



**Environmental Watch
on North Caucasus**

Sochi-2014:

**independent
environmental report**



CEE bankwatch
network

Both ENDS
Connecting people for change

Suren GAZARYAN



PhD in Biology, member of the Environmental Watch on North Caucasus' Council

Born in 1974 (the city of Kras-

nodar). Graduated from Kuban state university (Biology department) in 1996. In 2001, finished his postgraduate study and defended his dissertation in the Institute of problems of ecology and evolution named after A.N. Severtsov of the Russian Academy of Science.

From 2004 to 2012, worked in the Institute of ecology of mountain areas Kabardino-Balkarsky Science Center of the Russian Academy of Science in the capacity of senior researcher in the Laboratory of diversity of vertebrate animals. Has more than 60 scientific publications.

Co-author of Red Books of Krasnodar krai, Adygea republic, Kabardino-Balkaria, Dagestan, Rostov oblast.

Represents Russia in the Advisory Committee of the UNEP/Eurobats international agreement.

Since 2004, member of Environmental Watch on North Caucasus, and since 2005 - member of its Council.

Lives in Estonia.

Dmitry SHEVCHENKO



Deputy coordinator and spokesman of Environmental Watch on North Caucasus. Member of the Environmental Journalists'

Association Council of the Russian Union of Journalists.

Born in 1981 (Kazakhstan). In 2003, graduated from Kuban state university (Department of Management and Phycology). From 2004 to 2009 worked in a media industry. In 2009, participated in a constituent conference of the Environmental Journalists' Association of the Russian Union of Journalists; and was elected to the Council of this organization.

Author of the manual "How to organize and realize environmental campaign" (published by Oxfam Russia in 2011), co-author of reviews "Environmental offences in Russian regions" published by Environmental defense center "Bellona."

Member of Environmental Watch on North Caucasus since 2008.

Lives in Russia.

TABLE OF CONTENTS

Sochi. Ten years without justice	2
Sochi's path to Olympic Games: the art of diplomacy and a bit of criminal influence	5
Imeretinskaya lowland: an area of uncontrolled development	19
Mountain cluster: the story of a man-made catastrophe	27
Mzymta: the victim of the most expensive Olympic site	42
“Green” Standards for Olympic Construction Projects: a Fig Leaf to Cover Shame	51
Zero Waste: Zero Successes on the Waste Management Front	57
The Myth of “Clean” Air	68
Environmental Destruction for the Sake of the 2014 Sochi Winter Olympics Should Become a Lesson and Must Never Happen Again!	77

Sochi. Ten years without justice

“The goal of the Olympic Movement is to contribute to building a better world...”

The Olympic Charter

“If they come and start - flaunting the Constitution, shouting that you cannot cut fir and pine trees - then it is easier to change the Constitution”

**Leonid Tyagachev,
President of the Russian Olympic Committee 2001-2010**

Ten years ago, in October 2004, the thunder of a helicopter carrying VIP “troopers” broke the sleepy silence of Krasnaya Polyana at the time, an unremarkable village in the foothills. On October 8, 2004 that helicopter was carrying a group of high-ranking people including Minister for Economic Development Herman Gref, Minister of Natural Resources Yury Trutnev, Presidential Plenipotentiary Envoy to the Southern Federal District Dmitry Kozak, Governor of Krasnodar region Aleksandr Tkachev, and Chairman of the Olympic Committee Leonid Tyagachev. These men pompously poured the first symbolic block of concrete into the foundation of the new ski resort, Carousel.

The event was reported in the media as a “serious breakthrough,” and a “new milestone in Sochi’s history.” Off-camera, however, this “new milestone” was



an act of lawlessness. Carousel's clients were not worried about conducting an environmental impact assessment, and in participating in the pouring of the cement, Gref, Trutnev, Kozak, and Tkachev publicly gave the go-ahead to carry out illegal activity.

In this way, in violation of all conceivable legislative norms, but with high level protection, the Olympic ski adventure was carried out in Sochi.

This high level of protection for the Olympic Games came from Russia's President Vladimir Putin himself. The 2014 Olympic Games can be called "The Putinympics," as the realization of this extremely expensive and environmentally destructive project would not have been possible without his personal protection. The unique environment of the Western Caucasus, billions of dollars from the budget, the interests of hundreds of thousands of residents of Sochi, and Russian environmental protection laws have all been squandered – all for the ambitions and whims of one man.

There is no doubt that this legacy will become Herostratus' glory for Putin. Furthermore, what was conceived as a "triumph" has become an unprecedented orgy of corruption, arbitrariness, and legal nihilism. It turns out that any federal law can be "corrected" for a mega-project. In this sense, the Sochi Olympics has created a very dangerous precedent.

Another disgrace of the Olympics in Sochi is the extremely negative role that international institutions played in the Games' preparation, in particular the International Olympic Committee and the United Nations Environment Programme (UNEP). Their representatives—responsible for upholding the Olympic Charter and ensuring environmental protection—unfortunately shut their eyes to numerous violations, were not objective, and failed to carry out their responsibilities.

The international acquiescence of responsibility allowed the Russian government to organize and conduct this large-scale project to destroy the environment and unique ecosystems. The level of environmental damage of the Sochi project is unparalleled since the industrialization of the 1930s.



The report compiles and analyses the damage to the environment caused by Putin's "construction of the century". We are convinced that sooner or later, someone will answer for it all—the sinkholes in wetlands, useless concrete giants, empty ski slopes, fatal design flaws, and violated laws and human fates.

We really do not want the correction of these mistakes to turn into the old scapegoating. The Sochi 2014 adventure should be a serious lesson for all of us.

Andrey Rudomakha,
Coordinator, Environmental Watch of the North Caucasus

Sochi's path to Olympic Games: the art of diplomacy and a bit of criminal influence



Russia has bid for the right to host the Olympic Games four times in post-Soviet history. Sochi applied twice, and Moscow and Saint Petersburg both filed bids for the Summer Olympic Games.

The possibility of Sochi hosting the Winter Games became the subject of discussion for the first time in the late 1980s. In 1989, the executive committee of the Sochi city council made a decision to send the bid for the 2002 Winter Olympics as suggested by the Olympic Committee of the USSR.



Experts from the IOC's various winter sports federations inspected the Krasnaya Polyana area in 1990, and noted promising sites for building sports venues for downhill skiing, freestyle, ski racing, biathlon, Alpine combined event, ski jumping and other sports events.¹

Sochi officially bid for the right to host the 2002 Olympics in 1994. However, the IOC decided not to include the city in the short list of candidates after concluding that the Black Sea resort did not fit the technical criteria.

Interestingly, in 1999 officials discussed the possibility of lodging a bid to host the Summer Olympics in Sochi in 2008. However this discussion never led to applying to the IOC officially. The 2008 Games took place in Beijing.

In March 2000, Vladimir Putin became the President of Russia. His ascent to the Kremlin coincided with the beginning of Russia's rapid economic growth after the financial crisis of the late 1990s. Escalating oil and gas prices played a key role in this economic recovery. For example, one barrel of oil cost 12 dollars in 1998, reached 30 in 2000, and 53 in 2005.²

The attempt to make Sochi into a world class ski resort, though it fell short in the 1990s, now stood a new chance. It was clear that no amounts of money would be spared for the project.



In Sochi's 2002 bid, Russia focused on the city's unique geography. The IOC was not impressed



The head of the Russian Olympic Committee Leonid Tyagachev described in a 2007 interview how the idea of hosting the Winter Olympic Games in Sochi was first resurrected: “The 2014 Olympic project began seven years ago when we went to Krasnaya Polyana with Vladimir Putin. We looked at the mountains and got to thinking – how can we make it into a world class resort? Of course, we need the Olympics. And the idea enthralled the President. Of course, had he not been a skier himself, he would not have fully appreciated Krasnaya Polyana. A total of three people then supported the idea. Herman Gref abstained, and Alexei Kudrin gave his support. Others did not believe that this miracle was possible. It was important for me to convince the President that the resort would not be for me or for him, but for the entire country. That it was time for the country to have at least one real resort. Our people and the sport needed it.”³

Below is a chronology of key events that predetermined the decision of the International Olympic Committee to select Sochi as the venue for the 2014 Olympic Games.

2003: In February, Prime Minister Mikhail Kasyanov signed Government Decree №238-R, dated 27 February 2003: “Description of the boundaries of land plots in the Sochi National Park that could be rented out for construction of the sports resort complex, Krasnaya Polyana. This document effectively set off the avalanche of subsequent Olympic injustice.

Kasyanov decided to use extremely valuable wilderness areas, the ridges Aibga, Psekhako, and Grushovy, as well as the Khmelevsky lakes area, for the development for downhill ski projects.

In March, Kasyanov presided over a meeting on Krasnaya Polyana complex, where it was decided that the ministry of natural resources must put together the “resort concept” in three months, while the minister of economy was to decide within one month how the tenders for renting out the land plots for said resort would be held. The meeting also addressed the issue of completing reconstruction of the existing road from Adler to Krasnaya Polyana, and bringing gas to this mountain village.

The first beneficiary of Kasyanov’s decree was Gazprom, the Russian gas company, which rented 95 hectares in the Sochi National Park to build a ski area,



and immediately announced plans for developing their own ski resort. Gazprom began construction the same year, including a so-called “Laura house for receiving official delegations”, and villas in the valley of the river Achipse, specifically a site called Rudnik. Construction began without completing an environmental impact assessment.



Gazprom was the first beneficiary of Kasyanov's decree and started to develop their own ski resort in the Achipse River valley

It is worth noting that two years later, Sochi's prosecutor's office found violations in Decree 238-R. It turned out that land on the Psekhako ridge, which was allocated for Gazprom's resort, partly encroached on the territory of the Caucasian State Biosphere Reserve, which was illegal. Sochi's prosecutor Alexander Sergeyenko said in a letter in response to an inquiry from EWNC that “federal authorities need to take measures.” To this day, the measures have not been taken.

2004. In February, the Krasnodar region Governor Alexander Tkachev and Gazprom's Deputy Chairman Nikolai Guslisty lit a gas torch to mark the completion of a high-pressure gas line, Adler-Krasnaya Polyana. The project, worth 1.7 bil-



lion rubles, was built in record time of less than a year in highly complicated topography, and would bring gas “to 17 Sochi villages for free,” Gazprom declared.

Gazprom’s gas line to Krasnaya Polyana marked the first serious conflict between infrastructural development and Russia’s legal norms. Gazprom pressured the authorities of the natural resources and environment administration of the Krasnodar region, demanding a positive environmental impact assessment by using a singular argument: “Putin only gave us one year.”

The impact study was finished in record time but the main contractor of the building, ZAO Pitergaz, did not wait for the paperwork allowing construction. The first section of the gas line tore through a protected area, the natural monument, Kudapestinsky Canyon, and destroyed about two thousand protected box trees. There were ways of going around the canyon, but looking for alternate routes for the line would seriously delay the completion of the project and required the contractor to make changes to the building plan.

In March 2004, Gazprom began construction of the lower station of the ski lift at the Psekhako ridge, on the border of the Caucasus reserve. Construction went ahead without any authorization documents. According to EWNC’s information, the contractor, a Turkish firm called Khazinedarogly, did not even have a project plan. The Sochi inspection of the natural resources and environment administration of the Krasnodar region issued official orders to the company to stop construction of the station, but works continued without pause.

In 2004, other investors also came to Krasnaya Polyana. In May, the company, Krasnaya Polyana, created by the Krasnodar regional administration and the Sochi administration, received 1920 hectares in the Sochi National Park for the Gornaya Carousel project. This land was on the forested and alpine slopes of the Chernaya Piramida (Black Pyramid) mountain that is part of the Aibga ridge system. The infrastructure planned for this area included twenty ski lifts and over 70 kilometers of ski slopes.



