) takes decisions on reservation of territories predesigned as specially protected and on restrictions of economical activity within such territories.

Article 3. Control and Administration over Establishment and Functioning of Specially Protected Natural Territories

- 1. Control and administration over establishment and functioning of specially protected natural territories are carried out by specially authorized executive bodies of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection and by federal executive bodies acting in the sphere of environmental protection.
- 2. Control and administration over establishment and functioning of specially protected natural territories of local value are carried out by local authorities.

Article 4. Participation of Citizenry and Legal Entities in Establishment, Protection, and Functioning of Specially Protected Natural Territories

Citizens and legal entities including public associations and religious communities, render assistance to state and local authorities in providing measures aimed at establishment, protection, and functioning of specially protected natural territories. State and local authorities providing such measures take proper account of proposals advanced by the citizens and public associations.

Article 5. Order of Establishment of Specially Protected Natural Territories

- 1. Establishment of specially protected natural territories is made in accordance with plans of development of specially protected natural territories designed with due account for zonal geographical, ecological system, social, historical, didactic, scientific research principles.
- 2. Decision on establishment of specially protected natural territories of republican value is taken by the Government of the Republic of Sakha (Yakutia) at the recommendation of a specially authorized executive body of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection and in coordination with local authorities, excluding natural parks the decision on establishment of which is taken by the Government of the Republic of Sakha (Yakutia) at the recommendation of federal executive bodies acting in the sphere of environmental protection.
- 3. Decision on establishment of specially protected natural territories of local value is taken by a representative body of the local government with an allowance of opinion of the residential population and in coordination with a specially authorized executive body of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection.
- 4. Establishment of specially protected natural territories concerned with retirement of land or withdrawal of water areas utilized for state needs is carried out by means of an Ordinance of the Government of the Republic of Sakha (Yakutia) in coordination with the Government of the Russian Federation.

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- 5. Establishment of specially protected natural territories of republican and local values is not associated with entire or partial withdrawal of hunting grounds, fishery areas, and reindeer grazing lands located on the lands of tribal nomad communities of indigenous peoples of the North.
- 6. Establishment of specially protected natural territories is carried out with or without withdrawal of areas of other lands categories.

Chapter Two. THE REPUBLICAN SYSTEM OF SPECIALLY PROTECTED NAT-URAL TERRITORIES (Ytyk Kere Sirder)

Article 6. The Republican System of Specially Protected Natural Territories (Ytyk Kere Sirder)

The republican system of specially protected natural territories (ytyk kere sirder) is an assemblage of natural objects and complexes entirely or partially withdrawn from economical activity accompanied by imposition of particular regimes of attendance and utilization of natural resources (without land retirement), with due account for local customs, traditions, and beliefs, aimed at preservation of natural environment, subsurface resources, and traditional economies.

Article 7. Natural Parks (Aan Aiylgylar)

- 1. Natural parks include territories and complexes under special protection of law and traditions of indigenous peoples of the North, both general and distinctive landscapes of environmental, moral, educational, recreational, and scientific significance, comprising habitats of wild plants and animals, places of relaxation, ceremonies, traditions, and beliefs of indigenous peoples of the North, tourism, and excursions, contributing to environmental education of the people.
- 2. The territory of a natural park consists of the combination of the following zones differing by the grade of their recreational and economical capacities:
 - Reserved zone (tyytyllybat sirder) area of full forbiddance of all types of economical and recreational activity;
 - Sacred places (ytyk sirder) areas of traditional folk rituals;
 - Restricted recreational zone area of restricted entrance for limited number of visitors;
 - Active recreational zone area of educational tourism for environmental education and acquaintance with remarkable places of interest in natural parks as well as for recreation:
 - Traditional nature management zone (terut sirder, ethnic territories) area of full forbiddance of industrial development, forbiddance or restriction of traffic, permittance of natural resources utilization in forms assuring protection of native

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habitats of indigenous peoples and preservation of their traditional way of life;

- Zone of artificial keeping and breeding of rare and extinct animal species;
- Protected historical or archaeological zone.
- 3. Natural parks are specially protected natural territories of republican value under the jurisdiction of a specially authorized executive body of the Sakha Republic (Yakutia) acting in the sphere of environmental protection.
- 4. Establishment of a natural park is accompanied by, in coordination with the Government of the Russian Federation, partial withdrawal of land and water areas, subsurface and biological resources from economical activity, excluding the lands of traditional nature management zone (ethnic territories, terut sirder).
- 5. Privity in the sphere of utilization, protection, organization, and functioning of a natural park is governed by civil legislation unless otherwise stated by the Federal Law "On Specially Protected Natural Territories".
- 6. Withdrawal or other termination of rights on land and other natural resources included into the natural park are prohibited.
- 7. Regime of land utilization in traditional nature management zones within the natural park is defined in the regulations of natural parks approved by a specially authorized executive body of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection.
- 8. To ensure research activities in the sphere of environmental protection, natural parks can be provided with biological stations as parts of the former.
- 9. Particular features, zonation, and regime of each natural park are defined in the regulations of the natural park approved by a specially authorized executive body of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection.

Article 8. Resource Reserves (Erkeeiy Sirder)

- 1. Resource reserves are established for the purpose of:
 - preservation of natural resources of the particular territory for future generations through preclusion and restrain of economical activity on the scientific basis;
 - provision of conditions necessary for protection of species, their populations, and species groups or physical objects of environment;
 - preservation of natural habitat of indigenous peoples of the North and provision of optimal conditions for natural development of their cultures, preservation of traditional forms of economic activity and way of life, for environmental education of the peoples.

- 2. Resource reserves comprise a zone or a combination of the following zones:
 - absolute rest zone (tyytyllybat sirder) area of full forbiddance of all types of all types of human activities;
 - sacred lands (ytyk sirder);
 - zone of licensed withdrawal of biological resources;
 - zone of seasonal withdrawal of natural resources;
 - zone of traditional nature management.
- 3. Resource reserves can be both of republican and local value.
- 4. Proclamation of territories as resource reserves is allowed both with and without withdrawal of land, water, and other resources.
- 5. Economic relations with landowners located on resource reserves territories are made on the contract basis with a specially authorized executive body of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection.
- 6. Particular features, zonation, and regime of each resource reserve are defined in the regulations of the natural park approved by a specially authorized executive body of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection.

Article 9. Protected landscapes (uluu tuelbeler)

- 1. As protected landscapes are proclaimed the areas of land and water surface with the purpose of preservation of natural landscapes (river valleys, alases, lakes, forestlands, mountains) considered by aborigine population sacred and featured by harmonious interrelations of man and earth, as well as of providing possibilities for their wide usage for tourism and recreational purposes with regulated economic activity on their territories.
- 2. Protected landscapes are combined anthropogenic landscapes of high aesthetic and economical value. Proclamation of objects as protected landscapes is made without withdrawal of land, water, and other resources.
- 3. Particular features, zonation, and regime of each protected landscape are defined in the regulations of the natural park approved by a specially authorized executive body of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection.

Article 10. Natural monuments (aiylha menelere)

- 1. Natural monuments are rare or unique natural objects of environmental, scientific, historical, and cultural value.
- 2. Natural monuments occupy relatively small areas.

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- 3. Natural monuments and their territories are passed for protection to persons under the jurisdiction of which they are delivered, completion of writ of protection, passport, and other documents are carried out by a specially authorized executive body of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection.
- 4. Proclamation of natural complexes and objects as natural monuments, as well as that of territories occupied by the former as the territories of natural monuments are allowed with or without retirement from owners and nominees of land and other locations occupied by the latter.
- 5. Necessity of land retirement or water withdrawal used for state needs, proclamation of natural complexes and objects as natural monuments, as well as that of territories occupied by the former as the territories of natural monuments are defined in accordance with acting legislature.
- 6. Objectives and functioning of specially protected natural territories, special regime of their protection, and order of utilization of natural resources are defined in the model regulations approved by the Government of the Republic of Sakha (Yakutia).

Article 11. Botanical gardens

- 1. Botanical gardens are environmental institutions aimed at creation of special plant collections with the purpose of preserving variety and enriching flora, as well as carrying out scientific, instructional, and educational activities.
- 2. On the territories of botanical gardens any activity is forbidden that is not connected with fulfillment of their tasks and can damage flora objects safety.
- 3. Botanical gardens territories can be subdivided into various functional zones, including:
 - exposition attended with permission granted in the order determined by management of botanical gardens;
 - scientific experimental attended only by research officers of botanical gardens as well as experts of other research institutions.
- 4. Objectives, scientific profile, characteristics of legal status, organizational arrangement, characteristics of regime of special protection of specific botanical gardens are defined in the regulations of botanical gardens approved by the Government of the Republic of Sakha (Yakutia).
- 5. Financing of botanical gardens is provided at the expense of budgetary funds of the state budget of the Republic of Sakha (Yakutia).
- 6. Financial assets of botanical gardens they can command in an established order are formed by incoming financial resources received by botanical gardens:

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- as reparation of damages caused in result of physical persons and legal entities activities;
- from recreational, advertising services, publishing, and other activities non-discordant with tasks incumbent on them;
- gratis aid of physical persons and legal entities, including foreign citizens and international organizations.

Article 12. Sacral natural objects

- 1. Sacral natural objects are esteemed by the people landscape elements (trees, brooks, rocks, hills, and others) being places of worship, rites, and consentaneously elements of ethnic cultural heritage meaningful as special places uniting humans and nature.
- 2. On the territories of sacred natural objects excavations, collectors construction, sampling, and any other interferences resulting in disturbance of original state of natural objects or their territories, accompanying research works on historical, archaeological, paleontologic or other monuments (objects) of scientific interest are forbidden.
- 3. Protection of sacral natural objects is carried out with full consent and support of the people preserving traditions of worshipping the objects and keeping to the corresponding traditions.

Article 13. Competence of Public Authorities of the Republic of Sakha (Yakutia) and Local Authorities in the Sphere of Administration of Specially Protected Natural Territories

- 1. Competence of the Government of the Republic of Sakha (Yakutia) comprises:
- 1) establishment of general provisions in administration of relations of possession, usage, and disposition of the republican system of specially protected natural territories (ytyk kere sirder);
- 2) elaboration, development, and approval of republican statutory acts on protected territories; approval of plans of development of the republican system of specially protected natural territories; taking decisions on establishment of specially protected natural territories of regional value;
- 3) delimitation, in agreement with the corresponding executive authorities, of the borders of territories with special regime of protected territory in places of residence and economical activity of indigenous peoples and ethnic groups;
- 4) composition, in cooperation with executive authorities concerned, approval and realization of republican programs on protection, reproduction, restoration, and conservation of biological resources in association with other nature-conservative measures; approval of republican integrated specific-purpose programs in the sphere of protection, financing, and material support;
- 5) approval of statutory acts on utilization of biological resources, excluding animal

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and plant objects liable to protection, regulation, utilization, and control provided by federal executive authorities acting in the sphere of animal life protection;

- 6) coordination of activities of republican authorities, legal entities, and physical persons in the sphere of protection and utilization of specially protected territories objects;
- 7) approval of model regulations of and statutory acts on protected territories;
- 8) taking decisions on establishment of territories of traditional nature management of indigenous peoples of the North of regional value.
- 2. Competence of the specially authorized executive authority of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection comprises:
- 1) elaboration and development of statutory acts on specially protected natural territories;
- 2) coordination with local authorities of the borders of specially protected natural territories;
- 3) approval of regulations of a specific specially protected territory;
- 4) composition and realization, in cooperation with scientific research and other institutions, of the programs on protection, reproduction, restoration, and conservation of biological resources in association with other nature-conservative measures;
- 5) approval of technical and economic assessments, feasibility and ecological studies of the projects of specially protected natural territories;
- 6) examination and approval of the chronicle of nature;
- 7) organization of protection, financing, and material support of specially protected natural territories;
- 8) construction of manufacturing and administration objects of specially protected natural territories at the expense of capital investments and self-financing;
- 9) control over legal entities locating within specially protected natural territories;
- 10) popularization of protection and conservation of specially protected natural territories and education of the population in this field;
- 11) organization of advanced training courses for government comptrollers of specially protected natural territories;
- 12) calculation and evaluation of conditions of specially protected natural territories;
- 13) organization and realization of cadastre and monitoring of specially protected natural territories;
- 14) coordination of research subjects on of specially protected natural territories;
- 15) regulation of quantity and distribution of biological resources of specially protected natural territories, excluding fauna and flora objects liable to liable to protection, regulation, utilization, and control provided by federal executive authorities acting in the sphere of animal life protection;
- 16) issue of permanent and single permissions for entering specially protected natural territories to persons licensed to utilization fauna attributed to hunting and fishery objects;
- 17) regulation and administration of pass regime for vehicles;
- 18) elaboration and approval of lists of officials of bodies responsible for environmental control over specially protected natural territories of republican and local value.

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Article 14. Features of Legal Status of Natural Parks (aan aiylgylar)

- 1. Natural parks possess the status of legal entities which does not have profit earning among their aims, thus being non-commercial entities established in the form of nature conservative institutions financed by state budgetary funds of the Republic of Sakha (Yakutia).
- 2. Financial assets of natural parks they can command in an established order are formed by incoming financial resources received by botanical gardens:
 - as reparation of damages caused in result of physical persons and legal entities activities;
 - from recreational, advertising services, publishing, and other activities non-discordant with tasks incumbent on them;

gratis aid of physical persons and legal entities, including foreign citizens and international organizations.

- 3. Production of graphic, printed matter, souvenirs, and other replicated products as well as consumer goods bearing images of natural and historical cultural complexes and objects located within the territories of natural parks as well as their designated names are carried out with permission of natural parks directorate on payment basis determined according to established order.
- 4. Natural parks can initiate and participate in funds, associations, and other institutions favoring development of specially protected natural territories.
- 5. Matters of socio-economic activities of economical entities as well as plans of development and improvement of settlements located within the territories of natural parks are coordinated with the corresponding natural parks.

Article 15. Procedure of Utilization of Resources of the Republican System of Specially Protected Natural Territories (Ytyk Kere Sirder)

- 1. Within the objects of the republican system of specially protected natural territories (ytyk kere sirder) any kind of activity is permanently or temporarily prohibited that does not comply with its goals and tasks and damage environment.
- 2. Depending on established regime of the territories of the objects of the republican system of specially protected natural territories (ytyk kere sirder), scientific, cultural, educational, and health-improving activities as well as traditional economic activities, can be allowed.