Construction of the Gornaya Carousel project was illegal but supported by the Krasnodar regional administration

About one year later, another investor in the project, the owner of ZAO NortGaz Farkhad Akhmedov, who had become a senator from Krasnodar region with the help of governor Tkachev, sold his stake in Gornaya Carousel to the former Krasnodar regional Duma Deputy Akhmed Bilalov, also a future Krasnodar region senator. The construction of Gornaya Carousel began without an environmental impact assessment.

Vladimir Potanin, the owner of Interros holding, became another major player after announcing in 2004 that he plans to build the ski resort Rosa Khutor on the slopes of Aibga. The same year, Interros founded the Rosa Khutor company, which signed three rental agreements with the Sochi National Park for a total of 541.4 hectares.⁴

Soon after initial development for the project began, Potanin said that building Rosa Khutor would require “very little excavation and zero logging.” A year later,



when the first plan for the project was shown at the public hearings, it became clear that the territory of the future ski resort is covered with forest, and much of it was subsequently cut.⁵



Potantin declared that “zero logging” would be needed to build Roza Khutor. The reality turned out very different: logged forest on Aibga

2005. In April, Sochi’s authorities organized public hearings for the project “General plan of development for the mountain-sea complex Krasnaya Polyana.” The plan included new ski complexes near the villages Krasnaya Polyana and Aibga, construction of various recreational facilities in the lower area of Sochi’s Adler district, massive resort construction in the Imeretinskaya lowland, and infrastructural development. 84 percent of the “mountain-sea complex” fell on the land of the Sochi National Park and Sochi State Nature Reserve (zakaznik).

The main idea of this general plan was to host the Winter Olympic Games in Sochi using the planned sports venues. This was the first time the city’s intentions to host the international event were mentioned publicly.⁶



On July 26, 2005, delegates at Russia's Olympic Committee unanimously decided to make Sochi the bid for the XXII Winter Olympic Games in 2014. They said that 6 billion dollars would be necessary to construct the Olympic venues. The official bid was sent to the IOC on July 27.

2006. In February, Russia's Olympic Committee sent the IOC 30 CDs containing information about Russia's future Olympic project. Together with Sochi, the following cities were in the running: Salzburg (Austria), Sofia (Bulgaria), Jaka (Spain), Borjomi (Georgia), Pyeongchang (South Korea) and Almaty (Kazakhstan). By June of that year, Sochi was one of three cities shortlisted by the IOC as a realistic candidate to host the event, together with Salzburg and Pyeongchang.

Almost immediately after, the Russian government initiated a change to the functional zoning of the Sochi National Park. The Ministry of Natural Resources concluded that it was "not practical to safeguard the protected regime" at the Aibga ridge, Grushevaya Polyana, Turye mountains and the Psekhako ridge. In this way, extremely valuable natural territories became vulnerable. An enormous part of the Krasnopolyansky forestry was excluded from the strictly protected zones of the National Park, an intact forest area in the middle of the Mzymta river that spread across 23 entire and 3 partial forest quarters.

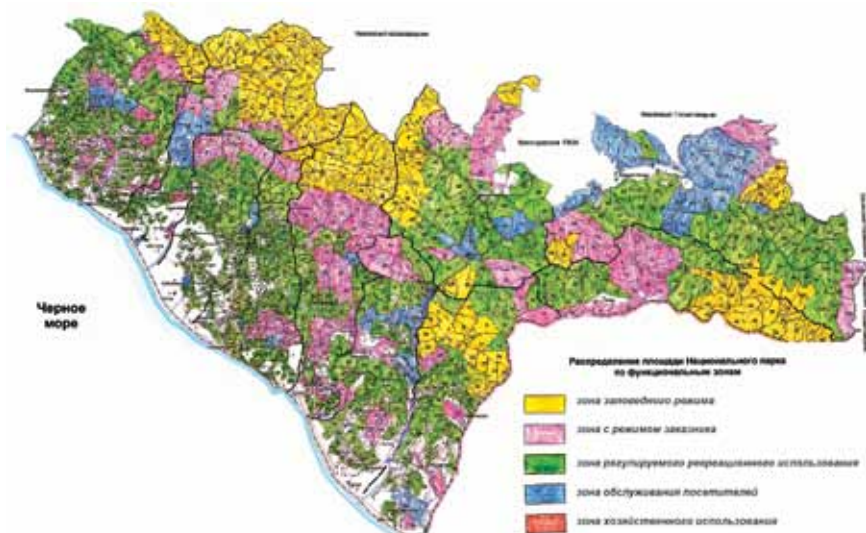


Image 1. The zoning plan for Sochi National Park before 2006. The zone of strict protection, which was discontinued with the onset of Olympic preparation, is marked in yellow

At this point, the biggest environmental threat was to the virgin forests on the Psekhako ridge. According to the initial national park zoning, this ridge was surrounded on three sides by the Caucasian reserve and was almost entirely in the strictly protected zone of the national park. When zoning was changed in 1997, most of it was taken out of the strictly protected zone, and after 2006 the entire ridge, where Gazprom was already deep into construction of their resort, was removed from the strictly protected zone.

On September 27, 2006, the expert committee of the Ministry of Natural Resources approved the positive environmental impact evaluation assessment of the plan to alter the Sochi National Park zoning despite strong criticism by various environmental organizations, including Environmental Watch on North Caucasus, Greenpeace Russia, and Maikop's branch of the Russian Nature Protection Society.

In June, the Russian government approved a federal target program "Development of Sochi as a mountain climatic resort (2006-2014)." According to the program, about ten sports venues would be built in the Sochi National Park. From



the beginning it was clear that the Grushevy ridge, where the planners placed the ski complex, the ski jumps, the bobsled track and the mountain village, was entirely inside the strictly protected zone of the Sochi National Park and directly bordered the Caucasian reserve, which is part of the UNESCO World Heritage Site, Western Caucasus.

The public hearings and the environmental impact assessment of this federal target program were put together several months after it was already approved by a governmental decree.⁷

The symbolic first bricklaying of the Gornaya Carousel project was completed at a ceremony on October 30 as part of the international economic forum, Kuban-2006. Deputy Prime Minister Alexander Zhukov, Economy Minister Herman Gref and Krasnodar Governor Alexander Tkachev were present. It was known well at that time that the first stage of the resort was built without an environmental assessment, which is illegal.

On October 9, Governor Tkachev presented the president of the International Ice Hockey Federation, Rene Fasel (Switzerland), a certificate granting land for the future Olympic ice palace. The ceremony was held in the Imeretinskaya lowland, where some ten sports venues were planned.

To provide electricity for all of these massive objects, the authorities planned to build a power and heat station in Sochi's Adler district.

In December, the Economy and Trade Minister Herman Gref presided over a meeting of the Coordinating council for the realization of the federal target program. At this meeting, officials decided that the land already allocated from the Sochi National Park was insufficient. "The Russian Olympic Committee and RosSport federal agency did not fully consider the number of necessary objects in drafting the federal target program," said the protocol of the meeting, ordering the Ministry of Natural Resources to "review proposed objects and the possibility of allocating land plots for their construction."⁸

Coerced seizure of land and property from inhabitants of Imeretinskaya lowland began in 2006. The authorities immediately adopted a method of force, without any attempts to build constructive dialogue with the local community. In the sum-



mer, a meeting of the Krasnodar region Security Council issued a special decision “On bringing order in the spheres of land use and stopping unauthorized construction in the Imeretinskaya lowland.” The region’s property department was ordered to “issue lawsuits to decide on objects of illegal building and land use.” The regional Anti-terrorist Committee and Security Council would control seizures and demolitions.

2007. On January 18, the Russian Olympic Committee presented Sochi’s bid book in Moscow. This main document of Russia’s campaign outlined the concept of Olympic Games. The three tomes contained 110 charts and maps, 500 pages and 550 official guarantees.⁹

Immediately after the New Year holiday, the company “Tonnelnyotryad 44” (which subsequently became embroiled in a criminal probe over corruption) began illegally building a road to the Pslukh ranger station in the Caucasus reserve, where an the IOC mission was expected in February. According to the plan, the bobsled track, biathlon complex mountain village, and several hotels were planned in the Pslukh area.

On February 3, government decree 81-R, signed by Mikhail Fradkov, was published, dated 26 January 2007. This decree enlisted the plots of land in the Sochi National Park where construction and use of “objects of social infrastructure” was now allowed.

The pretty “social infrastructure” euphemism hid luxury hotels with a golf club, which were intended for the Grushevy ridge, a most valuable natural area between the Mzymta and Pslukh rivers in the Sochi National Park and Sochi Nature Reserve (zakaznik), another protected area. The total area planned for the “objects of social infrastructure” was over 943 hectares, a huge territory of which, 362 hectares, were in the protected zone of the Caucasian reserve.

The IOC mission, headed by Vice President Chiharu Igaya, came to Sochi in mid-February. International inspectors looked at the proposed venue sites, as well as the new airport terminal. The media was not invited to participate in the visit, only to a short press-conference by Mr. Igaya, who said that Sochi “has no weak areas, only certain problems that require solutions.” The main problem, according to Mr. Igaya, was time, a short time in which so many objects were



needed. "Sochi does not have much time to build all of the Olympic venues," he said.¹⁰

In early June, the IOC published a report of the mission that visited three contending cities with inspections. In the report, Austria's Salzburg and South Korea's Pyeongchang received the mark of "excellent" while Sochi was deemed "very good." The report noted that Salzburg had most of the venues already, while Pyeongchang had 7 out of 11 almost finished. Meanwhile, Sochi "must build all 11 venues."

So, Sochi arrived to the final vote absolutely not ready, which was recognized by the IOC. In this situation, Russia's lobbyists, together with President Putin, had to use all available resources, some of which did not fall within the IOC's framework. First of all, IOC delegates to the session, where the fate of Sochi 2014 was to be determined, had to have things explained to them.

As the head of Russia's Olympic Committee Leonid Tyagachev would later admit, "Many of the IOC members from countries in Asia and Africa, who do not participate in the Winter Olympics, could vote for this or that candidate, and it was impossible to predict how they would vote."

"I can say with confidence that the votes cast by delegates from Asian countries, and without them it would be difficult for Sochi to expect victory, were cast in favor of our candidacy due to careful work done by the representative of Uzbekistan, the Vice President of the Asian Olympic Council and the Acting Vice President of the International Federation of Amateur Boxing, Gafur Rakhimov," Tyagachev further told Rossiyskaya Gazeta.

Today, Mr. Rakhimov is listed in the database of Russia's Interior Ministry as a leader of an organized crime group, previously associated with the criminals, Yaponchik and Ded Khasan. In his native Uzbekistan, Rakhimov is a wanted man, while in the United States he has been implicated by the US Treasury in the infamous Brothers' Circle, an international crime syndicate created by people from the former Soviet Union.¹¹



Crime boss Rakhimov who engaged in “careful work” with the IOC delegates from Asia and Africa

According to *Novaya Gazeta*, Rakhimov asked to use one of the Duma deputies as a contractor in Sochi’s Olympic construction for his services.¹²

On July 3, the 119th session of the IOC opened in Guatemala. The main question was who would be chosen to host the Winter Olympic Games in 2014. Each candidate country had 45 minutes to present its case, followed by a series of questions, and a final presentation by the head of the bid commission, Chiharu Igaya.

Just before the vote, 47 Russian environmental organizations appealed to the IOC to “be responsible about picking the place of choosing the place of the Olympic Games and not make decisions that will inflict irreversible damage, not just to the environment and human rights, but to the whole Olympic movement.” Russia’s environmentalists pointed out to the IOC that, as never before, all Olympic venues were planned on valuable protected natural territories.

Nevertheless, the outcome of the vote was predetermined. Sochi overcame the runner-up, Korea’s Pyeongchang by only four points (51 votes for Sochi, 47 for Pyeongchang). For the first time in the history of Winter Olympic Games, the



host city had none of the necessary venues completed for the event or none of the necessary Olympic venues were at the last stage of construction.

Subsequently, the IOC had to make numerous statements trying to justify its choice to host 2014 Winter Olympics in Sochi, where nothing was ready for the Games at the moment of choosing a host city. In particular, it stated that Sochi had 'unique' opportunity to implement international sport, social and environmental standards while building all Olympic venues from scratch.

Further part of this report describes consequences of this "unique" gamble

-
- 1 Themaster planof development of tourist and sports complex «Krasnaya Polyana». Executive Summary.
 - 2 <http://www.protown.ru/information/hide/3196.html>
 - 3 <http://www.rg.ru/2007/08/08/tyagachev-sochi.html>
 - 4 <http://www.business-fm.ru/news/14565?doctype=new>
 - 5 <http://ewnc.info/node/4277>
 - 6 <http://lenta.ru/lib/14182863>
 - 7 <http://ewnc.org/node/323>
 - 8 Protocol of the meeting of the Coordinating Council for Realization Minutes of the Federal Program «Development of Sochi as a Mountain Climate Resort (2006-2014)», 13 December 2006. Number 78-YY
 - 9 <http://www.willan.ru/news/68/>
 - 10 <http://www.nr2.ru/106259.html>
 - 11 <http://www.treasury.gov/press-center/press-releases/Pages/jl2196.aspx>
 - 12 <http://www.novayagazeta.ru/inquests/61809.html>

Imeretinskaya lowland: an area of uncontrolled development



All of the Olympic sites along the Coastal Cluster, as it is called, are located in Imeretinskaya lowland, which is bordered by the Mzymta and Psou Rivers.

All Olympic sites of the so-called Coastal cluster are located in Imeretinskaya lowland, which is bordered by Mzymta and Psou Rivers. Massive Olympic construction caused massive biodiversity loss, migratory species and coastal flora were damaged in particular. The level of destruction does not have any analogue in Krasnodar region.



The Imeretinskaya lowland is a natural landscape typical for subtropical coastal lowlands of the Northern Caucasus Black Sea coast and is an unique Russian area. It used to be the habitat of surviving threatened and endangered plant species, which are protected in Russia.

According to data collected by more than 100 inventories conducted between 1997-2006 by the Russian Bird Conservation Union, approximately 200 bird species were registered on the territory of the Imeretinskaya lowland. Twenty six of these species are included in the Red Book of the Krasnodar region; 22 species are included in the Red Book of Russia. More than 65 bird species (16,000 individual bird species) live there during cold winters.¹

In 2006, the Imeretinskaya lowland was included in the list of areas that **meet the criteria of the Ramsar Convention on Wetlands of International Importance particularly as Waterfowl Habitat**. In 2008, it was recognized as a **key ornithological territory of international importance**.²

In 2004, scientists developed a project for a Natural Park for bird and plant conservation. It was supposed to include fields of the Russia state farm and wetlands; the entire Park was proposed to be approximately 800 hectares.

In order to protect the most intact area with coastal marine vegetation in the Imeretinskaya lowland, they drafted plans to establish a natural monument “The beach area with sandy marine vegetation located between “Chernomorets” and “Energiya” recreation centers.”

In 1993, the coastal beach area with endemic flora was included in the city of Sochi’s general plan (General plan correction, the 2nd stage) as a natural monument B-VII-61. The monument included unique habitats for many species of rare Mediterranean flora protected by the Red Book of Russia.



Image 2. Borders of the Ornithological Park and natural monument, which were never created

In order to justify Olympic construction on the key ornithological territory of international importance, the Sochi Bid Book contained a lot of promises that were never fulfilled. In particular, it promised to conserve lakes, where birds overwinter, as well as the habitats of protected plant species.

It also stated, the “Olympic Park will exclude uncontrolled development of the territory and will mitigate negative impact on ecosystems. No long-term negative impact is expected.”

To fulfill these promises, the Olympic construction program provided for the establishment of a regional specially-protected natural territory, i.e. the Ornithological Park.

Project development of the Ornithological Park began in 2009. It became clear that almost all of the territory of the Imeretinskaya lowland had already been allocated for construction of various sites. And it turned out that, simply, there is no room for the promised park, which was 300 hectares. Some lakes were filled in; and the most valuable part of the prospective ornithological park was behind a stone fence built around the land lot of one of the FSB subdivisions. Therefore,



authorities decided to give away storm drainage ponds and areas surrounding them. They also decided to give wetlands in the Northern part of the lowland. However, the decision was made to allocate the greatest part of the ornithological park beyond the borders of the Imeretinskaya lowland, on abandoned farmland.

In April 2009, when the project was being developed, the Russian Bird Conservation Union sent its viewpoints on ornithological park to the Administration of Krasnodar region and to the Ministry of Natural Resources and Environment of the Russian Federation. Scientists stated that *“establishment of the series of isolated environmental sites of various purpose (and the purpose is not always clear) makes it clear that project developers do not have a clear understanding that a natural park as an integral specially-protected natural territory that has organizational peculiarities established by law. Also, the given scheme does not meet the biological needs of the birds, which utilize these areas as their natural habitats, in particular, it is proposed to include only a small portion of territories that present importance for birds conservation. The proposed version discredits the very idea of establishing a national park with the purpose to protect unique natural sites.”*³

They did not take scientists' opinion into consideration, though. According to the latest version of the park's borders (approved by the regional governor's decision of October 1, 2012), the territory of the park consists of 14 land lots scattered all over a huge territory. The total area is 298 hectares. At the same time, only 100 hectares, divided into 9 land lots, are located on the Imeretinskaya lowland itself. The other two thirds of the territory are located along the Psou River bed and in the mountains.⁴

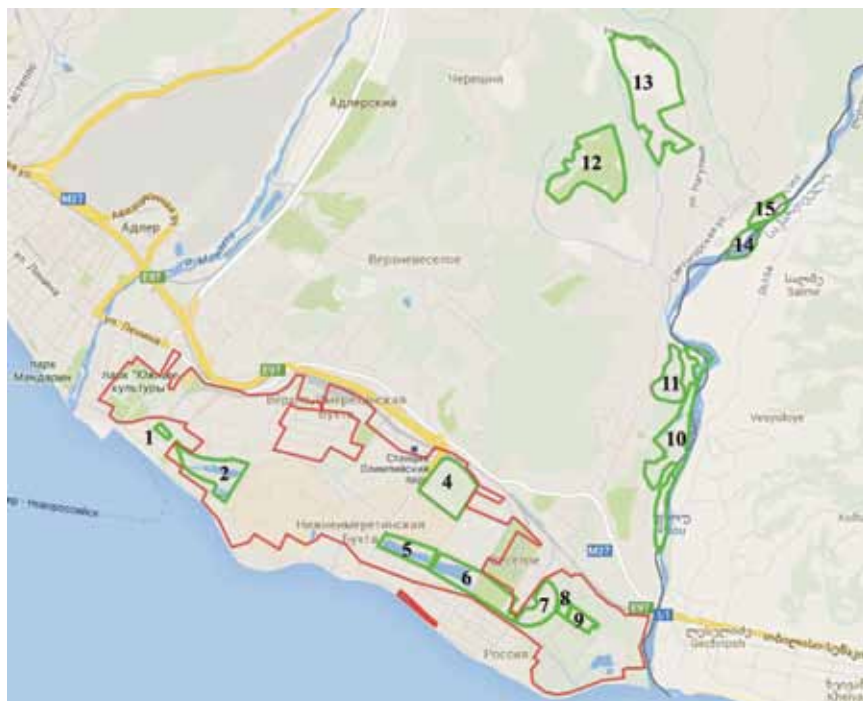


Image 3. Borders of created clusters for the ornithological park (green) and borders of the reserve earlier proposed by scientists (red)

Nevertheless, even those drainage ponds that could have theoretically become an area for overwintering and stopovers for migratory birds, are being use by authorities at their own discretion. According to Regulations on the Ornithological Park, land lots allocated on the territory of the Imeretinskaya lowland will have a recreational function and will also be used for commercial purposes as an unusual amusement park. According to information on the web-site, these land lots will be used in a following manner:

- *cluster 1*: recreational zone for Sochi residents and for Sochi visitors;
- *cluster 2*: usage mode is not described;
- *cluster 3*: excluded from the ornithological park;
- *clusters 5 and 6*: after creation of a regulating pond, it is intended to be inhabited



by water birds, shorebirds, cranes, gallinaceae and other birds. It will function for Sochi residents' and visitors' ecological education;

- *cluster 7*: intended to function as a demonstration-area of diversity of bird species and other animals, as well as demonstration of the unique tree-park;

- *cluster 8*: after construction, the land lot is intended to function as a park with a butterfly pavilion and a show-room where insects of the Imeretinskaya lowland are on display;

- *cluster 9*: intended to be a park zone with playgrounds and children's small zoological park.

It is obvious, that the proposed regime will not allow birds that are sensitive to disturbances to use the Imeretinskaya lowland even for short-term stopovers.

Clusters 10, 13, 14, and 15 are ascribed to the reserve area. At the same time, *cluster 10* is partially built up with boundary constructions. The other part is located in the Psou riverbed.

Cluster 13 is intensely used for agriculture, and *clusters 14 and 15* are **located outside the Russian border**. Mountain clusters are still fictitious as none of them are defined as an officially bounded land lot.

Work on the ornithological park began. In 2013, 600 million rubles (\$20 000 000) were allocated to administration of the park for organizing trails and building construction. However, this money has nothing to do with environmental protection and birds as it is being used to build trails, flower gardens, flower beds, etc.

Thus, the protected territory that was created in the Imeretinskaya lowland is **8 times smaller than the area that was scientifically proven**. Instead of creating a continuous wetland area entirely of 800 hectares, there is no area beyond the lowland that is suitable for water birds' overwintering. Bureaucrats organized something similar to a zoological park that is intended to be inhabited by domesticated birds; and they plan to build enclosures and butterfly pavilions on a drainage pond shore instead of establishing a protected area in the Imeretinskaya lowland.



Special measures to protect other animal species, e.g. amphibians and reptiles, organized by the State Corporation, Olympstroy, are also absurd. According to Olympstroy's 2011 report, *"in fall of 2010, 450 animals (amphibians, reptiles and fish) were captured in the construction area and resettled to analogous biotopes of the developing natural ornithological park in the Imeretinskaya lowland."* However, according to another report by Olympstroy, by the fall of 2010 the entire area had been under the construction of engineering protection facilities for about a year. Thus, it is not clear where species were caught. At the same time, according to scientific data from environmental impact assessment made for Olympic sites, there were 400 specimens of the protected Schelkovnikov's tree frog on 1 sq km of protected area. About 5 sq km of natural habitat was destroyed in the implementation of the project, *"Engineering protection of the Imeretinskaya lowland."* This means that at least 2,000 individuals of this one species were killed.