- 3. Regime of special protection presumes entire or partial land retirement and withdrawal of adjacent water and air areas as well as subsurface mineral resources.
- 4. Organization of activities in the sphere of controlled environmental tourism and recreation within the territories of the objects of the republican system of specially protected natural territories (ytyk kere sirder) is carried out in accordance with approved programs of environmental tourism development within specially protected territories with permission of administrative bodies of natural parks or a specially authorized executive body of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection in concord with the purposes of specially protected territories without damaging natural complexes and objects of historical and cultural heritage.
- 5. Procedure of usage of resource reserves is determined by the present Law and a specially authorized executive body of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection.
- 6. Procedure of usage of specially protected natural territories of local value is determined by local authorities in accordance with nature conservative legislature.
- 7. Within specially protected natural territories
 - mineral reserves development;
 - hydraulic engineering and melioration;
 - employment of pesticides and fertilizer;
 - final harvesting;
 - construction and deployment of industrial objects, high-voltage transmission lines, trunk pipelines, and motor road;
 - commercial fishery, commercial production of meat and fur of wild animals, are entirely forbidden.
- 8. In zones of traditional nature management of specially protected natural territories utilization of natural resources in forms providing for protection of native habitats of indigenous peoples of the North of the Republic of Sakha (Yakutia) and preservation of their traditional way of life.
- 9. Other activities associated with utilization of resources is ruled by regulations and regimes of protection of particular specially protected territories approved by a specially authorized executive body of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection.

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Chapter Three. ORGANIZATION OF STATE ECOLOGICAL CONTROL AND PROTECTION OF SPECIALLY PROTECTED NATURAL TERRITORIES OF REPUBLICAN AND LOCAL VALUES

Article 16. Protection of Natural Complexes and Objects. State Ecological Control Over Specially Protected Natural Territories of Republican and Local Values

- 1. Protection of natural complexes and objects as well as state ecological control over specially protected natural territories of republican value are exercised by state controllers of specially protected natural territories of a specially authorized executive body of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection and ecological security.
- 2. Protection of natural complexes and objects within specially protected natural territories of local value is exercised by local authorities.
- 3. State ecological control over specially protected natural territories of local value is exercised by state controllers of specially protected natural territories of a specially authorized executive body of the Republic of Sakha (Yakutia) acting in the sphere of environmental protection and ecological security.
- 4. Within the corresponding specially protected natural territories of republican and local values state controllers of specially protected natural territories have the power of state nature conservation controllers of the Republic of Sakha (Yakutia) conditioned by the legislature of the Russian Federation and the Republic of Sakha (Yakutia).
- 5. Protection of natural complexes and objects within specially protected natural territories of republican and local values can be carried out by law-enforcement agencies and voluntary nature conservation controllers.

Article 17. Legal Authority of State Controllers of Specially Protected Natural Territories

- 1. State controllers of specially protected natural territories have the right to:
- 1) check visitatorial power of the persons within specially protected natural territories;
- 2) check the documents affirming the right of nature management and other activities within specially protected natural territories;
- 3) detain, within specially protected natural territories, those violating the laws of the Russian Federation and the Republic of Sakha (Yakutia) on specially protected natural territories and convey violators to law-enforcement agencies;
- 4) draw up statements of the case and pass decisions in cases of administrative violation in the sphere of protection of specially protected natural territories;
- 5) draw up and send in to state bodies of respective authority reports on violation of nature conservation laws presuming administrative and criminal responsibility;

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- 6) take, in the sphere of their authority, appropriate measures to provide for administrative proceedings;
- 7) have unimpeded access to any objects located within specially protected natural territories in order to check compliance with the legislature of the Russian Federation and the Republic of Sakha (Yakutia) on specially protected natural territories.
- 2. State controllers of specially protected natural territories also have the right to:
- 1) prohibit, by court decision, any economical and other activities non-compliant with the established regime of specially protected natural territories;
- 2) impose administrative penalties for violation of the legislature of the Russian Federation and the Republic of Sakha (Yakutia) on specially protected natural territories;
- 3) advance claims to physical persons and legal entities on recovery of damages caused to natural complexes and objects of specially protected natural territories by violation of the established regime of specially protected natural territories.
- 3. State controllers on protection of specially protected natural territories have, in the course of duty, the right to employ special means (handcuffs, rubber batons, tear-gas, war-dogs etc.) in the following cases:
- 1) to repulse an attack over officials and citizens in the course of their service or civil duty of protection of environment, natural and historical heritage;
- 2) to repulse an attack over buildings, constructions, facilities, and vehicles belonging to specially protected natural territories and their officials;
- 3) to detent offenders, convey them to law-enforcement agencies or other office premises, in case of their disobedience or resistance, if there is good reason to expect their escape or harm to those around or themselves;
- 4) to stop a vehicle the driver of which did not comply with the order to stop made by a state controller.
- 4. State controllers of specially protected natural territories in the course of discharge of their official duties imposed by the present Law, can bear fire-arms.

Procedure of purchasing, keeping custody, and use of fire-arms are regulated by the laws of the Russian Federation.

- 5. State controllers of specially protected natural territories are provided with means of personal defense.
- 6. State controllers of specially protected natural territories are liable to obligatory state insurance in accordance with the laws of the Russian Federation.

Chapter Four. RESPONSIBILITY FOR VIOLATION OF REGIME OF SPECIAL-LY PROTECTED NATURAL TERRITORIES

Article 18. Responsibility for Violation of Regime of Specially Protected Natural Territories

1. Violation of established regime or other rules of protection and utilization of environment and natural resources within specially protected natural territories and their protection zones implies legal liability as stated by federal laws, laws of the Republic of Sakha (Yakutia) and other statutory acts in the sphere of environmental protection and legal regulation of specially protected natural territories.

Article 19. Reparation of Damages

Damages caused to natural objects and complexes within specially protected natural territories is liable to indemnity in accordance with tariffs and computational procedures of reimbursement legally stated by the laws of the Russian Federation and in the absence of the former, at the rate of actual expenses for compensation

Chapter Five. INTERNATIONAL COOPERATION IN THE SPHERE OF SPE-CIALLY PROTECTED NATURAL TERRITORIES

Article 20. Participation in International Cooperation in the Sphere of Specially Protected Natural Territories

The Republic of Sakha (Yakutia) participates in activities of international organizations in the sphere of specially protected natural territories, in preparation and holding international conferences, in elaboration and realization of international environmental programs, in exchange of experts delegations in the sphere of specially protected natural territories, in compliance with procedures of coordination with federal bodies (in the frame of authority of the subjects of the Russian Federation).

Chapter Six. CONCLUSIVE PROVISIONS

Article 21. Law Effectiveness

The present law takes effect from the official issue date.

Article 22. Correspondence of Statutory Acts of the Republic of Sakha (Yakutia) with the Present Law and Federal Legislature

- 1. From the effective date of the present Law the Law of the Republic of Sakha (Yakutia) of May 6, 1996 No.113-1 "On Specially Protected Natural Territories in the Republic of Sakha (Yakutia)" becomes invalid and not applicable in the territory of the Republic of Sakha (Yakutia).
- 2. State bodies of the Republic of Sakha (Yakutia) and local authorities are liable to bring their statutory acts to conformity with the present Law.

City of Yakutsk December 25, 2003 105-3 No.213-III President, Republic of Sakha (Yakutia) V. Shtyrov

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GOVERNMENT OF THE REPUBLIC OF SAKHA (YAKUTIA) RESOLUTION of February 10, 1995 N 39

ON ESTABLISHMENT OF THE NATIONAL LENA PILLARS NATURE PARK ON THE TERRITORIES OF KHANGALASSKY AND OLEKMINSKY ULUSES

The unique nature complexes of the Middle Lena river constitute national patrimony and pride of our Republic.

Picturesque rocks "Lena Pillars", site of ancient people "Diryng-Yuryakh", tukulans, rich flora and fauna of the Lena-Buotama interfluve, amazingly beautiful landscapes of the Sinyaya river present special ecological, historical and aesthetic value.

Wild unorganized tourism, barbarous attitude towards unique nature objects of outstanding scientific and historical value, uncontrolled use of nature resources, numerous forest fires deteriorate ecological state of the Lena Pillars and raise public awareness.

In order to provide protection and rational management of the Lena Pillars natural complexes being of outstanding cultural, aesthetic, scientific and educational value in the name of present and future generations, revival of traditional trades, in pursuance of Decree of the President of the Republic of Sakha (Yakutia) of 16.08.1994 N 837 the Government of the Republic of Sakha (Yakutia) here resolves:

- 1. To establish the National Lena Pillars Nature Park on the territories of Khangalassky and Olekminsky Uluses including the two sites: "Pillars" and "Sinsky" and the buffer zone.
- 2. To approve Regulatory Statute on the National Lena Pillars Nature Park and its buffer zone (Annexes NN 1-4).
- 3. Ministry of Nature Protection (Alexeev), administration of the Khangalassky Ulus to complete the National Lena Pillars Nature Park with the staff, transport and inventory.
- 4. To exempt the National Lena Pillars Nature Park from all types of federal and local taxes and duties.
- 5. State committee for science and technology (Kuzmin) to provide funding of research and development of the National Lena Pillars Nature Park in the establishment period.

- 6. Public Assets Management Funds (Fedorova) to transfer recreation center in Verkhy Bestyakh village of the Khangalassky Ulus from the balance of the State National Television and Radio Broadcasting Company to the balance of the established Park.
- 7. Ministry of Finance (Ptitsyn) to provide operation and maintenance of facilities costs for the National Lena Pillars Nature Park in the limits of budget appropriations, allotted to the Ministry of Nature Protection for 1995.
- 8. State committee for economy (Burnashov) to provide capital investment for supplying production facilities of the National Park total 600 million rubles.
- 9. To impose control for realization of the present Resolution on Ministry of Nature Protection (Alexeev).

Chairman of the Government of the Republic of Sakha (Yakutia) Yu. KAIDYSHEV

GOVERNMENT OF THE REPUBLIC OF SAKHA (YAKUTIA)

RESOLUTION Of November 6, 2006 N 495

ON RENAME OF NATIONAL NATURE PARKS INTO NATURE PARKS OF THE REPUBLIC OF SAKHA (YAKUTIA) AND APPROVAL OF THE STANDARD STAT-UTE OF A NATURE
PARK OF THE REPUBLIC OF SAKHA (YAKUTIA)

With a view to bring regulatory legal acts of the Republic of Sakha (Yakutia) regarding specially protected nature areas to conformity with the Federal Law of December 29, 2004 N 199-FL, in pursuance of clause 3 of the Resolution of Government of the Republic of Sakha (Yakutia) of September 28, 2003 N 615 "On bringing of regulatory legal acts of the Government of the Republic of Sakha (Yakutia) to conformity with the federal legislation", the Government of the Republic of Sakha (Yakutia) here resolves:

1. To rename the following National Nature Parks of the Republic of Sakha (Yakutia) into Nature Parks of the Republic of Sakha (Yakutia):

The National Lena Pillars Nature Park in Khangalassky and Olekminsky Uluses established in accordance with the Resolution of Government of the Republic of Sakha (Yakutia) of February 10, 1995 N 39 "On establishment of the National Lena Pillars Nature Park on the territories of Khangalassky and Olekminsky Uluses";

National Nature Park "Sinyaya" in Gorny Ulus, established in accordance with the resolution of Government of the Republic of Sakha (Yakutia) of August 12, 1996 N 337 "On establishment of the National Nature Park "Sinyaya" in Gorny Ulus and Resource Reserves "Kytalyk" in Allaikhovsky and "Lena-Delta" in Bulunsky Uluses";

National Nature Park "Ust-Vilyuisky" in Kobyaisky Ulus, established in accordance with the resolution of Government of the Republic of Sakha (Yakutia) of May 15, 1997 N 196, in consequence of reorganization of the Reserve (zakaznik) of the same name;

National Nature Park "Momsky" in Momsky Ulus, established in accordance with the resolution of Government of the Republic of Sakha (Yakutia) of June 18, 1996 N 260 " On establishment of the National Nature Park (Aan Aiylga) "Momsky" and Resource Reserve (Erkeeiy Sir) "Eseliakh" in Momsky Ulus";

National Nature Park "Kolyma" in Srednekolymsky Ulus established in accordance with resolution of the Government of Republic of Sakha (Yakutia) of July 11, 2000

N 371 "On establishment of the National Nature Park "Kolyma" in Srednekolymsky Ulus, Resource Reserves "Allakit", "Bur" in Oleneksky, "Vilyuisky", "Chonsky" in Mirninsky, "Kiupsky" in Ust-Maisky, "Tyukian", "Syugdzher", "Eedieen" in Nyurbinsky, "Ergedzhey" in Lensky, and "Kharyialaakh" in Vilyuisky Ulus".

- 2. To provide funding of costs for rename of National Nature Parks into Nature Parks of the Republic of Sakha (Yakutia) as equity financing of the Nature Parks.
- 3. To approve the Standard Statute of a Nature Park of the Republic of Sakha (Yakutia) according with the Annex to the present Resolution.
- 4. Ministry of Nature Protection of the Republic of Sakha (Yakutia) (V.A. Grigoriev) by December 31, 2006:
 - to work out corresponding Regulation Statutes for the renamed Nature Parks of the Republic of Sakha (Yakutia) in accordance with the supplied Standart Statute and to submit them for approval of Ministry of Property Relations of the Republic of Sakha (Yakutia);
 - to make alterations into the State Cadastre of specially protected nature areas of the Republic of Sakha (Yakutia) due to rename of National Nature Parks into Nature Parks of the Republic of Sakha (Yakutia);
 - to realize measures for state registration of changes regarding information of legal entities.
- 5. Ministry of Property Relations of the Republic of Sakha (Yakutia) (G.M. Makarova) to include lands of the established specially protected nature areas of regional importance into the List of estates of the Republic of Sakha (Yakutia) subject to property rights.
- 6. To impose control for realization of the present Resolution on the Deputy Chairman of the Government of the Republic of Sakha (Yakutia) D.F. Naumov.

Chairman of the Government of the Republic of Sakha (Yakutia) E. BORISOV

STATUTE

of the State Enterprise

Nature Park (Aan Aiylgyly) "Lena Pillars"

of Sakha Republic (Yakutia)

The present Statute settles procedures of establishment and activities of the Nature Park (Aan Aiylgyly) on the territory of the Sakha Republic (Yakutia) and is composed on the basis of the Civil Code of the Russian Federation, the Law of the Russian Federation of March 14, 1995 No.33-Φ3 "On Specially Protected Natural Territories" (ed. of December 29, 2004) and the Law of Sakha Republic (Yakutia) of December 25, 2003 No.214-III "On Specially Protected Natural Territories of Sakha Republic (Yakutia)".

1. GENERAL PROVISIONS

- 1.1. The State Enterprise "Nature Park (Aan Aiylgyly) Lena Pillars of Sakha Republic (Yakutia)" was set up by the Decree of the President of Sakha Republic (Yakutia) of August 16, 1994 No.837 "On Measures For Development of Specially Protected Natural Territories" and by the Regulation of the Government of Sakha Republic (Yakutia) of February 10, 1995 No.39 "On Organization of the 'Lena Pillars' National Nature Park On the Territory of Khangalasskii and Olekminskii Uluses".
- 1.2. The State Enterprise "Nature Park (Aan Aiylgyly) Lena Pillars of Sakha Republic (Yakutia)" (hereinafter referred to as Nature Park) is a state-operated nature conservation recreation agency established by the Government of Sakha Republic (Yakutia) represented by the Ministry for Privity Sakha Republic (Yakutia).

The Nature Park comprises natural territories and complexes specially protected either by law or customs of indigenous peoples of the North, including both typical and rare landscapes of environmental and moral educational value, habitat of wild plant and animal communities, places of organized rest and recreation, of customs and traditional beliefs of indigenous peoples of the North, of environmental tourism and excursions contributing to ecological education of the people.

1.3. The Nature Park is situated on the territory of Khangalasskii and Olekminskii districts and consists of two isolated areas, of which "Sinskii" is located on the left bank of the Lena river upstream the mouth of the Siniaia river, and the main area of the Park territory is located on the right bank of the Lena river following the border of Khangalasskii district including the part of Olekminskii district along the watershed of the Buotama river.

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The territory of the Nature Park includes, as its organization departments, the natural relics and monuments (Lena, Buotama, and Siniaia Pillars), historical and cultural sites, archaeological and paleontological objects (Diring Yuriakh archaeological site, places of sacrifices, and old rock paintings "pisanitsy").

- 1.4. The Nature Park is a non-profit institution organized in the form of a state nature conservation agency financed at the expense of the state budget of Sakha Republic (Yakutia) and other sources. The Nature Park has its independent balance, an official seal with the National Emblem of Sakha Republic (Yakutia) and the Nature Park designation, a personal account opened at the Department of the Republican Treasury, fiscal boards of the Ministry of Finance of Sakha Republic (Yakutia), as well as a currency account in banking establishments.
- 1.5. The Nature Park acts on the basis of the Statute approved by the Ministry for Privity of Sakha Republic (Yakutia) and agreed with the Ministry for Nature Protection of Sakha Republic (Yakutia).
- 1.6. The Nature Park has the right to stand as claimant and defendant in court and arbitrage, to exercise all rights and bear all responsibilities vested in legal entities.
- 1.7. The property of the Nature Park is the state property of Sakha Republic (Yakutia) and is formed by transferred budgetary funds and other sources permitted by the legislation of the Russian Federation and Sakha Republic (Yakutia), that property assigned to the Nature Park by the right of operational management.
- 1.8. The territory of the Nature Park occupies the land granted to it for perpetual tenure, in some cases, the land of other users and owners.
- 1.9. Withdrawal and other termination of rights on land and other natural resources located within the territory of the Nature Park are prohibited.
- 1.10. In some cases ground areas of other users and owners can be situated within the borders of the Nature Park.
- 1.11. Land owners, land proprietors, and land users located within the territory of the Nature Park are required to obey to special protection regime established in the Nature Park and liable to administrative, criminal and other responsibility for its violation.
- 1.12. The territory of the Nature Park is taken into account at composing territorial integrated plans, land management patterns, and at district planning.
- 1.13. Matters of socioeconomic activities of legal entities and physical bodies as well as other economic entities acting within the territory of the Nature Park, development and improvement plans and designs of townships and settlements are coordinated with the Nature Park directorate.

- 1.14. Decision on establishment of the Nature Park is taken by the Government of Sakha Republic (Yakutia) at the proposition of federal executive bodies acting in the sphere of environmental protection.
- 1.15. The full official name of the Nature Park:
- in Russian "Государственное учреждение «Природный парк (Аан Айылгы) «Ленские Столбы» Республики Саха (Якутия)»;
- shortened ГУ «ПП «Ленские Столбы» $PC(\mathfrak{A})$ »;"
- in English: The State Enterprise "Nature Park 'Lena Pillars' of Sakha Republic (Yakutia)";
- in Yakut: Судаарыстыбаннай учреждение «Аан Айылгы «Олуонэ туруук Хайалара»».
- 1.16. Legal address: 56 Ordzhonikidze Street, Pokrovsk, Khangalasskii District (Ulus), 678000 Sakha Republic (Yakutia), Russian Federation.
- 2. goals and objectives, subject AND kinds of activity of the Nature Park
- 2.1. The Nature Park is established in the aim of preservation of reference and unique sites of natural, historical, and cultural complexes and objects economically and historically valuable by virtue of favorable combination of various elements of natural landscapes and with the goal of their utilization in recreational, educational, scientific, and cultural purposes.
- 2.2. Major tasks of the Nature Park include:
- 2.2.1. Maintenance of the natural state of protected natural complexes and preservation of biological diversity.
- 2.2.2. Revival and development of traditional economies of the local population.
- 2.2.3. Preservation of reference and unique natural complexes and objects, monuments of nature, history, and culture as well as other objects of cultural heritage.
- 2.2.4. Arrangement of conditions for controlled tourism and organized rest in natural conditions.
- 2.2.5. Environmental monitoring.
- 2.2.6. Scientific research.
- 2.2.7. Restoration of damaged natural and historical cultural complexes.
- 2.2.8. Arrangement of environmental education of the population.

- 2.3. Subject and kinds of activity of the Nature Park:
- 2.3.1. Securing protection of assigned territories together with existing natural and historical-cultural objects.
- 2.3.2. Creating conditions for all kinds of controlled tourism, excursion services and public recreation, for learning the Park's natural environment, its cultural and historical monuments.
- 2.3.3. Preservation (restoration) of natural complexes as places of traditional economic activities of the local population.
- 2.3.4. Information, advertising, and publishing activities aimed at publishing scientific and popular literature covering all spheres of the enterprise's activity (scientific works, guidebooks, information bulletins, reference books, pamphlets, booklets on excursions and lectures, commemorative booklets, postcards, posters, photo albums etc.).
- 2.3.5. Recovery of nature of the territories involved in economic activities with economically and culturally valuable plant and animal species, ensuring contribution to the system of regional monitoring to maintain general ecological optimum in the region.
- 2.3.6. Keeping and breeding wild animals within the zone of artificial keeping and breeding of rare and endangered animal species.
- 2.3.7. Environmental education and training, organization of open-air museums and expositions, creation and equipment of excursion paths and routes; organization of environmental associations and centers; organization of educational and practical training for students of institutions of higher and specialized secondary education of respective professions; coverage of the Nature Park activities in mass media; other forms and methods of socio-environmental education and popularization of environmental knowledge.
- 2.3.8. The Nature Park can act as a hunting resources user.
- 2.3.9. Realization of business (commerce, trade, intermediate trade, public services) and other kinds of industrial and economic activity unrepugnant to the legislation of the Russian Federation and Sakha Republic (Yakutia) as well as to the present Statute, independently or through purposefully organized small subsidiary enterprises, farms, workshops, sales outlets; manufacture of various kinds of agricultural and hunting products:

manufacture and sale of souvenirs, foodstuff trade, selling of board lumber, firewood after sanitary felling etc;

strictly limited gathering of timber and technical raw of vegetable and animal origin within restricted and active recreational zones and the zone of traditional nature management;

wild and cultured berries and mushrooms gathering within the zone of traditional nature management;

participation in construction, repair, and restoration.

2.3.10. Paid services to individuals and legal entities:

excursions and tourist services within restricted and active recreational zones and in sacred places;

hiring-out of equipment and implements;

transportation services;

amateur hunting and fishing by agreement with the directorate of the Nature Park within the active recreational and traditional nature management zones.

3. PROPERTY AND ASSETS OF THE NATURE PARK

- 3.1. Property of the Nature Park is accounted on an independent balance and includes key assets and floating funds necessary for implementation goals and tasks of the Nature Park in accordance with the present Statute.
- 3.2. In accordance with the established order, the Nature Park disposes of the property and assets formed on account of:

budget and non-budget funds;

property transferred by an owner or authorized institution;

credits from banks and other lenders by consent of an owner;

capital investments and budget grants;

reparation of damages caused by activities of individuals and legal entities;

recreational, advertizing, and publishing activities unrepugnant to functions and tasks of the Nature Park;

granting opportunities and/or direct participation of the Park in realization of research and educational programs beyond the scope of immediate interests and plans of the Nature Park;

sales of products, works, and services as well as other kinds of economical activity permitted to the Nature Park;

gratis aid of individuals and legal entities including foreign citizens and international agencies;

grants from foreign organizations;

other forms specified in the acting legislation.

- 3.3. The Nature Park has no right to alienate or in any other way dispose of its settled estate including land and property acquired by budget allowances.
- 3.4. Revenues collected from tourism, publishing, and independent economic activities permitted by the Statute of the Nature Park as well as property acquired by non-budget means are accounted in other personal accounts

opened at the departments of the Republican Treasury of the Ministry of Finance of Sakha Republic (Yakutia) and are assigned to the Nature Park by the right of operational management.

- 3.5. Penalties paid in administrative procedure for ecological infringements and recovered by decisions of public officers of the Nature Park come to the budget of Sakha Republic (Yakutia).
- 3.6. Production of graphic, printed matter, souvenirs, and other replicated products as well as consumer goods bearing images of natural and historical cultural complexes and objects located within the territory of the Natural Park as well as their designated names, cine and video filming are carried out on payment basis in agreement with the directorate of the Natural Park.
- 3.7. Exercising the right of operational management of its balanced property, the Nature Park:
- 3.7.1. Provides insurance of the state property of Sakha Republic (Yakutia) on balance of the Nature Park.
- 3.7.2. Provides safety and use according to its intended purpose of the property assigned to the Nature Park by the right of operational management.
- 3.7.3. Excludes deterioration of the technical state of the property assigned to the Nature Park by the right of operational management; this requirement does not cover deterioration caused by standard operation time of the property.
- 3.8. The Nature Park is liable to:
- 3.8.1. Bear responsibility, in compliance with the legislation of the Russian Federation and Sakha Republic (Yakutia), for breach of the contract, credit, payment, and tax obligations as well as of other rules of economic management.
- 3.8.2. Observe standards, norms, and rules of fire safety; comply with decisions of the state fire safety control authorities.

- 3.8.3. Carry out technical inventory (certification) of its real property.
- 3.8.4. Carry out operational accounting of the results of production, economic, and other activities, statistical and financial statements, report on the results of activities in accordance with the established procedures and terms assigned by the Ministry for Privity and the Ministry for Nature Protection of Sakha Republic (Yakutia) in the frame of acting legislations.

In case of misrepresentation of state reporting public officers of the Nature Park are liable to disciplinary, administrative, and criminal responsibility stated by the legislation of the Russian Federation.

3.9. Control and inspection over activities of the enterprise are carried out by the Ministry for Nature Protection of Sakha Republic (Yakutia) along with tax, nature protection, and other authorities vested by acting legislation and legislative acts of the Russian Federation and Sakha Republic (Yakutia) with the right to control state enterprises.

Control over the property assigned to the Nature Park by the right of operational management is carried out by the Ministry for Privity of Sakha Republic (Yakutia).

- 4. Nature Park Management
- 4.1. The Nature Park is in authority of the Ministry for Nature Protection of Sakha Republic (Yakutia) that exercises general guidance and coordination of the Nature Park activities.
- 4.2. The Nature Park is headed by a director appointed by the Minister for Nature Protection of the Sakha Republic (Yakutia).
- 4.3. The Director manages the Nature Park on the principle of undivided authority, bearing full responsibility for the Nature Park activities, providing for law observance, state discipline, and accomplishment of the tasks the Nature Park is entrusted with.
- 4.4. To consider the matters of scientific research, nature conservation, recreation, and education, Scientific and Technical Council can be affiliated with the directorate of the Nature Park. Structure and staff of the Scientific and Technical Council is approved by the Ministry for Nature Protection of Sakha Republic (Yakutia).
- 4.5. To solve the problems related to indigenous population, the Commission of the Nature Park can be affiliated with the directorate of the Nature Park. The commission comprises representatives of the local population, authorized members of the local nasleg (village), ulus (region) administration, of ulus (regional) Committee of the Ministry for Nature Protection of Sakha Republic (Yakutia) and invitees from scientific institutions superintending the Nature Park activities.
- 4.6. The commission has the prerogative of discussing the disputable matters of licensing, territorial zoning, formation of subsidiary transportation routes, necessity of uti-

lization of the natural resources by the local population over arranged rate, and other questions of the Nature Park activities if they affect interests of indigenous population. The Commission holds its meetings as may be necessary.

- 4.7. Decisions of the Commission are of recommendation character.
- 5. Regime of the Nature Park
- 5.1. Within the territory of the Nature Park the differentiated regime is established of security, protection, and utilization of natural resources with regard to local natural, historical, cultural, and social peculiarities.

Accordingly, the following zones can be defined within the territory of the Nature Park:

5.1.1. Reserved zone (tyytyllybat sirder) — area of full forbiddance of all types of economical and recreational activity except vehicular and pedestrian traffic of organized groups of tourists, resters, and members of Evenk tribal communities permitted to cross the protected territory by roads and pathways used for recreational and organized tourism purposes.

The territory on the right bank of the Lena River is divided to the following portions:

"Achchygyi Taryng — Ulakhan Tuoidakh"

A 6045-hectare site is situated on the right bank of the Lena River in the interfluve of Achchygyi Taryng and Ulakhan Tuoidakh rivers. Its northern border starts on the right bank of the Achchygyi Taryng river mouth at the lower talus line and goes eastward along the lower line of hillside waste to rock debris on the left bank of the Ulakhan Tuoidakh river mouth. The eastern border starts on the right bank of the Lena River at the Ulakhan Tuoidakh river mouth from rock debris on the left bank of the mentioned stream. Further, the border passes southward along the left bank upstream of the Ulakhan Tuoidakh river through points with true altitudes (subsequently referred to as altitudes) of 253, 300.7, and 369.1 m to 395.2 m altitude point. The southern border starts at 395.2 m altitude point and passes westward across the watershed crossing 427.7 m altitude point and comes to 385.9 m altitude point on the right bank of the Achchygyi Taryng river. The western border starts on the right bank of the Achchygyi Taryng river at 385.9 m altitude point and further goes downstream northward on the right bank of the Achchygyi Taryng river passing 390.5 and 295.6 m altitude points. Further, the border goes to the Achchygyi Taryng river mouth to the lower line of rock debris.