Protection of flora has not been any better. The only extant area with marine vegetation is a natural monument, *"The beach area with sandy marine vegetation located between "Chernomorets" and "Energiya" recreation centers"*, and **was destroyed in April 2013 despite the fact that Olympstroy promised numerous times to include this territory into the ornithological park.**



Territory of the former natural monument "The beach area with sandy marine vegetation located between "Chernomorets" and "Energiya" recreation centers"(before Olympic construction)



Former natural monument in April 2013

According to environmental reports by the State Corporation Olympstroy, 13,132 individuals of arboreal species and 28,131 of bushes should have been planted on the destroyed Imeretinskaya lowland as a compensation measure. Olympstroy underlined several times that only native species would be used in planting the area. However, plants were brought from European nurseries; and the majority of all planted replacement trees were various species of palm trees. Thus, promised “compensation measures”, as regards to the plant world, were not fulfilled and were a simply a desecration.

-
- 1 <http://www.fesk.ru/wetlands/325.html>
 - 2 www.birdlife.org/datazone/sitefactsheet.php?id=1634
 - 3 Statement of the Russian Bird Conservation Union № 2009-15 of 06.04.2009
 - 4 Decision of the Head of Krasnodar regional Administration (governor) of October 1, 2012 №1140

Mountain cluster: the a story of a man-made catastrophe



The Sochi National Park (over 1937 sq km) and the Caucasian State Biosphere Reserve (2800 sq km), to its north, form the largest protected area in the Caucasus. Its virgin, broad-leaved forests are the largest in Europe. The value of the ecosystems of the Western Caucasus is recognized internationally. Part of its territory, including the Caucasian Reserve, became a UNESCO World Natural Heritage site, Western Caucasus, in 1999.

Almost all Olympic mountain cluster sites are located on the territory of Sochi National Park, including on a former specially-protected area. In addition, in 2009, subcontractors of the Public Corporation “Gazprom” initiated construction of a road through the Caucasian Reserve in order to build a road to the ski complex Laura and to the governmental residences Psekhako and Achipse. Later, the left bank of the Achipse River, which was needed to build the road, was excluded from the Reserve under the pretext of adjusting its borders.



According to satellite images, as a result of construction of the Olympic mountain cluster, the total area of modified vegetative cover and modified landscape of Sochi National Park and Caucasian Reserve is about 6 sq km. Roads, alpine ski tracks, and other linear sites were created because of Olympic construction. Thus, about 60 square kilometers of the reserve will suffer long-term negative impacts caused by the resulting fragmentation of the area.



The forest cover became fragmented after the construction of ski infrastructure in Krasnaya Polyana area

Unfortunately, it is impossible to fully estimate the impact on ecosystems and on landscape caused by construction of the Olympic mountain cluster. Ignoring recommendations issued by United Nations Environment Program (UNEP) in April 2010,¹ and in spite of numerous promises made by authorities to establish a unified system of monitoring the impact of Olympic construction, it has never been established.

Also, there is no unified program on compensatory measures for mountain cluster sites; this makes it difficult to assess the efficiency of such measures. Nonethe-



less, there is enough data to conclude that the area around Krasnaya Polyana has completely lost its natural value as a protected area because it was impacted by fragmentation caused by the construction of the Olympic mountain cluster.

Impact on Flora

As was noted in “Methodology for Rehabilitation of Rare and Threatened Plant and Animal Species Negatively Impacted by the Construction of Olympic Sites,” developed by the Ministry of Natural Resources and Environment of Russian Federation, mountains are natural habitats for most of the Caucasian endemic species² (*endemic species - plant and animal species that are found only in particular geographic region - ed*). 351 (36.3%) out of 967 registered vascular plant species are endemic. Mountains were modified significantly during the construction of ski and cable car routes. However, compensation for the destruction of mountain plants was not implemented. There were also no attempts to transplant them.

There is some information on compensatory measures for the destruction of plants in the forest belt. However, these data are highly controversial. Unfortunately, the plans for forest development, which contain information on the amount of deforestation and destruction of plants, have never been made publicly available. However, we can be guided by data published by construction companies.

In particular, the last environmental report by State Corporation Olympstroy states that the corporation gave 55,000 young plants to the Sochi National Park as compensation for destroying plant species. At the same time, there is no information on compensation for destroying shrubbery and herbaceous species.



Information about the amount of logging and destroyed species of flora is still not published

Most likely, rare species were not removed from the areas where Olympstroy operated and they were not further transplanted. Specifically, all rare species included in the Red Book were destroyed during construction of a main road leading from the mountain resort Alpika-Service to the Rosa Khutor resort. Results of the inspection conducted by the Federal Service for Supervision of Natural Resources (Rosprirodnadzor) prove this. In particular, the inspection revealed that contractor LLC Inzhtransstroy committed acts of deforestation; natural ecosystems, which used to be a natural habitat for wild plants species included in Russia's Red Book, were destroyed.³

Olympstroy's 2012 environmental report for contains information that starting in 2009, more than 11,000 plants were removed and transplanted from areas where Gazprom was the official investor; and, according to the report, "this figure represents approximately 10% more than was originally intended" to be removed and transplanted. At the same time, Olympstroy is investing funds in many construction sites on the territory of the Sochi National park, including a ski stadium and Olympic village in the Psekhako mountain ridge; and the total area of defores-



tation is more than 1.5 sq km. When we compare compensatory measures for planting by Gazprom to the plan for forest development related to the combined road (the areas are comparable in size), we see that the compensatory measures by Gazprom are dozens of times less.

It is also interesting that according to Gazprom, the largest transplantation took place in 2012, when all vegetation had already been destroyed as construction works had already been started long before 2012.



Image 4. The plan of Gazprom ski resort on Psekhako ridge shows that the forest cover is fractured into separate segments

The website of Rosa Khutor contains information that 25,800 young chestnut trees were planted in return for those that were cut down during the construction of the alpine ski center, Extreme Park and Mountain Olympic village. However, nothing is known about compensatory measures in relation to other protected Red Book species. Interestingly, in spring 2011, the Federal Service for Supervision of Natural Resources (Rosprirodnadzor) inspected construction in the Snowboarding park and Mountain Olympic Village and discovered that contractors of Rosa Khutor, in violation of the law, destroyed Red Book species in an area of more



than 20 hectares.⁴ In January 2013, the Federal Service for Supervision of Natural Resources (Rosprirodnadzor) learned that another 50 individual species were cut by unknown persons on a secret territory of Rosa Khutor.⁵

The compensation measures at the Gornaya Carousel resort are similar. A project to remove and transplant species located in the area occupied by ski jump complexes was approved as late as the summer of 2011. However, there was nothing to remove and transplant as construction and assembly works had begun there in May 2010, according to official data by State Corporation Olympstroy.

Data from the Federal Service for Supervision of Natural Resources (Rosprirodnadzor) proves that deforestation in the area of Gornaya Carousel had started long before projects on forest development began. In particular, during the inspection on preparation of a sewage system, it was revealed that there no transplantation had taken place.⁶

However, information on transplanting and planting by the Public Corporation, Krasnaya Polyana, as a compensatory measure is missing in the Olympstroy reports. According to available documentation, there were plans to plant 6,000 young chestnut, pear and cherry trees in the Kepshinsky district forest range. However, it is unknown if that was done.

In general, it can be said that the descriptions of compensatory planting in the mountain cluster is pure greenwashing: declarations by Russian authorities that three trees were planted in return of one cut tree are false as is the data on the total volume of compensatory planting.

It is evident from the above information about the mountain cluster that about 100,000 new trees were planted all in all. In addition, Russian Railways announced that it planted another 70,000 trees as a compensatory measure during the construction of the combined road. Consequently, the total amount of planted trees is hardly more than 200,000. At the same time, the Sochi 2014 Organizing Committee states on its websites that 1.1 million trees were planted in Sochi.⁷ However, in September 2013, Deputy Prime Minister Dmitry Kozak declared that 2 million trees were planted.⁸

Thus, the volume of compensatory planting is several times higher in open state-



ments made by organizers and Russian authorities. At the same time, because of the lack of planting material, compensatory measures were not conducted for the most vulnerable mountain and herbaceous Red Book plants, which were affected the most. According to the nursery of Sochi National Park, which is the only source of compensation for aboriginal plants, it is lacking protected species.⁹

At the same time, it is impossible to monitor vegetation in the mountain cluster, because most of testing areas created by scientists in 2007-2010 were destroyed by contractors. All three testing areas with rare species have been destroyed on the territory of the Gazprom resort;¹⁰ two out of three—on Gornaya Carousel, and its third part is partially affected by construction works;¹¹ on Rosa Khutor—one out of three.¹²

Impact on Fauna

Even before the start of construction of ski complexes in the vicinity of Krasnaya Polyana, zoologists warned that new ski routes and other infrastructure will lead to the destruction of migratory routes of large mammals.

The greatest negative impact was on the brown bear population. Anatoly Kudaktin, PhD in biology, pointed out in 2009 that the destruction of three migratory routes of brown bears was a result of development of the Aigba slope; consequently, one third of the Southern population was lost. Ski routes cut bears off from fall fattening habitats. The animals had to change their traditional routes and find new habitats.

The construction of sport venues and cable-routes “scalped” slopes on the Psekhako mountain ridge and led to the loss of one of the largest fattening and hibernation stops for bears and ungulate animals. Now bears who follow a migratory route from the Caucasian Reserve through Pseashko pass (Bears’ gates) find themselves right in the middle of the tourist spots. According to Kudaktin, animals have to change the route and come to new areas. Animals are cut off from the main chestnut woodlands, which has been a source of nutrition for these animals for many centuries.

According to 2013 calculations, the bears completely disappeared from the area of the Sochi National Park around Krasnaya Polyana; no signs of life were found.¹³



Construction of sports venues and ski lifts on Psekhako ridge caused the loss of feeding grounds and places where bears and hoofed animals spent the winter

The population of Caucasian Red Deer decreased as well as a result of Olympic construction. In general, the continuing development of this area is a cause of negative trends in the population of mammals. Because of the loss of forest the-riofauna biotopes, areas suitable for several species have also been diminished; migratory routes of animals are disturbed; and food sources have decreased; which has negatively impacted main biological processes in lives of large and medium mammals. As a result, animals have been forced to move to more favorable adjacent areas.¹⁴

In the first half 2013, it was noted that populations of amphibians and reptiles (under researchers' control) on the territory of the Rosa Khutor, Gornaya Carousel and Gazprom resorts have decreased. This is a direct consequence of the transformation of forest and mountain-meadow biotopes.

Thus, on the territory of Rosa Khutor, the population of the southern banded newt (*Triturus vittatus*) has completely disappeared and the micro-polution of



West Caucasian lizards (*Darevskiaalpinais*) in critical condition. The long-legged wood frog (*Ranamacrocnemis*) is in relatively stable condition.

On the territory of the Gazprom resort, the populations of the long-legged wood frog (*Ranamacrocnemis*) and Derjugin's Lizard (*Darevskiaderrugini*) are in critical condition; the disappearance of the Caucasian lizard (*Darevskiacaucasica*), the Slow-worm (*Anguisfragilis*), Caucasus subalpine viper (*Viperadinniki*), and the Caucasian parsley frog (*Pelodytescaucasicus*) has been confirmed.

Calculations conducted in June 2013 on the territory of Gornaya Carousel revealed a drastic decrease in and, in some places, complete disappearance, of the population of West Caucasian lizards (*Darevskiaalpinais*). This species is included in the IUCN Red List and the Red Book of Krasnodar Krai; only individual species were found on rock ridges with extant vegetation. In 2013, it was noted that amphibians and reptiles had completely disappeared in the area of the ski jumps.¹⁵

Olympic projects anticipated some protection measures for flora. But even those soft measures were not implemented. In violation of project documentation, construction works were conducted during all seasons, including during the breeding season and migration season for birds and mammals. None of the following compensatory measures were implemented: construction of artificial shelters for birds and chiroptera, building reservoirs for amphibians, or creation of nurseries for breeding rare species.

Thus, Olympic construction caused serious damage to terrestrial vertebral species of Sochi National Park. Large mammals, amphibians and reptiles were particularly negatively impacted. Moreover, their population is continuing to decrease, and the brown bear population disappeared completely.

Impact on aquatic ecosystems, pollution of Achipse, Laura and Mzymta Rivers

Deforestation and construction on unstable mountain slopes led to significant pollution of the Achipse, Laura and Mzymta Rivers and to complete fish loss in the area of construction of sites located in the mountain cluster. According to monitoring conducted by the Russian hydro-meteorology bureau in 2013, during



low water periods, the Mzymta River is muddy; technical equipment and various mechanisms are used in the riverbed and the area around it; during heavy precipitation, erosion processes are intensified; and part of the river transforms into a mudslide. The section of the Mzymta River adjacent to Rosa Khutor and Gornaya Carousel Alpine resorts is no longer a feeding and spawning aquatic area for trout reproduction. Part of the fish population has moved up-stream, and the other part, apparently, died during floods.

A similar situation has been noted in areas of the Laura and Achipse Rivers close to the Gazprom ski resort.¹⁶

Public inspections conducted by Environmental Watch during 2011-2012 revealed that river pollution is connected to barbaric construction methods, soil dumping in riverbeds, and to the unsustainable decision to situate Olympic sites in areas where there is erosion.^{17,18}



The pollution of Mzymta river and its tributaries was caused by barbaric construction methods



Development of Dangerous Geological Processes

When the ski resorts near Krasnaya Polyana were being designed, geologists warned of threats of potential hazardous exogenous processes, i.e. erosion, landslides, mudslides and landslips resulting from deforestation and disturbance of the natural landscape. These warnings became a reality soon after the beginning of Olympic construction.

Since 2011, the Southern Regional Center of State Monitoring of the Condition of Subsoils has been monitoring hazardous exogenous geological processes (EGP) in the mountain cluster of Olympic construction.¹⁹ Its first report noted that activation of all EGP developments was caused solely by technogenic factors: cutting slopes during construction, reconstruction of motorways of local importance, and building service lines leading to Olympic construction sites. Large-scale and massive EGP caused by natural factors have not been observed on the territory of Sochi National Park.



Erosion and landslide processes in Mzymta valley are caused only by technogenic rather than natural factors



The number of hazardous geological developments is increasing over time. Thus, as a result of engineering-geological inspection conducted in the Olympic mountain cluster, 18 EGP developments were noticed in October 2012. This includes 5 sandslides, 2 landslides and 11 mud-slides.²⁰ In June 2013, the number of EGP reached 21, including 7 large-scale landslides, 11 mudslides and 2 erosive developmental processes.

This erosion threatens the following Olympic construction sites:

- combined road (railroad and motorway) Adler-Alpika-Service;
- ski jump complexes;
- Nordic combined track;
- access road № 6 to the biathlon complex on the Psekhako mountain ridge of the ski-tourist center Gazprom-Laura and to its safety buildings;
- motorway going from the mountain resort Alpika-Service to the Rosa Khutor resort;
- motorway to the 1st support of the cable-route 3S;
- motorway № 23 to substation “Mzymta”.²¹

Finally, in November 2013, as a result of engineering-geological examination 30 landslides, 2 sandslides, 8 erosive-landslides, 4 planar erosions and 1 mudslide had already been discovered.²²

It is obvious, that the intensity of dangerous geological processes will continue to increase as several Olympic sites were located on areas of potential landslides. The most striking example is the ski jump complex Russkie Gorki; the increase in the cost of its construction is being justified by the complex geological conditions.

In 2013, the State Corporation, Olympstroy, organized a tender on construction of engineering protection from natural processes (mudslides and landslides, including processes of technogenic origin) for Olympic sites located in the mountain cluster. The total cost of the first stage, Organization of Collection and Deriva-



tion of Surface Runoff on the slope of Aigba Mountain Ridge in the Area of Rosa Khutor, as well as engineering protection measures in channels PS1-PS14 (designing, exploration and construction works) reached 430 million rubles. How much the next stages of these protection measures will cost is unknown. It is obvious, however, that once Olympic construction is complete, the major expense will be maintenance of the Olympic sites. Consequently, the future of these sites cannot be called sustainable.

Conclusion

The construction of Olympic sites and associated infrastructure on the territory of the Sochi National Park and Caucasian State Nature Biosphere Reserve was accompanied by unprecedented violations of environmental law.

Moreover, in our opinion, the desire of Putin and his friends to build ski resorts on the territory of Sochi National Park is the most important reason for the preparation and participation in the Olympic bidding process to host 2014 Winter Olympics. Under the pretext of realization of this “national project,” lawmakers amended numerous laws that now allow practically any type of construction in a national park. Now it is possible to build not only ski routes within the borders of a national park but also Olympic villages and hotels, which investors were hoping to sell as a luxury real estate once the Olympics are over.

Those plans are ruined because the unreasonably high price of new buildings, hotels’ and ski routes’ capacity in the mountain cluster is much higher its current tourist potential.

At the same time, Olympic construction caused irreparable damage to the region’s biodiversity and to the potential of the Sochi National Park’s to develop as a center for educational and ecological tourism. The entire valley of the Mzymta River was negatively impacted: seasonal migratory routes of large mammals, which start in the Caucasian State Biosphere Reserve and lead to lower hibernation locations, are destroyed. The construction of roads and residences in protected areas of the Caucasian Reserve and



in valleys of Laura and Achipse Rivers led to direct negative impact on the UNESCO World Natural Heritage site, Western Caucasus, and compromises Russia's international legal obligations regarding its protection.

Despite the fact that the Sochi National Park was expanded by inclusion of the Loo district forest range, this territorial compensation is not an adequate substitute for lost natural areas in the vicinity of Krasnaya Polyana. In particular, in Loo district forest range, there are no unique mountain plant communities, which were destroyed during the construction of ski routes on the slopes of the Aigba mountain ridge. The value of a new territory for the protection of large mammals is also questionable, because this area is located far away from the animals' core population, which is located in Caucasian Reserve.

The Sochi mountain cluster is a striking example of unsustainable planning and development and its maintenance requires continuous and meaningless expenses that must be paid by Russian citizens. Consequently, the 2014 Sochi Olympics, and the entire Olympic history, are tainted with the stigma of environmental destruction and negative environmental impact.

- 1 http://www.unep.org/PDF/PressReleases/REPORTOFTHEUNEP_2ndEXPERT_MISSION.pdf
- 2 <http://www.sc-os.ru/common/upload/ecol-20-05-10.pdf>
- 3 <https://rospravosudie.com/court-as-goroda-moskvy-s/judge-utochkin-igor-nikolaevich-s/act-301391663/>
- 4 <https://rospravosudie.com/court-as-krasnodarskogo-kraya-s/judge-kolodkina-viktoriya-gennadevna-s/act-306925241/>
- 5 <https://rospravosudie.com/court-as-krasnodarskogo-kraya-s/judge-kolodkina-viktoriya-gennadevna-s/act-306925241/>
- 6 <https://rospravosudie.com/court-as-krasnodarskogo-kraya-s/judge-pogorelov-igor-alekseevich-s/act-306695507/>
- 7 <http://www.sochi2014.com/garmoniya-s-prirodoy>
- 8 <http://www.interfax.ru/russia/txt/331183>
- 9 <http://sochinp.ru/pages/pitomnik.html>
- 10 <http://www.feerc.ru:8080/sochi/ru/monitoring/biota/plants/gazprom>
- 11 http://www.feerc.ru:8080/sochi/ru/monitoring/biota/plants/kr_polyana
- 12 http://www.feerc.ru:8080/sochi/ru/monitoring/biota/plants/roza_khut



- 13 http://www.feerc.ru:8080/sochi/ru/monitoring/biota/bigmammals/gor_karus
- 14 http://www.feerc.ru:8080/sochi/ru/monitoring/biota/bigmammals/gor_karus
- 15 http://www.feerc.ru:8080/sochi/ru/monitoring/biota/herpetofauna/gor_karus
- 16 http://www.feerc.ru:8080/sochi/ru/monitoring/biota/fish/roza_khut
- 17 <http://www.ewnc.org/node/6303>
- 18 <http://gazaryan-suren.livejournal.com/74904.html>
- 19 http://www.south-geomon.ru/index.php?option=com_content&view=article&id=45:-2011&catid=13:2011-09-14-13-57-31&Itemid=24
- 20 http://www.south-geomon.ru/index.php?option=com_content&view=article&id=133:--2012-&catid=13:2011-09-14-13-57-31&Itemid=16
- 21 http://www.south-geomon.ru/index.php?option=com_content&view=article&id=142:-2013-&catid=13:2011-09-14-13-57-31&Itemid=16
- 22 http://www.south-geomon.ru/index.php?option=com_content&view=article&id=147:--2013-&catid=13:2011-09-14-13-57-31&Itemid=16

Mzymta: the victim of the most expensive Olympic site



The largest and the most expensive Olympic site, the combined road Adler-Krasnaya Polyana (railroad and highway) is the best example of how Russian authorities treat the Sochi National Park ecosystems; it also shows how Olympic organizers treat the local population and their rights.

This site is a key part of the entire Olympic project as it is intended to transport sportsmen and visitors from the coastal cluster to the mountain cluster and back. It is also the most vulnerable area in the development and construction of the Olympic sites.



The selection of the route of the road was conducted without the participation of scientists and without any discussion with civil society. As a result, the road was built through woodlands and along the steep left bank of the Mzymta valley, which was located within the borders of the reserve and specially-protected areas of Sochi National Park before Olympic construction began. The location of the proposed road was extremely inconvenient and poorly chosen from an engineering perspective, and significantly added to the environmental consequences of the project. The entire construction of the road, which was conducted by the state-owned corporation Russian Railways, was accompanied by unprecedented violations of Russian environmental law.