"Chys — Buotama river mouth"

A 65,720 hectare site is situated on the right bank of the Lena River from the Chys river mouth to the Buotama river mouth. Its northern border starts at the right bank of the Chys river mouth and goes generally eastward along the lower line of hillside waste and rock debris. Further it goes along the upper shoreline to the Buotama river mouth. The

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eastern border starts at the Buotama river mouth going further along the floodplain edge at the hill base southward to the river mouth end opposite the Byiyttakh river flowing on the right bank in the Buotama river. Then the border passes southward along the floodplain at the hill base upstream Buotama River to the Khary Khan River. The southern border starts at the point of the two rivers junction at the Chys river head, then follows upstream along the right bank of the stream flowing in the Chys river, to its headwaters. Further, going generally eastward, it follows along the line between Nos.74-102, 75-103, and 76-103 quarters. Then it goes along the left bank of the stream flowing in the Kuranakh river until its junction with the Kuranakh river further crossing the Kuranakh river coming at its right bank, going upstream towards its junction with a nameless stream. Going upstream along the right bank of the nameless stream the border comes to its headwaters. Further it goes eastward to the Kuranakh - Uettekh - Khangas Labyia rivers watershed and comes to headwaters of the stream flowing in the Khangas Labyia River. After that it passes along the left bank of the stream northeastward downstream to the stream junction with the Khangas Labyia River, crossing the riverbed and coming to the right bank. Further southeastward, it goes upstream Khangas Labyia river to its headwaters and along the line between No.81-110 quarters crosses the watershed to a nameless stream flowing in the Labyia River. Along the left bank of the nameless stream, it follows northward to the point of junction with the Ochchugui Iuriakh River. Along the right bank of the mentioned river it goes northeastward upstream reaching the point of junction with the Suordakh River. Along the right bank of the Suordakh River, it goes upstream to the point of the two streams junction (286.0 m altitude). Further, along the pathway marking the border between Nos.18-19 quarters, it crosses the watershed between the Suordakh and Kiuges Iuriue rivers and comes to the stream flowing in the Kiuges Iuriue River. Along the left bank of the stream, it comes to its junction with the Kiuges Iuriue river and along its left bank goes to crossing with the border of Nos.313-381 quarters at the point of junction with a nameless stream flowing in the Kiuges Iuriue river on the right bank. Then it goes to the right bank of Kiuges Iuriue River and northeastward to the watershed of Kiuges Iuriue - Khotu Dzhukaia Rivers. Further, it goes generally eastward along the watersheds of Kiuges Iuriue - Khotu Dzhukaia, Khonku Iuriue - Orto Dzhukaia, and Echita - Khakhannakh rivers, through 312.1, 310.5, 300.8, 313.4, 309.2, 303.3, and 305.6 m altitude points. From 305.6 m altitude it goes northeastward to headwaters of the stream flowing in the Khakhannakh Lake. Along the left bank of the stream it goes downstream to the Khakhannakh lake, rounding it at the left side and passing to headwaters of Ieree Biuteidiakh stream flowing in the Borulakh lake. Along the left bank of the Ieree Biuteidiakh river it goes to the Borulakh Lake, rounding it at the southern side and goes southeastward along the right bank of the stream flowing in Borulakh lake to the stream headwaters. Further the border crosses the watershed and goes downstream reaching the Bulgunniakhtakh river headwaters, then going downstream along the left bank of the mentioned stream to the junction of the two streams with the Bulgunniakhtakh river. Then it crosses the watershed of the Bulgunniakhtakh and Atyrdzhakh Khatyng rivers going to the left bank of the latter. Then it goes downstream the Atyrdzhakh Khatyng river to the junction of the stream with the Borokhu stream, passing to the left bank of the Borokhu river and southeastward upstream the Borokhu river to the point of junction with a nameless stream on the left bank at the border of No.331 and 333 quarters. Along the left bank of the nameless stream it goes northward

to the nameless stream headwaters. Then it goes along the watershed of the Borokhu - Diring Yuriakh – Daban Rivers and reaches 287.9 altitude. Then it turns southeastward reaching the watershed of the Kyrsagai - Kien Yuriakh at 282.3 m altitude point. Further the border passes eastward reaching the Khary Khan river headwaters and going along the left bank of the mentioned stream downstream the Buotama river.

The western border starts at the Chys river headwaters, going upstream along the right bank of the stream to the point of junction of two nameless streams at the Chys river headwaters.

The Sacred Place (Ytyk Sire) serving as a place of traditional folk rituals is situated in the Labyia river headwaters in the active recreational zone between portions of preservation zone.

5.1.3. Restricted recreational zone with restricted entrance of the limited number of visitors. The total area of the zone is 12657.7 hectares. The zone includes the following parts:

"Lena river bank" is situated on the right bank of the Lena River along the shore line from the Taryng Yuriakh River northeastward along the Lena river bank to the Buotama river mouth (8287.5 hectares).

"Echita river – Buotama river road" starts on the right bank of the Lena river at the point where the road to the Buotama river begins, then follows the road across the watershed of the Lena and Buotama rivers to the point where the road reaches the left bank of the Buotama river in the Men'shikovo locality (210 hectares).

"Oddokun river – Buotama river road" starts at the Oddokun river mouth on the right bank of the Lena river, then follows the road across the watershed of the Lena and Buotama rivers to the point where the road reaches the left bank of the Buotama river in the Sanga Kiuel' locality (340 hectares).

"Bysyt Yuriakh river road" starts at the junction of two rivers at the Bysyt Iuriakh river headwaters, and then goes along the road downstream to the Bysyt Iuriakh river headwaters (30 hectares).

"Buotama river mouth – Tukulan road" starts at the point where the road reaches the floodplain part of the Buotama river mouth, then goes along the road southwestward to sandy (tukulans) (65 hectares).

"Buotama River" starts at the Del'berge river mouth on the left bank of the Buotama River, then goes along the floodplain part of the Buotama River downstream to the Byiyttakh river mouth (3,725 hectares).

"Siniaia River" starts at the northern border of the Siniaia part of the Nature Park on Siniaia River. Then it goes along the floodplain part of the mentioned river along its left and right banks, downstream to the southern border the Siniaia part at the point

where the tractor road reaches the left bank of the Siniaia river. The part includes a winter road passing from the western border of Siniaia part of the Nature Park at the watershed of the Billiakh and Siniaia rivers, then passing along the road to Siniaia river and further along the road across "Eiim" locality on the Siniaia river and along the bank of the mentioned river to the northern border of Siniaia part of the Nature Park (2,885 hectares).

5.1.4. Active recreational zone — area of educational tourism for environmental education and acquaintance with remarkable places of interest in Nature Parks as well as for recreation. The total area of the zone is 1,368 hectares. It includes the following parts:

"Kuranakh River" is situated on the right bank of the Lena River including the floodplain part from the Kuranakh river mouth to the Uettiakh river mouth (237.5 hectares total area). The northern border starts on the left bank of the Kuranakh River and follows the lower shoreline eastward to the Uettiakh river mouth. The southern border starts on the left bank of the Kuranakh River and follows the lower hillside waste and rock debris line eastward to the Uettiakh river mouth.

"Labyia river" is situated on the right bank of the Lena river at the Labyia river mouth in 1 km distance to the left and right of the Labyia river mouth along the shoreline limited by the lower shoreline and lower rocks (30 hectares total area). It also includes tourist routes located in the Labyia river valley.

"Buotama river mouth" is situated near the mouth in the Buotama river floodplain (762.5 hectares total area). The northern border starts at the eastern end of sand taluses on the right bank of the Lena River at the Buotama river mouth, and then goes northeastward along the shoreline to the Buotama river mouth. Then, crossing the moth part of the Buotama River, it goes eastward to the Kachikattsy branch mouth. Further, it goes southeastward rounding the Tit Kuturuga and along the Nature Park border reching the shore. The eastern border starts at the border of the Nature Park at the point where it reaches the right bank, further going southwestward along the edge of the floodplain part at the hill base to the Atakh Yuriakh river mouth. Then it goes along the shoreline to the Byiyttakh river mouth. The southern border starts at the Byiyttakh river mouth on the right bank of the Buotama river, crossing the Buotama river westward goes to the left bank of the mentioned river and reaches the hill base over the floodplain part. The western border starts at the western top of the sand talus line at the Buotama river mouth and follows southward along the top of the elevation at the Buotama river mouth and follows southward along the top of the elevation over the mouth floodplain of the Buotama River along the road to tukulan. The it follows the floodplain edge near the hill base southward to the end of the floodplain part opposite the Byiyttakh river flowing in the Buotama river on the right bank..

"Bysyt Yuriakh river" is situated in the floodplain part of the Buotama river near the Bysyt Yuriakh river mouth (the road outcome from the 131st km of Nizhnii Bestiakh - Bol'shoi Never highway) (182.5 hectares). The northern border starts at the northwestern end of the Darkylakh lake bay, then goes further eastward along the lake shore across the Buotama river bay on the left bank to the river mouth. Then it crosses the

river mouth and reaches the right bank of the Buotama River. Then the border passes along the right bank downstream the right branch of the Buotama River eastward. It reaches the edge of the floodplain part near the hill base of the native shore in the place where the right branch turns from east to the north. The eastern border starts at the hill base on the right bank of the Buotama river the turn of the right river branch from east to the north and passes southward upstream along the edge of the floodplain part near the hill base of the native shore to the Bysyt Yuriakh river mouth. The southern border starts at the Bysyt Yuriakh river mouth and follows westward ,crosses the Buotama river mouth and reaches the left bank of the former riverbed mouth at the "Kuonan" locality. The western border starts on the left bank of the Buotama River from the former riverbed mouth at the "Kuonan" locality and follows northeastward to the southern end of the Darkylakh Lake. Then the border goes northwestward to the western end of the Darkylakh Lake.

"Khaara-Uu" locality is situated in the Buotama river midstream (150 hectares). It starts at the rocks on the left bank of the mentioned river between the Maiagastakh and Dzhukaia rivers. It passes the floodplain part of the Buotama River to the mouth of the Sylgy Ytar River flowing in the Buotama River on the right.

"Diring Yuriakh river" is situated at the site of archaeological excavations in the Diring Yuriakh river mouth, including the path k=leading from the bank of the Lena river (5.5 hectares).

"Eiim" locality on the Siniia River is situated at the place of the Kyry Tas river inflow in the Siniia River (53.1 hectares). The northern border passes along the road from the landmark of the border between No.100-111 quarters eastward to the road to the Siniia River. The eastern border starts at the road outcome to the Siniia River southeastward along the river bank to the Kyry Tas river mouth. The southern border goes from the Kyry Tas river mouth westward crossing the Siniia river bed and reaching its right bank. Further westward, it crosses the southern end of the lake and reaches the Siniia river bank. Crossing the Siniia river bed, it goes to the left river bank to the outcome of the border between No.100-111 quarters. The western border starts on the left bank of the Siniia river from the place of the outcome of the border between No.100-111 quarters and goes further along the mentioned border to the north of the road.

5.1.5. Traditional nature management zone (terut sirder, ethnic territories) — area of full forbiddance of industrial development, forbiddance of traffic outside public roads, permission of natural resources utilization in forms assuring protection and reservation of natural complexes and of native habitats of indigenous peoples and preservation of their traditional way of life. Passage of traffic is allowed only when warranted (a tourist voucher, drive permission) for entrance to the Park territory with clear reference to a particular kind of transport vehicle and its license plate number.

The zone is divided into the following parts:

"Taryng Iuriue – Buotama Rivers" is situated in the watershed of the Lena and Buotama

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rivers from the Taryng Yuriakh River northeastward to the Buotama River, excluding the territories of nature reserves, active and restricted recreational zones. The total area is 286,252.05 hectares including, according to the Decree of the Ulus Administration of Khangalasskii ulus of March 03, 1998 No.161, summer encampments (saiylyks) and a hydrological post.

"Siniaia River" is situated in the Siniaia river basin, excluding the territories of active and restricted recreational zones (85,905 hectares).

- 5.1.6. Zone of artificial keeping and breeding of rare and extinct animal species. The zone is intended for compensation of number of species peculiar to the given established natural community. The territory of the bison farm in the Buotama river mouth is 4 hectares.
- 5.1.7. Protected historical or archaeological zone is represented by historical and archaeological monuments and paleontological objects located in the Nature Park territory.
- 5.2. Within the territory of the Nature Park, with the exceptions envisaged in the present Statute of the Nature Park and compliant with the acting nature conservation legislation of the Russian Federation and Sakha Republic (Yakutia) forbidden are the following:
- 5.2.1. Activities altering the hydrological regime of surface and underground water.
- 5.2.2. Construction and placement of industrial objects, high-voltage transmission lines, trunk pipelines, motor roads, and other communications excluding those necessary for maintenance of the Nature Park.
- 5.2.3. Survey work and mineral resources development, all kinds of soil, vegetation, mineral prospect, and rock exposure disturbances, ploughing, blasting operations.
- 5.2.4. Traffic and parking of machine vehicles outside the roads and waterways of general use and outside specified places, timber rafting on watercourses and basins, cattle driving.
- 5.2.5. Unauthorized residence of persons not concerned by their official duties with keeping and development of traditional nature management and the Nature Park activities.
- 5.2.6. Hunting, fishery, extermination and catching of wild animals and birds, with the exceptions envisaged in the present Statute of the Nature Park and other statutory acts of the Russian Federation and Sakha Republic (Yakutia).
- 5.2.7. Destruction of burrows, nests, and other covers and shelters of wild animals as well as all kinds of alterations in animal habitats.

- 5.2.8. Introduction of plants and animals alien to local flora and fauna as well as measures favoring increase in population strength of some animal species over natural land capacity.
- 5.2.9. Major harvesting, medicinal and industrial plant collecting as well as other kinds of forest exploitation with the exceptions envisaged in the present Statute of the Nature Park.
- 5.2.10. Employment of chemicals as fertilizers, chemical weed and pest killers, and animal population controllers.
- 5.3. Within reserved, sacred, and restricted recreational zones are forbidden:
- 5.3.1. Airplane and helicopter flights below 500 meters above land and water level (excluding forest management duties), breaking sonic barrier by machine vehicles as well as other kinds of noise nuisance over stated norms.
- 5.3.2. Leasing land, water, and other natural resources.
- 5.3.3. Collection of zoological, botanical, and mineralogical samples except those envisaged in research programs within the territory of the Nature Park.
- 5.3.4. Other kinds of activities entailing deterioration of environmental, scientific, cultural, recreational, and economical significance of the territory of the Nature Park are prohibited.
- 5.4. The territory (water area) of the Nature Park can host:
- 5.4.1. Actions on preservation and prevention of alterations in natural complexes resulting from anthropogenic impacts.
- 5.4.2. Necessary veterinary measures aimed at elimination of extremely dangerous diseases common for man and animals.
- 5.4.3. Rehabilitation measures in the areas affected by natural disasters or disturbed by human activities.
- 5.5. The usage of the territory of the Nature Park can be allowed for:
- 5.5.1. Within the reserved zone:

scientific research:

fire prevention, sanitary, and epidemiologic surveillance of necessity;

in exceptional cases, rehabilitation measures in the areas affected by natural disasters or disturbed by human activities as well as measures aimed at prevention of alterations in

natural complexes resulting from economical activity in adjacent territories;

collection and other samples necessary for fulfillment of scheduled research works;

traffic and parking within the road/footpath network of allowed vehicles servicing the Nature Park officials while on official duty.

5.5.2. Within the restricted recreational zone:

actions allowed within the reserved zone;

construction of objects necessary for excursion and tourism services for visitors, rest of the local inhabitants;

road/footpath network formation and improvement;

sanitary measures of necessity to improve aesthetic value of landscapes, to facilitate availability and vision of the monuments and of animate and inanimate nature objects;

tourist services for visitors, movement and stops of tourist groups and individual visitors along established routes in accordance with calculated recreational load;

traffic and parking within the road/foot-path network of allowed vehicles servicing the Nature Park officials while on official duty;

licensed shooting (catching) animals and licensed fishing in quota limits, strictly limited plant harvesting.

5.5.3. Within the active recreational zone:

actions allowed within the restricted recreational zone;

excursion services and popular rest, stops and movement of tourist groups along the road/foot-path network in accordance with calculated recreational load;

traffic and parking within the road/foot-path network of the vehicles belonging to local inhabitants in case their actions comply with goals and tasks of the Nature Park;

amateur hunting and fishing (chargeable) in agreement with the directorate of the Nature Park and licensed by authorized state organs in compliance with the acting Hunting and Fishing Rules, with allowed hunting and fishing gear, in scheduled periods, of fauna objects besides those protected within the territory of the Nature Park.