Construction without Environmental Impact Assessment

Construction of the road began in June 2008¹ without a positive conclusion from the state environmental impact assessment, **without the plan on forest development and without approved project documentation.** That was a direct violation of the law.²

In the beginning of 2009, 14 administrative cases for violating environmental legislation were initiated by the Federal Service for Supervision of Natural Resources against the main contractor, the Public Corporation USK MOST, and subcontractors, LLC SK Mostotrest, Public Corporation SKDM, LLC UM Tunneldorstroy, and LLC Mostdorstroy.³ In particular, in March 2009, the court imposed a fine of 280,000 rubles (\$9,000) on USK Most for construction works conducted without design estimates and state environmental impact assessments. However, USK Most did not comply with the order of the Federal Service for Supervision of Natural Resources (Rosprirodnadzor) to suspend its work and construction continued.⁴

In August 2009, activists of Environmental Watch on the North Caucasus tried to stop illegal deforestation of the tree species protected by the Red Book of Russia. As a result of that civil action, Andrey Rudomakha and Suren Gazaryan were detained and subsequently arrested. After that civil action, the left bank of the Mzymta River, the place of the combined road construction, was blocked by private security service of “Russian Railways” and FSB border protection services.⁵



Adler-Krasnaya Polyana combined road and highway is the most expensive and destructive Olympic project

Damage to Sochi National Park Ecosystems

According to the compensation program developed by the Public Corporation Russian Railways, **at least 194 hectares of forest lands of the territory of the Sochi National Park were loss** during construction of the combined road.⁶ At the same time, starting in 2008, deforestation along the combined road construction was conducted without an approved forest development plan; this document was only approved by an environmental impact assessment in 2009, when the largest part of the area was cleared for the future road.⁷

They decided to put a stop to the scandal around illegal deforestation with the help of public relations measures, which were connected with so-called “compensatory tree planting.” It is still not clear how many trees and bushes were planted. Russian Railways representatives never agreed on the number of planted Red Book species. In 2012, Russian Railways press-service stated that the company had planted 74,000 individuals of the Red Book species in 2011, and from the beginning of 2012, another 163,000 individual species.⁸ However, Russian Railways Vice President Oleg Toni again mentioned the amount of 70,000 individual



species that were planted during the period from 2009 to 2012.⁹ Russian Railways press-service also gave this number to the newspaper, *Novaya Gazeta*.¹⁰ Finally, the press-service of the Northern Caucasus branch of the company stated that 55,000 individual species had been planted.¹¹



Russian Railways company still does not know how many logged trees have been “compensated”

In 2012, the Federal Service for Supervision of Natural Resources (Rospirodnadzor) examined two planting areas from 2009 and reported that **28,817 individual rare and disappearing species (more than a half of its initial number)** out of 55,133 individual rare and disappearing species had died. The reason for such loss was **gross violations of transplantation technology and absolute absence of care.**¹²

Inadequate Compensatory Measures

According to information from “The project of Forest Management in the Allotted Area of the Combined Road”, Russian Railways was obliged to transplant



224,503 trees, plants and bushes included in Russia's Red Book before the start of the construction. This amount includes only plants that grew on the area of 147.3 hectares given to Russian Railways for permanent use. Taking into account that about 40 hectares of forest land were given to Russian Railways for temporary use (they had separate forest development plans), the total amount of Red Book species that needed to be transplanted should have been more than 300,000 individual species. By 2009, when forest development projects for combined road construction went through state environmental impact assessment, **vegetation, including protected species, of the assigned forest lands was practically destroyed.**



Forest began to be cleared for the combined road without environmental impact studies or forest planning

This information is confirmed by the report given by the Head of Federal Service for Supervision of Natural Resources (Rosprirrodnadzor), Vladimir Kirillov, at a meeting, which took place on March 4, 2010 in the city of Sochi. He said Russian Railways had permission to take 46 species and 242,561 individual species included in Red Book of Russia and only 53,125 individuals of red-listed species were transplanted.¹³



If statements on compensation planting of 70,000 individual plant species are reliable, Russian Railways planted at best **4 times fewer rare species than it destroyed during construction works.**

There is also a striking difference between *de facto* planted species and recommendations by the Ministry of Natural Resources and Environment of the Russian Federation, “Methodology for Rehabilitation of Rare and Threatened Plant and Animal Species Negatively Impacted by the Construction of Olympic Sites.”¹⁴ According to this document, available on the website of the State Corporation Olympstroy, the following species should have been transplanted from the area impacted by the road construction: herbaceous species: about 888,000 individual species, arboreal and shrubby species: about 222,000 individual species. Recommendations state that the following species must be cultivated in nurseries and repatriated: herbaceous species: 976,000 individual species, arboreal and shrubby species: 244,000 individual species.

As a result, the real volume of compensatory measures conducted by the State Public Corporation Russian Railways was dozens of times fewer than assumed by the Ministry of Natural Resources and Environment of the Russian Federation.

Destruction of the Mzymta River Valley and a Loss of Fish

At least 1.5 million tons of gravel were illegally taken from the Mzymta River in the 2007-2010 period and it used for construction of the combined road.¹⁵ In March 2009, the Minister of Natural Resources, Yuri Trutnev, requested the Prosecutor General’s Office to stop gravel removal from Sochi riverbeds.¹⁶ In a period of 10 months in 2009, twenty-one criminal actions were filed against violators who illegally removed gravel from rivers.¹⁷ From 2010 to 2013, at least 26 criminal sentences were passed for taking gravel from the Mzymta River.¹⁸

This method of construction led to the degradation of natural landscapes and the profile of the Mzymta riverbed; and, as a result, it led to increased risk of floods and beach erosion.¹⁹ Several floods damaged the construction site and equipment in January and November 2010,²⁰ March,²¹ and September 2013.²² In spring 2013, they also had to evacuate about 700 workers as a result of flood in a construction camp.²³



In April 2010, WWF Russia ordered independent tests on maximum permissible concentrations (MPC) for oil products, arsenic, and phenol. Thus, in some areas where the test was conducted, the concentration of arsenic was three times higher than MPC of this chemical. Oil products were 35 times higher than the MPC, and phenol, 60 times higher than its MPC.²⁴



In August 2011, an accident on the road's construction site caused a chemical leak into the Mzymta

In August 2011, the Mzymta and the estuary of the Black Sea shore were covered with foam.²⁵ According to witnesses, the source of pollution was the third tunnel of the combined road.²⁶ In November 2011, the river was covered with foam again, but the source of the pollution was not identified.²⁷ In June 2013, WWF included the Mzymta River in the list of Russian natural areas that could lose ecological value.²⁸

As a compensatory measure, starting in 2009, Russian Railways stocked the poisoned Mzymta River with newly-hatched Black Sea salmon (*Salmon trutta*).²⁹ By 2013, the river was stocked with 3 million salmon, but scientists doubt that species survived. The part of the river below Krasnaya Polyana and alongside the combined road is so polluted that **no fish were seen** in it in 2013.³⁰



Dump and Quarry in Akhshtyr

Russian Railways organized a gigantic dump of soil from tunnels of the combined road in the vicinity of Akhshtyr village. They also built an illegal quarry there. Day and night, freight trucks drove on the village's only road. Soil dumping and movements of freight trucks caused irreparable damage to aquifers that had fed the village with fresh water. As a result, water disappeared from Akhshtyr wells; the Akhshtyr population were choked with dust and exhaust fumes for 5 years.



Residents of Akhshtyr village complaining to Sochi mayor Anatoly Pakhomov

-
- 1 http://skzd.rzd.ru/news/public/ru?STRUCTURE_ID=9&layer_id=4069&id=124014
 - 2 <http://ewnc.org/node/4412>
 - 3 <http://ewnc.org/node/4479>
 - 4 <http://ria.ru/eco/20090316/164984748.html>
 - 5 <http://www.novayagazeta.ru/society/43851.html>
 - 6 http://press.rzd.ru/news/public/ru?STRUCTURE_ID=654&layer_id=4069&refererLayerId=3307&id=83143
 - 7 <http://www.ewnc.org/node/5192>



- 8 http://press.rzd.ru/news/public/ru?STRUCTURE_ID=654&layer_id=4069&id=79796
- 9 http://press.rzd.ru/news/public/ru?STRUCTURE_ID=654&layer_id=4069&refererLayerId=3307&id=83143
- 10 <http://www.novayagazeta.ru/economy/58835.html>
- 11 <https://88001001520.ru/news/na-severo-kavkazskoy-zheleznoy-dorog-es-nachala-2013-goda-v-prirodoohrannyye-meropriyatiya-investirovano-34-15-mln-rublej.html>
- 12 <http://15aas.arbitr.ru/cases/cdoc?docnd=839944728>
- 13 http://rpn.gov.ru/sites/all/files/documents/doklady/doklad_sochi_04032010.doc
- 14 <http://www.sc-os.ru/common/upload/ecol-20-05-10.pdf>
- 15 http://2010.seacoasts.ru/reports/55/1_Krylenko%20Modern.doc
- 16 <http://ria.ru/eco/20090313/164699608.html>
- 17 <http://ug.ria.ru/incidents/20091016/81882598.html>
- 18 https://rospravosudie.com/vidpr-ugolovnoe/act-262-q/court-adlerskij-rajonnyj-sud-g-sochi-krasnodarskij-kraj-s-etapd-pervaya-instanciya/date_from-2010-01-02/date_to-2014-01-06/section-acts/sort-date/
- 19 <http://www.novayagazeta.ru/politics/44936.html>
- 20 <http://www.privetsochi.ru/blog/photo/6793.html>
- 21 <http://www.sochi-city.ru/novosti/pavodok-v-sochi-obyavlena-chs>
- 22 http://mosmonitor.ru/blogs/blog/navodnenie_v_olimpiyskom_sochi
- 23 http://www.gazeta.ru/social/news/2013/03/13/n_2795493.shtml
- 24 <http://www.wwf.ru/resources/news/article/6428>
- 25 <http://gazaryan-suren.livejournal.com/25919.html>
- 26 <http://gazaryan-suren.livejournal.com/25919.html>
- 27 <http://bednenkiy.livejournal.com/39285.html>
- 28 <http://www.wwf.ru/resources/news/article/11285>
- 29 <http://archive.premier.gov.ru/events/news/12558/>
- 30 http://www.feerc.ru:8080/sochi/ru/monitoring/biota/fish/gor_karus

“Green” Standards for Olympic Construction Projects: Fig Leaf to Cover Shame



During the preparation for the Sochi Olympics, Russian officials repeatedly stated that “green” international standards would be applied to Olympic constructions.

This principle, as defined by the Sochi 2014 Organizing Committee “is a contractual obligation for investors and contractors of Olymstroy, the State Corporation responsible for building all Olympic sites.”



The system of “green” standards involves the use of environmentally friendly construction materials, renewable energy, waste minimization and recycling, reduction of greenhouse gas emissions, as well as a rational use of water and energy. According to the Sochi 2014 Organizing Committee, about 200 Olympic sites “are being designed and constructed by State Corporation Olymptstroy with consideration of “green” standards.”¹



It was declared that green standards are compulsory for all investors and contractors of Olympic constructions

“Our Olympics are the same as all Olympics, the same composition of facilities, the cost of constructed facilities is not higher than those created in other countries; although they are the most advanced, they are built taking into account state of the art achievements and construction equipment; and, for the first time in our country, are built in accordance with green standards,” said Deputy Prime Minister Dmitry Kozak in the interview with the “Russia -24” television station.²

Even though the term “green” standards sounds blasphemous in relation to construction in Sochi, which **resulted in the destruction of natural complexes on the area of more than a thousand hectares in the Sochi National Park**, let’s look deeply into the issue. Russian Construction Minister Mikhail Men’ explained the meaning of the term “green construction” at the meeting with the Government of the Russian Federation: *“During the construction of Olympic*



sites the so-called BREEAM (Building Research Establishment Environmental Assessment Methodology –ed.), the international standard, was also applied.”³

Indeed, the BREEAM method was developed in the UK and is one of the most well-known and widely used methods to assess buildings from the standpoint of environmental efficiency. BREEAM sets standards for sustainable construction and design; it also allows a comparison of the environmental impact caused by different buildings. The BREEAM standard was applied to all Olympic venues built for the 2012 London Olympics.

However, if examined, the results of applying the BREEAM standard in Sochi are depressing. According to the latest report on green construction prepared by the Sochi 2014 Organizing Committee, the following six Olympic sites were certified by the BREEAM standard: Adler Arena, Bolshoy Ice Dome, the office building of the Sochi 2014 Organizing Committee, the IOC hotel, the educational and administrative building of the Russian International Olympic University and a cottage in a Mountain village on the territory of the Gazprom ski resort with the capacity to accommodate 260 people.

Thus, less than 2 percent of all Olympic facilities (of a total of 350) were built in accordance with “green” standards.⁴ Olympstroy and the Sochi 2014 Organizing Committee set the goal to have 10 BREEAM-certified Olympic sites. Importantly, Olympic sites include tens or even hundreds of buildings and facilities, each of which would have required a separate certification.

For example, the BREEAM-certified site of the mountain cluster, that is, a cottage with the capacity to accommodate 260 people (mentioned above) is a part of the Gazprom ski resort, which includes several dozens of buildings, including the huge ski complex Laura, large hotels, and three governmental residences.

Thus, BREEAM-certified buildings are hardly more than 1 percent of all buildings built in preparation for the Sochi Olympics. But even those six facilities, which the Sochi 2014 Organizing Committee claims were built in accordance with “green” standards, are, in fact, not green. Green standards do not allow illegal construction lasting for more than a year and a half: the Bolshoy Ice Dome and Adler Arena were built in this way.



Reports on “green” construction prove this fact as well. Thus, the Sochi 2014 Organizing Committee honestly reported that the construction of Bolshoy Ice Dome began in April 2009, while the state environmental impact assessment was not completed until September 2010.⁵

It turns out that, for a year and a half, the “green” Ice Dome was built in gross violation of Russian environmental legislation, which prohibits Olympic construction without a state environmental impact assessment.

Adler Arena was built in a same manner: construction started in April 2009, and the environmental impact assessment was completed in September 2010.⁶ Thus, the environmental impact assessment was just a farce: even if experts had comments to Olympic construction (and they certainly did have them), it was too late to correct those projects. Perhaps, that was the reason why BREEAM certifications for Adler Arena and Bolshoy Ice Palace have never been published. It is impossible to find out how those buildings were evaluated.



The Bolshoy Ice Dome’s BREEAM certificate has never been published

But at the same time, there is a publicly available certificate for the building of Olympic University. To construct this building, they demolished a number of his-



torical buildings and cut down hundreds of trees. To obtain certification, they had to sort the waste, utilize it and partially recycle it.⁷

Facts on waste “utilization” were brought in light in December 2013. The debris from Morris Toreza’s bust was found in a large illegal waste dump in Adler: the bust and the health resort of the same name were demolished in order to build Olympic University.⁸

Olympstroy’s “green” corporate standard, adopted in March 2011, is used as the main evidence of “green” construction in Sochi. The standard has 8 criteria and each of those “costs” a certain amount of points, which are earned during the certification process. Those criteria include: environmental management (maximum score - 70 points); choice of location, infrastructure and landscape improvement (80 points), rational water management, storm runoff regulation and pollution prevention (40 points); architectural planning and design solutions (100 points); energy conservation and energy efficiency (70 points), materials and waste (80 points), quality and comfort of the environment (60 points), and life safety (30 points).⁹

Despite the fact that corporate standards required online publication of the data on certification “at least once in a quarter,” information on the number of certified facilities and their scores have never been published on Olympstroy’s website. This information is also missing in the Sochi 2014 Organizing Committee reports on the implementation of “green standard” construction.

It is obvious that the idea of certification was just a whimsical wish of Olympstroy as **there is no enforcement mechanism to bring the construction company into compliance with those standards.** Moreover, by the time “green standards” were adopted, documentation on planning the territories for all large Olympstroy Olympic sites had already been approved by Olympstroy. In addition, the project documentation had already been approved by the Main State Expertise Service (Glavgozexpertiza). Therefore, **implementation of “green standards” could not affect decision-making on the project as it was too late for that.** Also, green corporate standard could not influence the selection of contractors for the main Olympic sites, because **by March 2011, construction of all main Olympic sites had already begun.**



Conclusion

The number of BREEAM-certified buildings is negligible small and barely exceeds 2 percent of all Olympic sites. The only BREEAM-certified site of the mountain cluster is a cottage on the territory of Gazprom ski resort. The list of voluntary certification has not been made publicly available. There is also no reliable source of information on such type of certification.

Given that the number of sites, which were certified under “green” standardization, is negligibly small and there is no enforcement mechanism whatsoever to control implementation of those standards, the actual application of those standards is so insignificant that its protective effect falls within statistical error.

-
- 1 <http://www.sochi2014.com/heritage-environment>
 - 2 http://government.ru/vice_news/9510
 - 3 <http://government.ru/news/9753>
 - 4 <http://government.ru/news/9753> Nomen
 - 5 <http://www.garant.ru/products/ipo/prime/doc/2073401/>
 - 6 <http://news-city.info/akty/instructions-15/tekst-zp-civil-pravo.htm>
 - 7 <http://olympicuniversity.ru/web/ru/news/-/view-content/95528>
 - 8 <http://www.sochinskie-novosti.com/>
 - 9 <http://www.sc-os.ru/common/upload/ecol-13-05-10.pdf>

Zero Waste: Zero Successes on the Waste Management Front



As one tallies up the costs of preparing Sochi for the Olympic Games, one of the most grievous fiascos has been the failure to comply with the Zero Waste standard which, according to IOC regulations, cities that win the Olympic bid must follow.

The Zero Waste standard is based on three “R’s”: Reduce, Reuse, Recycle. These determine an Olympic city’s waste management policy: separate collection of waste and its re-introduction into the production cycle in order to save resources and reduce energy costs and pollution. This principle forbids explicitly the burning of unsorted waste – because, among other reasons, burning destroys useful resources.



The website of the Sochi 2014 Organizing Committee proclaims the fulfilment, during the preparations for the Games in Sochi, of the key task to “minimize the amount of waste sent for storage in landfill sites, and to send as much waste as possible for recycling or repeat use.” It is claimed, in particular, that “97% of construction waste is utilized directly at the Olympic construction sites” and that Sochi has become “a city without landfill[s],” where two dumps totaling 7 million cubic meters of waste were closed and reclaimed.¹

The facts not only challenge the cited figures but cast doubt over the Russian officials’ fundamental understanding of the Zero Waste principle. For instance, the claim that “97% of construction waste has been utilized” is, to put it mildly, pulled out of thin air and does not find confirmation in any objective data. In reality, disposal of rock, soil, and construction waste has become the biggest problem at the Olympic construction sites, for which the preferred solution method was the simplest one: by creating massive waste and overburden dumpsites.

From 2010 to 2012, the Environmental Watch on the North Caucasus exposed numerous facts of dumping drilling fluids, soil and rock waste, and variegated construction waste on the territory of the Sochi National Park in the area where the combined motorway and railway was being built between Adler and Krasnaya Polyana, on the left bank of the Mzymta River. The situation reached the direst levels near the village of Akhshtyr, where an illegal dump for waste upturned by mining workings was organized on the farming lands of the tea, fruit and vegetable producer Adlersky Chai.

In January 2011, heavy rainfall triggered a mudslide in the area, which resulted in catastrophic pollution of the river Dzykhra and a water reservoir located on the river, followed by mass fish loss.² Up until the moment when the disaster struck, Adlersky Chai representatives and those of the waste producer, the Russian railroad monopoly Russian Railways, had been making assurances that what was happening was only “recultivation” of former tea plantations and that the dumping of overburden from the tunnels was “absolutely safe.”



Consequences of Catastrophic Mudslide on the Dzykhra River

Catastrophic pollution of the Dzykhra River with “safe” waste was documented by the United Nations Environment Program (UNEP) consultant Herv Lethier, who said that the riverbed would have to undergo manual cleanup.

In April 2011, two giant soil and rock waste dumps were discovered in the area of the village Nizhnyaya Shilovka in the valley of the Psou River. Furthermore, one of the dumps caused a massive landslide that blocked local creek beds. As a result of this man-made disaster, hundreds of trees were damaged, buried under piles of dirt, or torn out by their roots, with a layer of mud covering several hectares of forest lands.

A year later, in May 2012, another dump was found, this time in the valley of the Mzymta River, in Area No. 43 of the Veselovsky District Forest Range of the Sochi National Park. No engineered barriers were provided at the site – as none were provided for any other “Olympic” dumps.



Dump in Veselovsky District Forest Range

In 2012, a number of documents marked “For Official Use Only” became available to the public, which revealed the state enterprise, Sochi National Park, had made a smooth business out of accepting and accommodating on its territory soil excavated from Olympic construction sites, turning the arrangement into a cash cow. The task of checking the volumes of delivered soil – and ensuring that it was soil and not construction or domestic waste that was delivered – had been placed on the employees of the national park itself. In other words, there was no outside control over what and how much was being brought to the land plots specified by the national park’s administration.

Overall, the “Scheme of Removal and Disposal of Excess Soils Formed in the Process of Construction of Olympic Sites in 2011 to 2013,” a document that was signed by representatives of Russia’s Ministry of Natural Resources and Environment, State Corporation Olympstroy, and the Administration of Krasnodar region, lists over twenty locations where commercial organizations were offered to dispose of the excess soil. These were areas situated in immediate proximity



to the sea coast and in the area of Krasnaya Polyana (the slopes of the Aibga and Psekhako Ridges). At least some ten of the locations on the list are found in the valley of the Mzymta River.³

This too, though, proved insufficient to ensure compliance with the Zero Waste standard. In July 2013, during a meeting chaired by Deputy Prime Minister of the Russian Federation Dmitry Kozak on the issue of falling behind the Olympic construction schedule, a decision was made to “agree to the proposals made by the Ministry of Regional Development, Ministry of Natural Resources and Environment, State Corporation Olympstroy, regarding accommodation of excavated soil and construction waste produced in the course of construction of Olympic sites in the Akhshtyr quarry”⁷⁴ (this decision on creating a dumpsite in the Akhshtyr quarry was, however, annulled in the fall of that same year).

If the decision to dump waste in the former limestone workings had been carried out, it could have led to massive pollution of the Mzymta Aquifer, which takes its source from the area’s karst massifs.

The proposal to dispose of waste in the Akhshtyr quarry was being considered precisely because, on account of the frantic all-hands-on-deck construction rush in the run-up to the Games, contractor organizations had no time to look for any solutions that would see the waste re-used or reprocessed. The bulk of it was simply being moved to the city’s landfill in the village of Loo, with the rest distributed among the numerous unauthorized dumps that sprang up in abundance in Adler, Khosta, and Central Sochi Districts – or else, buried directly at the construction sites.

These facts were repeatedly exposed by EWNC, including, in particular, in the Imeretinskaya lowland, where pits were specially dug in a number of locations to use for dumping remnants of the razed houses, reinforced concrete frames, waste left from using finish materials (including plastic, metal, drywall, etc.), and diverse domestic waste from the construction camps.



Construction Waste Was Buried Right on Construction Sites

One of these illegal makeshift dumps for construction waste – which was later revealed to contain parts of the demolished building of the old Adler Railway Station – precipitated a landslide down a hillside in the area of Street Bakinskaya in Adler District. Fragments of concrete steel structures, brick and asphalt rubble, wreckage of private houses razed in the Imeretinskaya lowland were simply dumped in a creek bed on the property of someone by the last name of Baranov – until the weight of the accumulated waste was enough to cause the slope to break downhill.



Consequences of a Landslide on Bakinskaya Street

As a result of these landslides, which lasted for five months, the residential buildings located down the slope shifted seven to ten meters downward and, furthermore, became skewed and warped. Some houses were rendered completely unsuitable for living.

The exact amount of construction waste that has been illegally buried on the territory of Sochi is unknown. According to an order issued by State Corporation Olympstroy on approving a collection of plans for the removal of domestic, construction, and wood wastes in 2013 and 2014, the total volume of waste resulting from Olympic construction was anticipated at a level of 217 million tons in these two years alone. There is no doubt that the better part of this waste was simply relocated to both legal and illegal dumpsites in Sochi.



The situation with disposal of solid domestic waste in the Olympic city of Sochi is even more deplorable. **Not even for the sake of experiment did the city officials attempt to organize separate collection of waste at the level of the Sochi population** – something that makes thorough and efficient sorting of domestic waste impossible in principle. Emphasis was put on the construction of an industrial-scale waste sorting plant, which was announced in 2008. The Sochi Waste Reprocessing Plant, which is affiliated with Oleg Deripaska’s Basic Element group of companies, became an investor in the project.