5.5.4. Within the traditional nature management zone:

all actions allowed within the active recreational zone:

transit, along established routes, of the workers of tribal communities, collective farms, other land users passing to their proper land areas;

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construction, repair, and functioning of production, technical, and commercial objects of tribal communities, collective farms;

traditional economical activities (hunting, fishing, reindeer breeding, horse breeding, cattle breeding, mowing, wild berries and mushrooms gathering) by permanent land users and proprietors within the vested territories.

- 5.6. In some areas of the Nature Park later used as agricultural lands, can be allowed, in agreement with the administration of the Nature Park:
- 5.6.1. Subsidiary farming for sustenance of the Nature Park personnel and their relatives.
- 5.6.2. Pasturing cattle belonging to the Nature Park and its employees including retired, with the uninterrupted length of service in the Nature Park of 5 (five) years. Pasturing cattle by workers and retired employees of the Nature Park residing in its territory is allowed in agreement with the trade-union committee and administration of the Nature Park. Other citizens are allowed to pasture cattle only in case of their permanent residence in the territory of the Nature Park. Pasturing cattle is allowed only under permanent control of cattle owners and in the presence of an authorized herdsman. Cattle owners are fully responsible for injury to vegetation outside proper pasturing places.
- 5.6.3. Granting, in conformity with the Land Code of the Russian Federation, other laws of the Russian Federation, laws of Sakha Republic (Yakutia), and other statutory acts, employees of the Nature Park including retired but residing in its territory, with plots of arable land and hay lands.
- 5.6.4. Fuelwood storing by improvement felling to supply the needs of the Nature Park and its permanent residents.
- 5.6.5. Mushrooms, nuts, and berries gathering by the Nature Park employees and its permanent inhabitants for their personal needs (without power of sale).
- 5.6.6. Amateur fishing by the Nature Park employees and its permanent inhabitants for their personal needs (without power of sale) with allowed gear and in scheduled periods.
- 5.7. Animal shooting and catching within the territory of the Nature Park is permitted exclusively by the Ministry for Nature Protection of Sakha Republic (Yakutia).
- 5.8. Residence within the territory of the Nature Park of citizens and officers not belonging to the staff of the Nature Park and the Ministry for Nature Protection of Sakha Republic (Yakutia) is permitted exclusively by the directorate of the Nature Park.
- 5.9. Particular features of zoning and regime of the Nature Park are determined by the present Statute and can be changed in agreement of Ministry for Nature Protection and the Ministry for Privity of Sakha Republic (Yakutia).

- 5.10. The Nature Park territory is marked by information and caution signs.
- 6. Organization of Security IN the Nature Park
- 6.1. Security of the Nature Park is provided by special inspection responsible for protection of the territory of the Nature Park fully qualified as state control in the sphere of nature protection of specially protected nature territories.
- 6.2. Law-enforcement agencies and local inhabitants as voluntary nature conservation controllers can be drawn to protection of the Nature Park.
- 6.3. Special inspection is in the staff of the Nature Park, its list of members approved by the director of the Nature Park.
- 6.4. Rights of inspectors protecting the Nature Park are regulated by the acting legislation in the sphere of specially protected nature territories.
- 7. Responsibility for Violating Regime of the Nature Park
- 7.1. Violation of the established regime or other rules of utilization and protection of the Nature Park implies legal liability as stated by the laws of the Russian Federation and of Sakha Republic (Yakutia).
- 7.2. Damages caused to natural objects and complexes within the borders of the Nature Park are liable to indemnity in accordance with legally stated computational procedures of reimbursement definition and in the absence of the latter, at the rate of actual expenses for compensation.
- 8. activity arrangement
- 8.1. Scientific research of the Nature Park is aimed at elaboration and application of scientific methods of preserving biological diversity, natural and historical cultural complexes and objects in the context of recreational and economical utilization, long-term monitoring over natural processes dynamics, evaluation and forecast of environmental situation in the region, reproduction and resources conservation.
- 8.2. Scientific research in the Nature Park is carried out by:
- 8.2.1. Members of staff of scientific sections and laboratories of the Nature Park in accordance with research plans approved by Scientific and Technical Councils of the Nature Parks.
- 8.2.2. Scientific institutions and institutes of higher education of respective specialities on a contractual basis in the framework of programs common with the Nature Park and agreed with the Ministry for Nature Protection of Sakha Republic (Yakutia).
- 8.3. To carry out scientific research in the area of Nature Protection within the borders of the Nature Park, a biological station or other research department can be formed, the

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research area of the latter being approved by the directorate of the Nature Park.

- 8.4. Plans of bioengineering, revegetation, restoration, and forestry works as well as measures to regulate population size of wild animals within the territory of the Nature Park are obligatorily considered at the meetings of the Scientific and Technical Council.
- 8.5. Economic activity of the Nature Park is aimed at providing for proper protection of natural and historical cultural objects, taking measures on their maintenance and restoration as well as organizing tourism and recreation in natural environment, preservation and revival of extensive forms of traditional nature management.
- 8.6. The Nature Park is independent in its economic (entrepreneurial) activity in the limits stated by the legislation of the Russian Federation and Sakha Republic (Yakutia) as well as by the present Statute.
- 8.7. The relations of the Nature Park with other enterprises, institutions, and organizations in all the spheres of economic activity are on a contractual basis. In its activity the Nature Park takes account of the public needs, ensures quality of its products, work, and services.
- 8.8. The Nature Park can act as a founder and participate in activities of funds, associations, and other organizations promoting development of the specially protected nature territories in agreement with the Ministry for Privity of Sakha Republic (Yakutia).
- 8.9. Development of controlled tourism and rest in natural environment is carried out by the directorate of the Nature Park as well as other legal entities and individuals as users due to licenses and civil contracts.
- 8.10. Construction and exploitation of hotels, camping sites, holiday camps, public catering establishments, and other tourist service objects, provision of services for public recreation, cultural and general services are carried out by concerned state, public, and private institutions on conditions stated by contracts with the directorate of the Nature Park.
- 8.11. In case of absence of legal entities interested in construction and exploitation of tourist and recreation objects, the Nature Park can independently carry out such works at the expense of its budgetary funds, incomes of tourist service objects use accounted in the estimate of expenditure of the Nature Park.
- 8.12. Hunting activities within the territory of the Nature Park is carried out by the Nature Park through contractual granting hunting grounds to other hunting subjects on the basis of long-term contracts.

- 8.13. Formation of subsidiary farms, hotels, fish hatcheries, animal nurseries, hotels, tourism (including scientific) development and servicing, wild plants gathering, amateur fishery on payment basis, other economical activities of the Nature Park are permitted in legal order after their examination and positive decision made by the Scientific and Technical Council of the Nature Park.
- 8.14. Any kind of activity within the territory of the Nature Park is permitted exclusively by the positive decision by the Scientific and Technical Council and the permission acquired by the director from the Ministry for Nature Protection of Sakha Republic (Yakutia).
- 9. Remuneration of labor in the Nature Park
- 9.1. Payments and working conditions of the staff of the Nature Park are governed by the acting labor legislation of the Russian Federation and Sakha Republic (Yakutia).
- 11. liquidation and reorganization of the Nature Park
- 11.1. Termination of the Nature Park activities can be carried out exclusively in the form of its liquidation or reorganization.
- 11.2. Liquidation or reorganization of the Nature Park is carried out in order established by law and by the decision of supreme body of state power of Sakha Republic (Yakutia) in agreement with the Ministry of Nature Protection of Sakha Republic (Yakutia).
- 11.3. The enterprise to forfeits the rights of legal entity and is considered nonexistent since its exclusion from the state registry.
- 11.4. At liquidation or reorganization of the enterprise the discharged employees are guaranteed observance of their rights and interests in compliance with the acting legislation.
- 11.5. The property of the liquidated Nature Park, after settlements made in established order with the budget, lenders, and the enterprise employees is given to the Ministry for Privity of Sakha Republic (Yakutia).

GOVERNMENT OF THE REPUBLIC OF SAKHA (YAKUTIA)

REGULATION of January 25, 2011 N 21

On "Lena Pillars" Nature Park boundaries statement

In accordance with Federal Law №33-FZ, dated 14 of March 1995, "On specially protected natural areas", Republic of Sakha (Yakutia) Law №213-III, dated 25 of December 2003, 105-Z "On specially protected natural areas of Republic of Sakha (Yakutia)", Executive Order of Republic of Sakha (Yakutia) President №362-RP, dated 24 of August 2009, "On organizational management of "Lena Pillars" Nature Park document preparation", Government of the Republic of Sakha (Yakutia).

render a decision:

- 1. To confirm the exact territory of "Lena Pillars" Nature Park comprised of 1 353 000 Ha and to confirm "Lena Pillars" Nature Park boundaries description in accordance with Annex to the present Regulation.
- 2. To Ministry of Nature Conservation of the Republic of Sakha (Yakutia) (A.V. Grigoriev): to develop and to confirm a Regulation on "Lena Pillars" Nature Park amended and restated.
- 3. To Ministry of Property Relations of the Republic of Sakha (Yakutia) (V.P. Efimov) jointly with Ministry of Nature Conservation of the Republic of Sakha (Yakutia): to amend the Regulations on the government-owned body "Lena Pillars" Nature Park.
- 4. To GU "Department of Biological Resources of Ministry of Nature Conservation of the Republic of Sakha (Yakutia) (Y.S. Sivtsev): taking into account the modification of the Park territory, to plan land survey works for the sites, located within the territory of the State forestry fund, and to introduce the obtained data into the State Immovable Property Cadastre.
- 5. To publish current Regulation in official mass media of the Republic of Sakha (Yakutia).
- 6. To saddle Stepanov A.I., the Deputy of Government Chairman of the Republic of Sakha (Yakutia), with the responsibility of execution control of current Regulation.

Chairman of the Republic of Sakha (Yakutia) Government G.I. Danchikova

The "Lena Pillars" Nature Park Sakha Republic (Yakutia)

MEDIUM TERM MANAGEMENT PLAN for the period of 2012-2016

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INTRODUCTION

The medium term management plan of the "Lena Pillars" Nature Park has been developed in accordance with the Regulations of the development, coordination, and approval of the documents on planning the activities of the state nature reserves and national parks, and the Recommendations for the development of medium term management plans of the state nature reserves and national parks approved by the Order of the Federal Nature Management Surveillance Service of December 3, 2007 No.491.

The prospective working plan of the "Lena Pillars" Nature Park is based on the Program of Development of Specially Protected Nature Territories Activities of the Ministry for Nature Protection of Sakha Republic (Yakutia) and takes into account the primary goal and tasks set for the Park in the period of its creation.

The medium term plan includes the works on nature protection, scientific researches, environmental education, and recreation activities of the "Lena Pillars" Nature Park as well as the identification of sources of financing the planned works at the expense of the federal budget funds, the Park income from its business and other yielding interest activity as well as other attracted financial sources.

The Plan provides for the prospects of the Park activities along all directions: preservation of the natural complexes and objects, development of environmental educational tourism, protection of the territory of the Park, cooperation with other institutions and collaborative participation in the nature protection, environmental educational, tourist, and other activities positively influencing the Park's work. In its turn, the prospective Plan accounts for the annual plans of the Park work for the certain period in the immediate future.

The "Lena Pillars" Nature Park is located in the Central Yakutia within the boundaries of Khangalsskii and Olekminskii uluses (districts). Territory of «Lena Pillars» Nature Park consists of two isolated parts: Lena-Buotamskii and Sinskii. To protect natural complexes of the Park from unfavorable influence of anthropogenic activities in areas near the Nature Park, the protected zone of limited wildlife management was created.

The total area of the Park is 1 387 000 hectares. The territory of the Nature Park is located on the land granted to it on the terms of a usufructary right, including the territories of tribal Evenk communities. All matters of the Nature Park activity are regulated by "The Statute of the State Enterprise 'Lena Pillars' Nature Park (Aan Aiylgy) of the Sakha Republic (Yakutia)" approved by the Ministry for Property Relations of Sakha Republic (Yakutia) in coordination with the Ministry for Nature Protection of Sakha Republic (Yakutia). In July 2012, the Lena-Buotamskii part of the "Lena Pillars" Nature Park was inscribed on the List of the World Cultural and Natural Heritage of UNESCO.

The primary goals of the Nature Park are the following:

- Maintenance of the natural conditions of protected natural complexes and preservation of their biological diversity peculiar for the natural zone of the Lena River midstream.
- Revival and development of traditional forms of the local population economy.
- Preservation of model and unique natural complexes and objects, monuments of nature, history, and culture, other objects of cultural heritage.
- Creation of conditions for the organized tourism and recreation, acquaintance with the nature of the Park, cultural, historical, and natural monuments in the territory of the Nature Park.
- Environmental monitoring.
- Scientific research in compliance with the nature protection legislation of the Russian Federation and Sakha Republic (Yakutia).
- Restoration of disturbed natural, historical, and cultural complexes by means of the funds assigned from the Republic budget or other financing (sponsorship, contributions of nature protection organizations).
- Arrangement of the environmental education of the public.

The means obtained by the Nature Park for visiting and exploitation of natural resources in its territory, servicing visitors, sponsorship, grants and voluntary donations of the Russian and foreign legal entities, public organizations and funds, as well as individuals, are used to improve the work of internal structures of the Nature Park.

Goals and tasks of the management plan

The purpose of the present management plan is the optimization of the management system and identification of prospects of the further development providing steady functioning of the specially protected territory of the "Lena Pillars" Nature Park in view of preservation of biological and landscape diversity. The management plan of the "Lena Pillars" Nature Park solves the following problems:

- Maintenance of reliable protection of natural complexes and objects in the territory of the Park.
- Control over limited economic activities and wildlife management within the territory of the Nature Park and its protected zone.
- Evaluation of actual expenses and sources of financing.
- Coordination of scientific research with nature protection activity.
- Development of environmental education at local and regional levels.
- Improvement of cooperation of the Nature Park with governmental bodies, local self-government, scientific and nature protection institutions.
- Reception of wide public support at local, regional and federal levels.
- Optimization of structure and personnel, professional development of its employees.
- Preservation of historical and cultural heritage.
- Integration of the Park into the social and economic structure of the region.
- Creation of conditions for environmental tourism development.

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1. THE TERRITORY ARRANGEMENT PLAN

1.1. The structure of land tenure

The typical and unique nature of natural, historical, and cultural complexes is the most significant criterion that defines the territorial arrangement of the Nature Park.

Situational plan (see Nomination. Appendix: Maps).

The main levels of territorial management of the Park are borders of the Park and its security zone, functional zoning of territory, system of tourist routes and patrolling. The mechanism of management of the territory development is defined by its functional zoning.

The functional zoning, that is distribution of the equipment in territories by various regimes of protection and utilization held by the West Siberian Designing and Prospecting Expedition of Glavokhota of the Russian Federation in 1991-1992.

Functional zoning scheme (see Nomination. Appendix: Maps).

Seven functional zones are isolated in the territory of the Park.

In the territory of the Nature Park different regimes of protection and natural resources utilization operate, considering local natural, historical, cultural, and social features.

According to the current nature protection legislation the following zones are located in the Nature Park:

The preservation zone — places where all kinds of economic and recreational activity are forbidden, except for transit, travel of the organized groups of tourists, local citizens and members of the Evenk tribal communities that have the sanction for crossing of the reserved territory on road-route network of recreational purpose and places of organized tourism. The territory has the total area of 71765 hectares and is located on the right bank of the Lena River.

The sacred place — serves for performing traditional national rituals. It is located in the Labydya River mouth, in the zone of active recreational activity, between the preservation zone sites.

The zone of limited recreational activity — visiting of strictly regulated number of people is authorized. Total area is 12657.5 hectares.

The zone of active recreational activity — places of tourism for environmental education and acquaintance with the sights of the Nature Park, as well as for recreation. Total area is 1368 hectares.

The zone of traditional management (ethnic territories) — places where industrial development is forbidden, travel of all kinds of vehicles outside roads of general purpose is forbidden, utilization of natural resources in the forms providing protection and safety of natural complexes and original habitat of indigenous peoples and preservation of their traditional way of life is supposed. Transit of vehicles is permitted only if approved (tourist permit, sanction for transit) with the right of visiting the Park, with the indication of the type of a transport facility and its state registration number.

In this territory it is permitted to make actions not in conflict with the purposes and tasks of the traditional management zone (Evenk nomadic tribal communities: "Kelet", "Jona", "Bjutchen", "Kytakh", "Morso", "Kynat", "Sugar").

Zone of artificial maintenance and cultivation of rare and endangered kinds of animals. — intended for recovery of various species peculiar to the given settled natural complex. Territory of the bison nursery in the Buotama River mouth is four hectares.

The protected historical or archeological zone — represented by monuments of history of both archaeological and paleontological objects located in the territory of the Nature Park.

Agricultural works are not conducted in territory of the Park, area that belongs to saiylyk facilities belongs to settlements, and 2.9 hectares belong to "Brolog" hydrostation.

The "Sakhabult" concern relates to managing subjects of the Park, as it manages sable hunting by the hunters licensed and contracted with the Park.

The agricultural production in the territory of the Park includes herd horse breeding. The "Kachikatsky" enterprise breeds 5-6 herds in the territory of the Park.

Reacclimatization of wood bison is a young branch of economy. In 2006 thirty wood bison were brought to the Buotama River mouth from Canada.

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2. ACTION PLAN

2.1. Prospects of the "Lena Pillars" Nature Park Development

The long-term working plan is based on the Program of Development of Specially Protected Natural Territories approved by the Ministry for Nature Protection of Sakha Republic (Yakutia), considering the main purpose and tasks set before the Park during its creation.

The plan provides prospects of activity in all spheres: preservation of nature complexes and objects; development of environmental educational tourism; protection of the Park; cooperation with other bodies and teamwork in the sphere of nature protection, environmental educational tourism and other activities, which are favorable for the work of the Park. The long-term plan takes into account annual plans of the Park work for the nearest future.

Now, due to changes in the legislation of the Russian Federation in the field of nature management and activities of nature protection organizations, economic development and solution of social problems of the population near the territory of the Park have undergone significant changes. These changes were directly reflected in scheduling the work of the Nature Park that acts based on cooperation in the interests of all parties in compliance with the federal legislation.

2.1.1. Preservation of Natural Complexes in Conditions of Developing Tourism Activity Program

Purpose: Rational use, restoration and maintenance of the natural complexes and protection of the objects in the territory of the Park.

Primary goals:

- Enhancement of efficiency of state inspection in protection of «Lena Pillars» Nature Park territory.
- Control over rational nature management and preservation of a biological diversity within the borders of the Nature Park.
- Legal regulation of nature management matters on the land allocated to users.

Increase of state inspection activity in protection of the territory of the "Lena Pillars" Nature Park

Management goals:

- The improvement of state inspection work in the Park in the sphere of prevention of the nature protection legislation infringements.
- Maintenance of cooperation with ulus municipal bodies of territorial administration, the ulus law-enforcement bodies, bodies of management of forestry and

forest protection, education organizations and inspections of nature management of Ministry for Nature Protection of Sakha Republic (Yakutia).

Measures:

- Modification in the duty regulations of inspection staff in consideration of changes of the federal legislation.
- Staging performances in mass media, giving lectures in educational institutions and for visitors of the Park, as well as attraction of the local population's attention to activities of the Park.
- Attraction of skilled workers of the Ministry of Nature Management of Sakha Republic (Yakutia), Ministry of Home Affairs, Ministry of Emergency and Forestry Management to improve professional skills of inspection staff. Conducting guidance of personnel before going for inspection.
- Certification of inspection staff according to instruction and in terms set by Ministry of Nature Management of Sakha Republic (Yakutia).
- Forming public inspection of the Park by law-abiding local residents who have not infringed the Park rules or the nature protection legislation.
- Creating an electronic database by types of infringements.

Improving material resources of the state inspection of the Park

Measures:

- Improvement of material resources of the security service by financing from Ministry for Nature Protection of Sakha Republic (Yakutia): purchase of service weapons, horses, motor boats; transmission equipment, digital photo and video cameras.
- Forming and equipping cordons in the Park sites.
- Supply of working clothes and uniforms.
- Providing obligatory social insurance.

Expected results:

- Reduction of infringements of nature protection legislation by visitors and locals.
- Higher social security of state inspectors.
- Attraction of the public to nature protection actions in the Park.
- Professional development of inspectors as a result of training courses.
- Maintaining an electronic database on patrolling the territory of the Park.
- Possibility of patrolling the territory.

Indicators:

- Expansion of duties assigned to inspectors working in interaction with local population and visitors of the Park.
- More reports made by public inspectors.
- Social insurance of state inspectors.
- Equipping staff with uniforms, special security facilities, service weapons.
- Equipping with computers and training of staff.
- New buildings for staff.
- Availability of necessary mechanized and a cartage transport means.
- Decrease in the inspection staff turnover.

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Control over rational nature management and preservation of biological diversity in the Nature Park.

Management goals:

• Preservation and increase of environmental, recreational, scientific, and cultural value of forest ecosystems.

Measures:

- Forestry measures based on natural inspections, forest monitoring and purposeful scientific programs.
- Forest protection and fire prevention.
- Purchase of forest protection equipment. Low quality timber processing for the needs of the Park.
- Participation of local population in informing the Park employees of sites of fire.

Projected Activities on Forestry and Forest Restoration in the "Lena Pillars" Nature Park in 2012-2016

	Measure-	Volume			Year			Cost
Activity	ment		2012	2013	2014	2015	2016	(thousand rubles)
Felling	Hectares	240	40	50	50	50	50	
Other felling	Hectares	40	8	8	8	8	8	
Forest restoration	Hectares	100	20	20	20	20	20	
Sylvula care	Hectares	270	100	70	50	30	20	
Forest regulation	Thousand hectares	485	200	200	85	-	-	

Projected Activity Volumes on Forest Protection and Fire Safety in the "Lena Pillars" Nature Park in 2012-2016

					Year			
Activity	Measure- ment	Volume	2012	2013	2014	2015	2016	Cost (thousand rubles)
Forest pathology study	Hectares	1500	500	500	300	100	100	
Fire-prevention mineral strips	km	100	20	20	20	20	20	
Strip maintenance	km	200	40	40	40	40	40	
Road repair	km	25	5	5	5	5	5	
Stock purchase	thousand rubles							100,0

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Maintenance of poiums

Measures:

• The regular control of economic activities of cooperative farms of the Evenk tribal economies in the Park

Expected results:

- Elimination of improper use of assigned land and natural resources.
- Maintenance by land users of water-security zones regulations.
- Preservation and improvement of hunting wealth of land.

Project of Biotechnical Activity Volumes in the "Lena Pillars" Nature Park in 2012-2016

					By years	}		
Activity	Measure- ment	Volume	2012	2013	2014	2015	2016	Cost (thousand rubles)
1. Building and repair of feeding racks	pcs.	25	5	5	5	5	5	62,5
2. Building and repair of feeding points	pcs.	5	1	1	1	1	1	50,0
3. Hay preparation and furnishing for wild ungulates	centner	62,5	12,5	12,5	12,5	12,5	12,5	312,5
4. Purchase and furnishing salt	kg	625	125	125	125	125	125	12,5
5. Making artificial nests for puddle ducks	pcs.	75	15	15	15	15	15	37,5
6. Winter routes registration	km	30	30	30	30	30	30	250,0
7. Anti-suffocation activity in lakes	hectares	1,5	0,3	0,3	0,3	0,3	0,3	5,0
8. Shooting and capture of wolves and wild dogs	heads							100,0
9. Preparation of branch food for ungulates	pcs.	625	125	125	125	125	125	31,25
TOTAL:								861.25

Measures:

• Biotechnical actions and registration.

Expected results:

- Increase in number of game animals in the territory of the Park.
- Increase in number of waterfowl.
- Elimination of fish kill in lakes.
- Reduction in number of wolves and stray dogs.

Indicators:

- Density upon winter routes registration results.
- Number of broods observed.
- Low level of spring fish loss in lakes.
- Reduction in number of ungulates baited by wolves.

Legal regulation of matters of nature management in lands assigned to users

Measures:

- Receiving of certificates' copies on state registration of land users' rights.
- Making cooperation contracts on observance of land users' rights and of the Park regulations.
- Prevention of infringements of the land users rights by other persons and rendering assistance in resolving contradictions.

Expected results:

- Observance of the rights and regulations of the Nature Park by Evenk tribal communities and farms.
- Cooperation of the Park employees and Evenk tribal communities and farms.
- Fewer infringements of the Park regulations and nature protection legislation by the visitors to the Park.

Forms of preventing infringements

- 1. Lectures by state inspectors on environmental matters at schools, enterprises, and labor collectives.
- 2. TV presentations, printed publications, address to population of municipal unions.
- 3. Environmental actions and quizzes in cooperation with experts in ecology.
- 4. In cooperation with municipal bodies, making contracts on collaboration, contracts with law-enforcement bodies, forestry services. Explanation of importance of specially protected natural territories (SPNT) for preservation of flora and fauna, of SPNT functioning as nursery for biological diversity.
- 5. Acquaintance of visitors with the information on Nature Park regime, with zones in the territory, attraction of public attention towards environmental actions.
- 6. Patrolling the territory of the Park by local state inspectors by transport and on foot.
- 7. Posting information signs on the territory of the Park, collaboration with land users in representing their interests as for infringements of the Park regime.

Gathering information of operational character

Information of operational character is given by subdivisions of state inspectors of the Park — 9 persons, public inspectors of the Park — 14 persons, employees of Nature Protection Department, land users.

State inspectors:

Asekritov V. D. - Sinsk village

Gerasimov S. A. - Edyai village

Vladimirov V. A. - Kytyl-Dura village

Ivanov G.N. - Oddokun subdivision

Platonov R. N. - Buotama River mouth subdivision

Iljin D.I.- Buotama River, Kuonan subdivision

Kalitin V. N. - Protected (buffer) zone

Pavlov A. A. – Pokrovsk town

Timofeev S.P.- Sinsk

Officially responsible for gathering and analysis of the information of operational character is Pavlov A.A., the Park Inspector

Basic sources of information

Public inspectors in settlements, hunters, and members of environmental camps, forestry workers, and volunteers provide sources of operational information on incidents in the territory of the Park.

Definition of forms and methods of information reception

Reception of information concerning protection and prevention of violating the Park regime is carried out by city and mobile phones.

Definition of means and forms of material incentives of informants

In settlements where it is worthwhile to have informants and where the broadest review of the territory of the Park can be expected, voluntary informants are appointed whom the administration of the Park rewards financially.

Development of the protection service resource base

Resource base of the protection service now includes:

Motor boats of foreign manufacturers — 6 pcs

"Buran" snowmobiles — 2 pc

Inside lighting — 5 pcs

Automobiles - 3 pcs

Boat KS-102- 1 pcs

Boat Yamaha-250 - 1 pcs

Wind-mill electric generating plant — 1 pc

Each inspector has a binocular for observation.

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2.1.1. Program of natural complexes preservation

Value, thou-Value, thousand rubles sand rubles the senior state inspector. try of Home Affairs, the The chief of inspection, The involved experts of MEP RS (Y), the Minis-Ministry of Emergency Measures and others. State inspectors. Parks inspection. MEP RS (Y). MEP RS (Y). Executors Executors 1. Increase of activity's efficiency of the state inspection on territory protection 2012-2016 2012-2016 2012-2016 2012-2016 2012-2016 2012-2016 Terms Terms Decrease in quantity of infringements Decrease in number of complaints to work of inspectors from outside local Park. Improvement of quality of spent Maintenance of protection of inspec-Strengthening of positive image and Trustworthy information reception about infringements of a regime of Improvement of professional skills tion structure and mobility on duty. preservation of health of inspection and professional training of inspec-Reduction of number of infringetion personnel. Positive decision population and visitors of Park. from outside local population. nature protection actions. ments of a regime of Park. Results and indicators Results and indicators under reports made. structure. inspection structure considering changes of tors; snowmobiles; a communication facility; Formation of public inspection of Park from the office weapon; horses; boat pendant mothe local residents who do not have propengeneral educational institutions and for visi (Y), Ministry of Home Affairs, Ministry of tors of Park, local population attraction to Emergency and Forestry Managements to personnel. Participation in seminars, com-Strengthening of material base of service: petitions and other actions of MEP RS (Y) Presentations in mass media, lectures in sities to infringement of a regime of Park Modification of the duty regulations of improve professional skills of inspection Maintenance with overalls, uniform regi-Hiring qualified employees of MEP RS and the nature protection legislation. digital a photo and video equipment. the federal legislation. Park activities. Activity mentals. Activity 1.1.2. Strengthening Park state inspection. 1.1.1. Strengthening inspection of Park on ments of the nature protection legislation. of work of the state of material base of preventive maintenance of infringe-Administrative Administrative problem problem

Administrative problem	Activity	Results and indicators	Terms	Executors	Value, thousand rubles
	1.2. Control of rational wildlife mana	1.2. Control of rational wildlife management and biodiversity preservation in borders of Nature Park.	in borders of Na	ıture Park.	
and increase environmental, recreational, scientific and a cultural value of wood ecosystems.	Carrying out forestry actions based on natural inspections, wood monitoring, and within the limits of target scientific programs.		2012-2016	The forest warden state inspector.	
1.2.2. The decision of a question on carrying over bisons for Park territory	To prepare the letter addressed to the minister of MEP RS(Y) about adverse influence of bisons on ecosystems of a mouth of the river of Buotama.	Restoration of a vegetative cover, renewal of work of an environmental track, the bird's world of a mouth of the river of Buotama.	2012-2016	The ranger state inspector.	
1.2.3. Preservation and improvement of hunting economy values of lands.	Carrying out biotechnical actions and registration works. Increase in number of animals.	Reduction of quantity of the animals knocked down by wolves. Data of winter tracking.	2012-2016	Inspection.	
	1.3. Legal regulation of questi	1.3. Legal regulation of questions of wildlife management on the earths fixed to users.	ths fixed to use	rs.	
Reception of copies or rights of land users. To the mass information	Reception of copies of certificates on the state registration of the rights of land users. To reflect the data in performances in bodies of the mass information and at work with visitors of territory of Park.	The positive relation from outside land users to Park work.	2012-2016	Inspection.	
The conclusion of α rights of land us	The conclusion of contracts on teamwork on observance of the rights of land users and observance of a regime of Park.	Rendering assistance from outside users in Park work.			

TOTAL: 17225 thousand rubles

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2.1.2. Program of cultural heritage preservation

No.	Management aim	Activity	Terms	Executors	Value, thousand rubles
1.	Discovery and systematization of objects of historical	Investigation of the territory during expeditions.	2012-2016	«Lena Pillars» Nature Park.	
	and cultural nertiage.	Collecting and refinement of sepa-	2012-2016	«Lena Pillars» Nature Park.	
		rate archive materials.		Yakutsk State University.	
				National Archive.	
				Institutes of Siberian Branch of Russian Academy of Sciences.	
		Making of complex database.	2012-2016	«Lena Pillars» Nature Park.	
				Yakutsk State University.	
				National Archive.	
				Institutes of Siberian Branch of Russian Academy of Sciences.	
2.	Assigning under protection of objects of historical and	Certification of objects of historical and cultural heritage.	2012-2016	«Lena Pillars» Nature Park.	
		Defining and setting of protection areas of objects of historical and cultural heritage.	2012-2016		
3.	Attracting of locals for saving and reproduction of dynamic forms of culture heritage, including traditions of the culture.		2012-2016	«Lena Pillars» Nature Park.	

1	Management aim	Activity	Terms	Executors	Value, thousand rubles
P Ec	Preservation of manor in Echite place and bell-tower in Churan base.	Restoration of the manor and repair works.	2012-2016	«Lena Pillars» Nature Park.	
	Saving of necropolises.	Research and description of old headstones.	2012-2016	«Lena Pillars» Nature Park.	
P.	Preservation of archaeology monuments.	Systematic monitoring of archaeology heritage objects.	2012-2016	«Lena Pillars» Nature Park.	
		Conservation of destructing monuments.	2012-2016		
		Maintenance of archeological heritage (setting of information screens, educational work with population, issue of information guides, making of video and slide materials, expositions).	2012-2016		
		Protection of archaeology monuments from rides and illegal excavations.	permanently		
	Saving of monuments in honor of World War II participants.		permanently	«Lena Pillars» Nature Park.	
1	Provision of the necessary facilities in territories.	Liquidation of rests of abandoned farms located in visually important places which disfigure the landscape	2012-2016	«Lena Pillars» Nature Park.	
		Maintenance of the memorable places (setting of information screens, design of excursion routes).	2012-2016		

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2.1.3. Program of environmental tourism development

The Program preconditions

One of the main spheres of the Nature Park activities is development of environmental tourism.

The Nature Park has great tourism, nature, recreational, historical, and cultural potential.

The territory of the Park is 485 thousand hectares; its main part is the Lena-Boutamskaya area between the two rivers with its unique nature complex. There are many nature monuments here: «Lena Pillars», Buotama and Sinskiye Pillars, Tukulans, places with rare kinds of plants, pure and fast Lena, Buotama and Siniaia rivers.

The "Lena Pillars" are the nature monument of the geological origin; the age of the Pillars is 530 million years. The Pillars have witnessed geological past of the Earth of the ancient Cambrian Sea. Here on limy layers it is possible to find remains of trilobites and archaeocyatha. The Pillars are relics of weathering in form of towers, castles; they extend along Lena River for 40 km.

The Pillars are among the most significant natural objects in Russia for their high aesthetical value.

There are many monuments of culture in the Park — the primitive humans archaeological site in Diring-Iuriakh, rock drawings, iron-smelting stoves, etc.

There are many objects of scientific interest in the Nature Park: karstic relief forms, thermokarst, eolian formations, relic forests, endemic species of animals and plants, paleontologic sites of mammoth fauna.

All mentioned makes tourist potential rather big.

Realization of the Program assumes fund raising from federal and republican budgets and off-budget sources.

Off-budget funds come from the Park own means from its commercial activities, grant projects, loans.

Realization of the Program requires creation of the tourist complex for the organization of recreation for population of the Republic, mainly children and youth; it will help to solve a problem of employment of the ulus population, and attract financial resources to the ulus.

At full realization of the Program, the Park can accept up to 20 thousand tourists per year, while now it accepts 6 to 10 thousand tourists per year.

Development of tourism will enable significant influx of funds to the municipal budget.

Environmental tourism in the Park is carried out in following directions:

Buotama

This direction includes accommodation of tourists and camping in the Ust-Buotama and Verkhny-Bestyakh tourist centers, rafting down the Buotama River, «Fisherman House» in Kuonan, and excursions to site of primitive humans in Diring-Iuriakh. This direction includes environmental tracks "Feathery World of Buotama", "Unique landscape of Buotama", "Tukulan", "Wood Bison Nursery", in the future — "Iron-Smelting Stoves of Buotama", and educational programs in environmental camps for schoolchildren and pupils of Buotama environmental school.

The environmental routes should be richer and include the historical and ethnographic objects, in this view a concept of the open-air museum «Site of Ancient Hunters of the Stone Age» and «Concept of a Complex of Historical-Ethnographic Museums in Open Air» have been developed.

"Lena Pillars"

The following environmental routes have been developed in «Lena Pillars» Nature Park: «Lena Pillars», «Dry Channel of Labydya», and «Kurunnakh".

There are guesthouse in Pillars and a small tourist center on Kurunakh River.

It requires a lot of scientific and research work; unfortunately, lack of financing constrains this work. It is planned to construct an all- year-round Visitors Center, a viewing platform, rising ladder, a gallery of rock drawings.

It is necessary to provide neighboring territories with facilities necessary to develop the entertaining infrastructure.

Numerous actions are carried out in «Lena Pillars», such as «Gold of «Lena Pillars» open-air folklore festivals and author's songs «Lena Pillars» in Winter».

Batamai

The place is on the left coast of the Lena River opposite «Lena Pillars».

It is planned to develop a route alternative to the river route.

Because of costly oil products, tickets for river ships became very expensive and it is necessary to have such an alternative as an automobile route.

It is possible to fish, pick berries, etc during the rest. The Park has already accepted some groups of visitors along this route.

Here a part of "Winter «Lena Pillars»" festival takes place.

Churan-Baza

The route has not yet been well developed; in the long term, it can be of great interest as an "extreme tourism route". Tourists reach Churan-Baza by river. Then they get to know the history of Churan-Baza as a storage terminal for gold mining development in Aldan; then they reach Buotama by Tommot road and raft down Buotama (another option is rafting on Lena River).

The route is approved and promises to be quite competitive.

Rafting on the Siniaia River

The route will draw fans of extreme outdoor rest. Rafting starts with the river Matta, to Sinsk settlement, with 100 km distance in five days. It has the fourth complexity degree. Rafting is possible on kayaks and rubber boats. It is organized in June-July.

List of activities for the program realization

	Activity	Terms	Executors
1. Dev Nature	relopment of environmental tourism in «Lena Pillars» e Park.	2012-2016	«Lena Pillars» Nature Park.
1.1.	Certification of the culture and nature monuments in the Park.	2012-2016	«Lena Pillars» Nature Park.
1.2.	Design of general scheme of environmental tourism development.	2012-2016	«Lena Pillars» Nature Park .
1.3. 1.4.	Sale of souvenirs at tourist centers. Realization of "Buotama" sub-program.	Annually	Ministry of education of the Sakha Republic (Yakutia).
1.5. 1.6.	Realization of «Lena Pillars» sub-program. Realization of "Churan-Baza" sub-program.	2012-2016	«Lena Pillars» Nature Park, Artists
1.7. 1.8.	Realization of "Batamai" sub-program. Organization of historical environmental expedition	2012-2016	Union of Sakha Republic.
1.9.	of the school pupils to the Park. Organization of summer environmental tourism camps for school pupils.	2012-2016 Annually	«Lena Pillars» Nature Park, "Khangalasskii Ulus" municipal district.
1.10.	Organization of «Gold of «Lena Pillars» open-air festival.	Annually	
1.11.	Organization of «Lena Pillars» in winter» festival.	Annually	
1.12.	Rafters tourslet on the river Buotama.	Annually	
1.13.	Tourism Song Contest «Silver string Diring»	Annually	
1.14.	Orienteering Competition «Treasures Deering Yuryakh».	Annually	
1.	Improvement of tourist activity.	Annually	«Lena Pillars» Nature Park.
1.1.	Casting and training of guides.	Annually	
1.2.	Improvement of tourist centers equipment.	Annually	
1.3.	Equipment of routes and environmental routes.	Annually	

TOTAL: 120 million rubles

Development of the tourist rout visiting, for 5 years.

	Tourist rout	2012	2013	2014	2015	2016	Total
1	Lena Pillars	10 000	11000	12000	13000	14000	60 000
2	Buotama mouth	1000	1010	1010	1020	1020	5060
3	Verhnii Bestyakh	1000	1010	1010	1020	1020	5060
4	Diring Uryakh	500	500	510	510	520	2540
5	Rafting on the r. Buotama	1000	1000	1010	1010	1020	5040
	Total	13500	14520	15540	16560	17580	77700

2.1.4. Program of environmental education development

Annually the department of environmental education of the Park carries out seminars for teachers, thematic and scheduled, usually three to four seminars a year. The seminars are carried out with participation of lecturers from Yakutsk, employees of the Institute of Biological Problems of Permafrost Zone of the Siberian Branch of the Russian Academy of Sciences, Yakutsk State University, Ministry for Nature Protection, the Ulus education management etc.

Summer environmental camps and expeditions are organized in the Nature Park annually. Stationary recreation camp with the training program has been working in Buotama River mouth since 2003. Experts from the Institute of Biological Problems of Permafrost Zone and from Yakutsk State University are invited to train children. Besides, children's scientific expeditions to interesting places of Nature Park take place.

Traditionally in spring months from March until June, competitions and quizzes are organized in schools timed to «March of Parks» days of National Parks and Reserves.

A plenty of the population is involved in annual environmental actions on cleaning settlements of trash (e.g. "The Cleanest Courtyard" action).

The Department of Environmental Education has started issuing methodical literature for ulus schoolteachers. Methodical manuals are distributed on diskettes due to difficulties in copying. Issue of periodic methodical literature for teachers is planned.

"The Bulletin of the Park" newspaper is issued four times a year, it is planned to increase quantity of issues and its circulation.

To attract tourists attention it is necessary to increase issue of advertising pamphlets, calendars, leaflets, badges, emblems etc. (as an advertising production).

The Park is in close cooperation with rural museums; in each of them, our experts have established expositions on the work of the Park. In schools and administrations of ulus, villages displays have been set that are constantly updated. Opening a museum on nature with interesting exhibits in the Visitors Center is planned. There are plans of creating a video shop with movies on wonderful nature of the Park. To do this, professional video- and photocameras should necessarily be purchased.

The purpose of the program:

• Creation of steady system of environmental education in the territory of «Lena Pillars»" Nature Park proper and in Khangalasskii ulus as a whole.

Tasks:

- Increase of an educational level of teachers by carrying out seminars and conferences.
- Development of various forms and methods of work on environmental education.
- Rising interest of the local population in matters of nature management by giving comprehensive information.

Possible actions on development of environmental education in the "Lena Pillars" Nature Park in 2008-2012 are listed below together with the estimate of necessary expenditures.

Year	Activity
1.	Increase of an educational level of teachers by carrying out seminars and conferences
2012- 2016	1. Seminar for kindergarten and elementary school employees.
2010	2. Seminar for teachers of ecology.
	3. Seminar on tourist and local history activity of school pupils.
	4. Organizational seminar for teachers on summer children camps.
	5. "A Step Toward the Future" scientific conference of pupils.
2.	Development of various forms and methods of work on environmental education
2012- 2016	1. Organization of camps and field expeditions for practice of children and youth (annually).
2010	2. Development of different forms of work with children and youth such as quizzes and exhibitions, activity in context of "Marche of Parks" (annually).
	3. Attraction of population to ecologic actions – organization of annual nature protection action "Marche of Parks" (annually).
	4. Annual action "The cleanest courtyard".
	5. Lectures, discussions, hobby group work in winter time (annually).
	6. Organization of spot-checks in schools of ulus with lectures (annually).
	7. "Nature and we" action.
3.	Ecologic literature
annu- ally	1. Issue of methodical literature for those who need information on environmental education.
ally	2. Issue of periodical ecologic «The bulletin of the Park» newspaper.
	3. Issue of pamphlets about the Park.
	4. Issue of big photo album.
	5. Issue of the book about the Nature Park.
4.	Work with local history museums, organization of expositions and design of stands
annu- ally	1. Creation of a nature museum in the Visitors Center.
ally	2. Cooperation with rural museums.
	3. Making displays, brochures, information screens.
	4. Issue of advertising products (calendars, pamphlets, badges).
	5. Making of movies, photos and slides.

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Estimation of expenditures on environmental educational activity per 1 year.

Activity	Materials required	Cost
 3-4 seminars per year: thematic; about tourist activity; preparations for summer camps. 	For preparation of one seminar: hand-outs; paper; 10 pcs. of Whatman paper; inviting of lectors; visuals; expenditures.	10 000 rub
Organization of camps and expeditions for 1st season	Required for one season camp or one expedition: transportation cost (petroleum, rent); salary for lecturers, trainers, cook, worker; stationary; mobile laboratories; tents - 10 pcs.; rubber boats - 4 pcs.; tourist stock (balls, volleyball net, swimming buoy, table games, etc).	150 000 rub
Organization of quizzes, exhibitions.	prizes, certificates, presents;mass-media advertisement cost.	12 000 rub
Organization of environmental actions.	megaphones, loud-speakers;prizes, certificates, presents.	20 000 rub
Issue of methodical literature.	paper;publishing cost.	10000 rub
Issue of periodical newspaper.	 paper; publishing cost; making-up of news-paper; photos, pictures. 	40 000 rub
Creation of museum in the Visit-center (stands, expositions).	 making of fiberboard stands; making of diorama; supply of expo materials. 	120 000 rub
Work with mass-media.	 transportation of operators, correspondents (one report); advertisement cost (one ad.). 	30 000 rub
Issue of advertising products (calendars, pamphlets, brochures).	 publishing cost (one pamphlet); photos, texts composition; making-up of the texts. 	20 000 rub
Making of video-, photo- materials.	 purchase of video camera; purchase of professional camera; photo-, video- films; work of operators, photographers. 	30 000 rub
Office supply	computer, notebook, projector	140 000 rub
		582000 rub

2.1.5. Organization of scientific research and environmental monitoring

1. Inventory works

1.1. Inventory of the cartographic information.

For years of work of electronic Park maps have been made:

- 1) Topographical map of the Park, scale 1: 100 000;
- 2) Landscape map, scale 1: 500 000;
- 3) Map of woods, scale 1: 500 000;
- 4) Map of rare plant species, scale 1:500 000;
- 5) Map of the organization of environmental tourism, scale 1: 500 000;
- 6) Geological map of the Pillars, scale 1:100 000;
- 7) Map of zoning and the buffer zone, scale 1:100 000;
- 8) Landscape map, scale 1:500 000;
- 9) Map of the Khangalasskii region (all territory of Park included), scale 1:25 000. The maps on the paper carriers:
- 1) Schematic map of quarter arrangement of forest, scale 1:200 000;
- 2) Schematic map of Park and forest, scale 1: 100 000;
- 3) Schematic map of territorial arrangement, scale 1:100 000.

The inventory of the scientific and historical information about the "Lena Pillars" Nature Park was published in the form of the bibliographic catalogue with at least 540 references.

The botanical and soil mapping is made by the Institute of Biological Problems of Permafrost Zone of the Siberian Branch of the Russian Academy of Sciences (maps see above).

At present, under the contract made with the Institute of Biological Problems of Permafrost Zone of the Siberian Branch of the Russian Academy of Sciences a cadastral plan is made.

Organizing scientific research

Tasks of scientific research and environmental monitoring

The protected territories serve as a reference of the natural complexes of the region and can help in solving of environmental monitoring problems. Environmental monitoring includes geomorphological, geophysical, geochemical and environmental monitoring. It is necessary to organize a network of stationary platforms and routes in the Park to carry out complex environmental observation and organize biological monitoring. Thus, the main priority is location of the basic environmental system types of the Park. Then, in the most typical points of main environmental systems, stationary platforms are laid set by the area from 0.25 up to 1.00 hectares. Observation over land conditions (type, subtype, sort, kind, humus, pH, cation exchange etc.), vegetation, both herbaceous and forest (specific structure, covering, forest conditions, underbrush, undergrowth, living soil cover etc.), invertebrate surface and subsurface fauna is conducted on these platforms. For the observation of highly mobile forms of insects, amphibians, reptiles, and specially birds and mammals constant routes are more preferable than stationary platforms.

To carry out such complex research in the "Lena Pillars", it is of special interest to follow processes in soil of steppes and tukulans, conditions of main forest environ-

mental systems of the Park (green moss fir groves in valleys of Lena and Buotama rivers, bear-berry pine forests on ancient alluvial sediments near Buotama River mouth, native Buotama River bank near Menshikov's site, alder-cowberry larch forest on the right bank of Lena River close to Egiyte River, blueberry-cowberry larch forests on carbonate rock). Constant observations should be carried out over bank rocks environmental systems.

Biological monitoring should be carried out in tourist routes and places for studying the influence of recreational pressure on a condition of environmental systems (soils, vegetation, and fauna) and for development of destruction prevention and restoration measures.

The major task of scientific research in «Lena Pillars» Nature Park is detailed studying of environmental system resistance to anthropogenic influence. It is especially important to carry out such research in places of the highest recreational pressure, i.e. at tourist steam-ships stops and on environmental tracks. Because of research of environmental systems, capacity standards of recreational pressure should be determined and measures of disturbed environmental systems restoration should be developed.

Perspective plan of scientific research

No.	Names of agreements	Terms	Executor	Cost, rubles
1.	Monitoring of fish fauna on Buotama river.	2012	YIB SB RAS.	50
2.	Studying of environmental, physiological and biochemical features of adaptation process of a wood bison in conditions of the Central Yakutia.	since 2008	YIB SB RAS.	State target program
3.	Teamwork on stratification of Cambrian period in the territory of «Lena Pillars» Nature Park.	2012-2015	United geological team of SB RAS.	500
4	Monitoring of water and land environmental systems of «Lena Pillars» Nature Park.	2012-2013	YIB SB RAS	650
5	The study of rare plant species SPE "Lena Pillars" for introductions.	2012-2016	YIB SB RAS	State target program
6	The study of modern karst processes in the park.	2012-2016		200

Total: 1400 thousand rubles

Introduction of geoinformatic technologies

All maps are available on digital media and executed in CorelDraw 12. It is needed to convert all material to GIS format.

Two collections of scientific articles have been published:

The "Lena Pillars" National Nature Park: geology, land, vegetation, fauna, protection and use: the collection of scientific essays edited by correspondent member of the Russian Academy of Sciences, Doctor of Biology, Professor N. G. Solomonov, Candidate of Agricultural Sciences A. P. Isaev, candidate of Biological Sciences E. I. Ivanov. Yakutsk: Yakut State University Publishing House, 2001.

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The "Lena Pillars" Nature Park: the past, the present and the future: the collection of scientific essays edited by N. G. Solomonov, I. M. Okhlopkov; Institute of Biological Problems of Permafrost Zone of the Siberian Branch of the Russian Academy of Sciences, Ministry for Nature Protection of Sakha Republic (Yakutia), the "Lena Pillars" Nature Park, Yakutsk, 2007.

Also in 2007 the illustrated album "Lena Pillars" Nature Park" has been issued in Moscow by PENTA Publishing House.

There are two scientific reference books on animals and geology of the Park to be issued this year.

Scientific maintenance of activity in the field of protection of the territory, environmental education, development of tourism and recreation

The bases for development of the above-stated directions were:

- the project of the organization of "Lena Pillars" National Nature Park, executed in 1991-92 by West Siberian Design and Survey Expedition of the Russian Federation.
- the characteristic of Nature Territorial Complexes of "Lena Pillars" National Nature Park and making landscape maps executed in 1995 by the Institute of Permafrost Studies named after Academician P. I. Melnikov of the Siberian Branch of the Russian Academy of Sciences.
- the report on research work under the contract "Landscape and geographical substantiation of tourist routes", executed in 1995 by short term creative team "Cryolandscape".
- Business plans for development of environmental tourism in the territory of "Lena Pillars" National Nature Park executed in 1999 and 2002.
- Scientific reports of the Institute of Biological Problems of Permafrost Zone of the Siberian Branch of the Russian Academy of Sciences.

Development of resource base of scientific research

The material and technical base of scientific research at present includes computers, office equipment, fibre-optical communication, motor transport, river transport for fieldwork tents, sleeping bags, overalls are available.

Participation in scientific conferences and meetings

Members of «Lena Pillars»" Nature Park collective constantly participate in meetings of various levels. Experts of the Park have participated in school research-andapplied conference "A Step Towards the Future"; besides, director Kipriyanova L. D. has reported at the Conference on Preservation of Cultural and Historical Heritage of Sakha Republic (Yakutia) in Yakutsk. This year the Park acts as co-organizer of two international conferences where lecturers Rozhin V. I., senior state inspector and Kipriyanova L. D., director of the Park participated:

- 13th International Conference on Cambrian Bottom, July 2008;
- International Conference on Elk, August 2008.

Training in postgraduate and doctoral studies, preparation to defend theses

- the Park has no scientific department; all scientific work in the territory of the Park is conducted under arrangement with various scientific institutions

Organization of environmental monitoring

Drawing up the program of environmental monitoring for the perspective period

Directions of monitoring:

Over 10 years in the Park monitoring observation has been made on changes in the level of biological diversity and qualitative structure of biota, over conditions of populations, of ecosystems, forest restoration after fires. Parameters of measurement are the number of animals, sample places for definition of vegetation etc.

Frequency of information gathering — annually.

Spatial organization of monitoring — annual winter routing: quantity of routes – 30 km, length of routes not less than 35 km, overall - 150 km. Labor expenditures — 35 to 20 people per days, material needs – 53,500 rubles.

Also available is a permanent platform 25 km2 in Buotama River mouth.

2.1.6. Financial plan of the Park development

Information about Fund distribution for period 2012-2016 (thousand rub)

Out of budgetary incomes	2500	3000	3500	4000	4500
Budgetary funds					
"Lena Pillars" NP	14 003,14	14 700,65	15 637,45	16 352,71	17 11,60
Oil and gas, material supply	1311,44	1315,93	1320,12	1324,44	1328,89
Purchase of the fixed capital	200,00	200,00	200,00	200,00	200,00
	59,00	59,00	59,00	59,00	59,00
Other services	700,00	700,00	700,00	700,00	700,00
Insurance	241,72	241,72	241,72	241,72	241,72
Communal services	1 100,97	1299,14	1439,45	1571,88	1710,21
ter, fire-protection works etc)					
Transport services (helicop-	2 592,00	2 592,00	2 592,00	2 592,00	2 592,00
Communication	64,95	64,95	64,95	64,95	64,95
	1 765,86	1 880,64	2 268,16	2415,59	2 592,60
	120,00	120,00	120,00	120,00	120,00
Salary Fund	5 847,21	6 227,28	6 632,05	7 063,13	7 522,23
	2012	2013	2014	2015	2016

Financial and Economic activities Formation and servicing the fixed capital

Capital construction:

Construction of the visit-center in Yakutsk - 72 million rubles, 2012 – 2016. Construction of objects of tourism - 120 million rub. 2012 – 2016.

Purchase of a fixed capital.

In 2008 the Park has bought boats Yamaha – 1500 thousand rbls., KC-102 - 1500 thousand rbls., tents, rubber boats, the car UAZ-minivan. The vehicles were bought with support of the state target program "Preservation of the environment". With support of, earned the Park gets tents, rubber boats, pendant motors "Johnson-4" and "Johnson-10". Purchase of two motor boats with outboard motors of a class is planned - "Yamaha", a minibus, a motor vehicle of high Passability.

Attraction of financing:

- Federal budget 140 million rbl.
- Regional budget 48 140 thousand rbl.
- Incomes of own activity 2 million rbl. annually
- Payment for visiting the territory 130 rbl.
- Payment for commercial videos and photofilming 2800 rbl. for a day
- Payment for services of conductors, guides 280 rbl for 1 persons
- Transport services: boat KC-102 21-rbl x 1 km x 1 person

Boat "Buotama" - 25-rbl x 1 km x 1 person

- Incomes of sale of souvenirs, badges and polygraphic production. 50 000 rbl.

Savings of financial assets

For economy of financial resources are used:

Reduction of motor vehicles by realization through the Ministry for Property Relations individuals, closing of not used garage, transition to the simplified system of the taxation, use of the stipulated privileges and clearings (clearing of the tax to the land, on property).

Plan of activity

Administrative task	Activity	Terms of realization		Executors	Value, thousand rbl.
1. Forming and service of basic funds.		2012	2015	Park administration.	8750
2. Construction of Visitors Centre in Yakutsk.	Identification of financing sources (participation in investment projects) and building	2012	2015	Park administration, YIB SB RAS.	72 000
3. Construction on the «Lena Pillars».	Construction of visit – centre on «Lena Pillars».	2012	2012	Park administration, MEP RS (YA), Ministry of constriction RS (YA).	500
4. Organization of the equipment purchase.	Forming of interior technological equip- ment in Diring- Iuryakh	2012	2015	Park administration, MEP RS (YA), Ministry of constriction RS (YA).	640
5. Construction of tourist properties.	Participation in tender organized by Rosturizm, in order to gain investments for construction.	2012	2016	Park administration, Ministry of business and tourism RS (YA).	120 000
6. Organization of capital repairs, reconstruction and supporting of basic funds.		2012	2016	Park administration.	300
7. Basic funds purchasing.	Purchase of boat «Yamaha», boat «KC-102», tents, motoboats, car «UAZ- minivan», minivan.	2012	2016	Park administration, MEP RS (YA). TO	10 000 FAL: 212 190

RESUME

The main features

Each specially protected natural territory has the features distinguishing it from the others. These features, both positive and negative, certainly influence development of particular territory and its management. The following are among main features of "Lena Pillars" Nature Park:

- Valley character of the territory, located along the axes of Lena, Buotama and Siniaia rivers.
- Significant (220 km) extension of the Park along the right coast of Lena River.
- Cluster character of the territory including two isolated locations not incorporated into a uniform security (buffer) zone.
- Location of the Park on ownerless land excluded from economic operations.
- Presence of Amur-Yakut highway along the buffer zone and of a winter road, and shipping operations along Lena River that, on the one hand, secures accessibility of the Park any time of year, and, on the other hand, complicates regularity of visiting.
- Large settlements, including the city of Yakutsk in close vicinities of the Park.
- Various landscape provinces overlapping in the territory of the Park, mosaic physical and geographical conditions and natural territorial complexes.

These and other features of "Lena Pillars" Nature Park, on the one hand, impart special appeal and originality to its territory, and, on the other hand, presume special approach to management of the Park and planning of its activity in prospect.

Key problems of the Park, negative effects and threats to its protected natural, historical, and cultural complexes and objects

The basic infringements are:

- infringements of the Park regime (visiting without permission, violation of terms of gathering wild-growing berries and plants, of rules of fishing and hunting);
- sharp increase in visitors of the Park during summer leads to higher recreational pressure on natural complexes of the Park. Pollution by garbage, violation of fire safety rules, gathering wild-growing berries and mushrooms result in depletion of flora of the Park.

The most visited places experiencing anthropogenic influence are:

- Water system in lower reaches of Buotama River.
- Water system in lower reaches of Siniaia River.
- Water system of Lena River within Buotama "Lena Pillars" area.
- A mouth of the river Buotama.
- A mouth of the river Labyja around «Lena Pillars».
- Diring-IIuryakh area.

The greatest loss to natural complexes, historical and cultural objects of the Park is tied up with such disasters as floods, river jams, forest fires, reproduction and propagation of woodworms. For example, 1998 flood damaged the Park greatly: all cordons and campsites were under water. 2007 jam has completely erased visitors centre on Lena Pillars. Occasional forest fires and Siberian silkworm have caused an irreplaceable damage to wood resources of the Park in 2001-2002.

Basic directions of activity and the most important actions for preservation natural, historical and cultural complexes and objects

The basic directions of activity:

- Protection of vested territories as well as natural and cultural historical objects.
- Creation of conditions for all kinds of regulated tourism, excursion services and recreation facilities, acquaintance with the Park nature, its cultural and historical sites.
- Preservation and restoration of natural complexes as places of traditional economic activities of local population.
- Information and advertising campaigns, publication of scientific and popular literature on all aspects of activity of the Park (proceedings, guidebooks, information materials, reference books, pamphlets, booklets on excursions, lectures, instructions, maps, posters, picture albums etc.).
- Reproduction of the nature in the territories involved in economic circulation, of valuable kinds of plants and animals; participation in the system of regional monitoring and support of the general environmental optimum in the region.
- Maintenance and cultivation of wild animals within the zone of artificial cultivation of rare and vanishing species of animals.
- Realization of environmental education, organization of museums and open air
 expositions; creation and arrangement of excursion tracks and routes; organization of environmental associations and centers; practical work of students of
 higher and specialized secondary educational institutions of corresponding specializations, educating schoolchildren; coverage of the Nature Park activities in
 mass media; other forms and methods of social environmental education, formation and propagation of environmental knowledge.

Prospective nature protection, economic and social effects of the planned actions

The present management plan is created for strengthening of financial, technical base of the Park that will improve quality of protection of natural objects, will promote preservation of historical and cultural objects, and will give renewed impetus to development of environmental education and environmental tourism. Besides, the plan presumes expansion of scientific knowledge of flora, fauna, natural communities, and Park complexes that will allow more validly protect and operate the territory. It is important that the present plan envisages cooperation with local population of the region, when they do not only visit the Park as tourists, but take part in the territory protection (as public inspectors), environmental education and scientific research (summer environmental camps, study groups and societies, participation in various actions), work with personnel (increase in staff or attraction of businessmen to work in the field of tourism).

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