The Waste Sorting Complex (WSC) was launched in 2011, and it became clear right at the start that it would hardly prove capable of playing any sort of significant role in solving Sochi’s waste problem. According to Greenpeace Russia, as of early 2012, the WSC’s capacity – represented by a manually operated conveyor belt and immigrant labor from Central Asia – was only sufficient to salvage 4% of recyclable materials, with the rest dumped as waste. At the same time, the Waste Sorting Complex’s management claimed the facility recovered 16% of recyclable materials and, the WSC’s managers said, up to 50% of waste would be sorted into reusable materials in some distant future.⁵

What amounted to, effectively, the total demise of the industrial waste sorting project, which failed to live up to expectations, coincided with the need for Sochi to address the problem of its city dumps. It was decided that the dumps would be closed and the land reclaimed. The very first in line for reclamation was the Greater Sochi area’s main landfill in Adler, where over 1 million tons of waste had been accumulated over the course of several decades. This project was completed by the end of 2011. The waste was buried under a multi-layered blanket of sand, crushed stone, geotextile, and soil, and pipes were laid beneath the dump to capture methane, but the collected gas is **simply released into the atmosphere** without any processing or utilization. In other words, if it brought any positive changes at all, the closing of the Adler landfill did nothing to improve the quality of air in Sochi.

The landfill in Loo (Lazarevsky District of Sochi) was officially closed on June 1, 2012. By August 2013 it was supposed to be completely rehabilitated, but waste continued to be illegally transported to the “closed” site even as several months were left before the due date.



Just as dire is the situation with the promised cleanup of unauthorized dumpsites in the Greater Sochi area. As of January 2014, the interactive map of locations of unauthorized dumping of waste in Sochi, accessible on the website of the Directorate of the Federal Service for Supervision of Natural Resources (Rospirodnadzor) for Krasnodar region, showed some 35 dumpsites continued to operate in Central, Khosta, and Adler Districts.⁶

According to the original version of the master plan for Sochi cleanup, a solid domestic waste landfill was planned for construction on the city territory in place of the closed dumps. Site investigations for the project only started in 2010; moreover, as the location of the future landfill was being selected, the environs of the villages Verkhneye Buu and Uch-Dere, of Lazarevsky District, were being considered as possible candidates, which caused fierce opposition among the residents, who managed to prevent the initial stage of the project from being completed in time. In 2012, the administrations of Krasnodar region and the city of Sochi were forced to abandon both siting choices as it appeared impossible to finish construction before the Olympic Games were scheduled to start.

The Kamensky limestone quarry was considered as one last possible location for disposal of solid domestic waste on Sochi territory, but these plans, too, had to be scrapped in view of the severe environmental risks of accommodating waste on a karst massif, right on top of the water collection area that feeds the main source of fresh water for the city.

With the solid domestic waste sorting project failing abysmally, no significant efforts whatsoever in place to reduce this waste, and an absence of locations to bury the waste on the territory of the city of Sochi, the administration made the only “crisis-management” decision possible: transport the waste to another municipality in Krasnodar region: Belorechensky District.

Just like Sochi, Belorechensky District so far has no safe landfill for solid domestic waste. Delivered from Sochi, the waste, packed in big bags, is stacked at a local dump near the village of Verkhnevedeneyevskoye, on the bank of the Belaya River. Even before the decision to move Sochi’s waste to this location, the Verkhnevedeneyevskoye dumpsite was the subject of the villagers’ complaints as it would constantly burn and emit a stench, and when trucks started coming en masse bringing waste from Sochi – up to 30 or 40 truckloads are delivered



daily to the dump – a widespread protest campaign broke out in the area.⁷ Official statements estimate that around 300,000 tons of waste were brought from Sochi to Belorechensky District in 2013 (overall, about 600,000 tons of waste had been accumulated at the dump as of end 2012).⁸

Adding insult to injury are the lies that come from the officials. Despite the assurances that only “sorted and safe” waste finds its way to Belorechensky District, the fact – which the EWNC’s activists ascertained last October, 2013 – is that what is dumped near Verkhnevedeneyevskoye is common mixed domestic waste that bears no sign of ever having been sorted for recovery of recyclable materials: the torn big bags reveal plastic, metals, electric wiring, cardboard, and all sorts of organic waste such as kitchen refuse, food with expired “best before” dates, discarded by shops, livestock farming wastes (skins and offal of butchered animals), fallen leaves and gardening trimmings. The chief mystery that remains is why the leaves and branches would need to be transported 250 kilometers away from Sochi if they could be disposed of on site.



Removal of unsorted waste from Sochi to Belorechensk



The possible answer is that the officials of Belorechensky District are nurturing plans to build a waste burning plant, a project that they are already holding talks about with the Spanish company Ortiz Martos Abogados.⁹ This will be one case where no one will be interested in sorting or reducing the amount of solid domestic waste, but the environmentally dangerous burning of waste completely defeats the Zero Waste standard.

What can be said is that none of the principles of this standard – Reduce, Reuse, Recycle – has been fulfilled where the preparation for the Olympic Games in Sochi is concerned, and now, in an attempt to save face, Russian Olympic officials are trying to pass off as Zero Waste compliance projects that are at best a stretch: such as the wastewater catchment system for highway runoff or renovation of the sewer.

-
- 1 <http://www.sochi2014.com/en/zero-waste-games>
 - 2 <http://www.livekuban.ru/node/223274>
 - 3 <http://ewnc.org/files/sochi/otval/Shema.pdf>
 - 4 Протокол совещания у заместителя председателя правительства РФ Д. Н. Козака от 12 июля 2013 г. № ДК-П9-15пр (Minutes of the meeting held by Deputy Prime Minister of the Russian Federation D. N. Kozak of July 12, 2013, No. DK-P9-15pr)
 - 5 <http://izvestia.ru/news/516582>
 - 6 http://prirodnadzor-kuban.ru/olimpiada1/karta_mest_nesankcionirovannogo_razmeweniya_othodov/ (in Russian)
 - 7 <http://www.sochinskie-novosti.com>
 - 8 http://www.dg-yug.ru/a/2013/04/01/Othodi_iz_Sochi_budut_svoz
 - 9 <http://www.kommersant.ru/doc/2315134>

The Myth of “Clean” Air

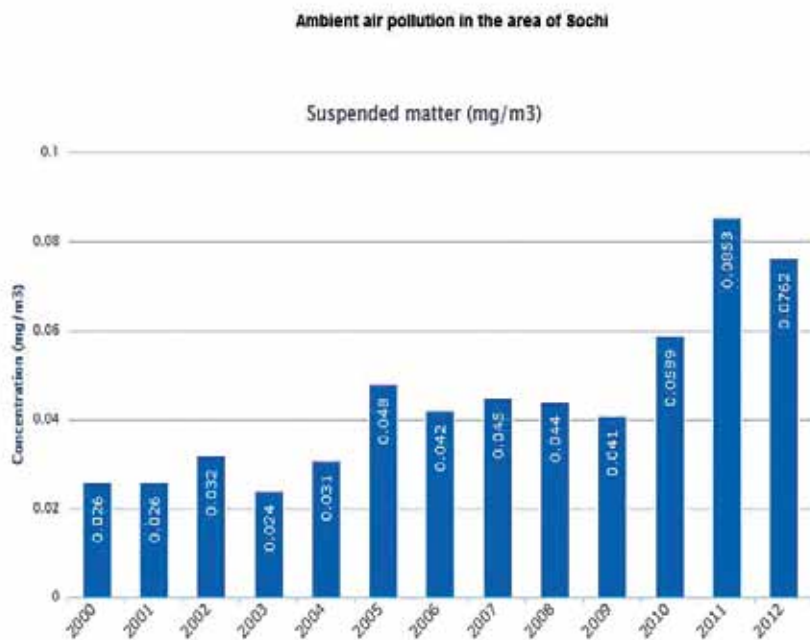


Aside from the lies about “green construction,” officials responsible for maintaining propaganda support of the Sochi Olympic Games have been hard at work selling the population on the idea that Olympic construction has resulted in significant improvements in the city’s air quality.

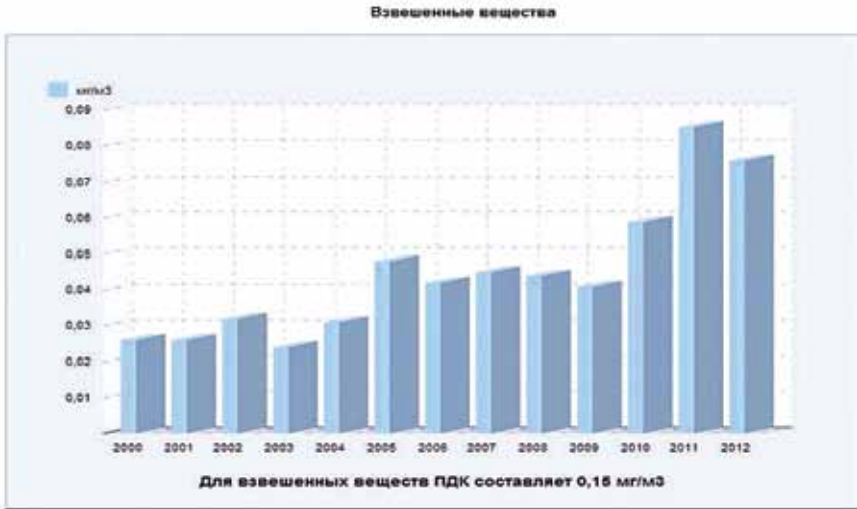


“The air and water in Sochi have become cleaner than as of December 2007. The air has become twice as clean. Where in December 2007, when there was no construction yet, the amount of suspended matter is 1.2 of the maximum allowable limit, today, [it is] 0.6 of the [maximum allowable limit]. This is a very good result,” Russian Deputy Prime Minister Dmitry Kozak said in early January 2014¹.

Kozak’s information, however, is completely at odds with official reports by the Russian Federal Service for Hydrometeorology and Environmental Monitoring (Roshydromet), whose data are available on the agency’s official website². One need look no further than the aggregated information on the concentrations of main pollutants and particulate matter in the air within Sochi’s city limits in the period between 2007 and 2012 to see that air quality in the city has been degrading steadily.

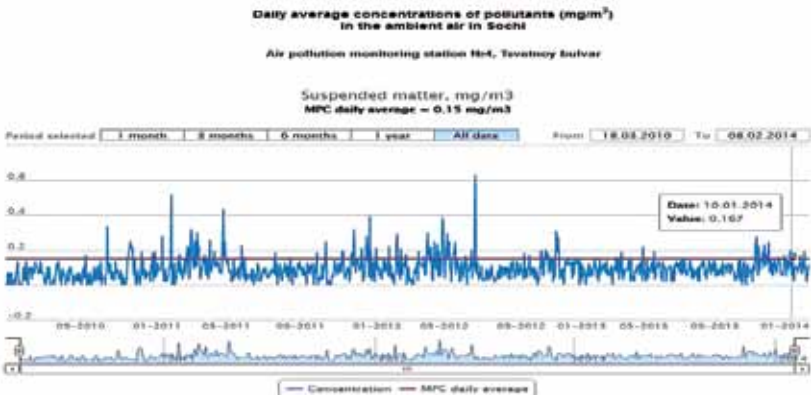


Aggregated data for suspended matter pollution in Sochi as recorded by Roshydromet in 2000 to 2012. The maximum allowable limit for suspended matter concentrations is 0.15 mg/m³.



But perhaps the situation changed radically right before the Games, and the embattled Olympic torch ended up being the only source of pollution in Sochi’s air? Unfortunately, no. It all only became worse.

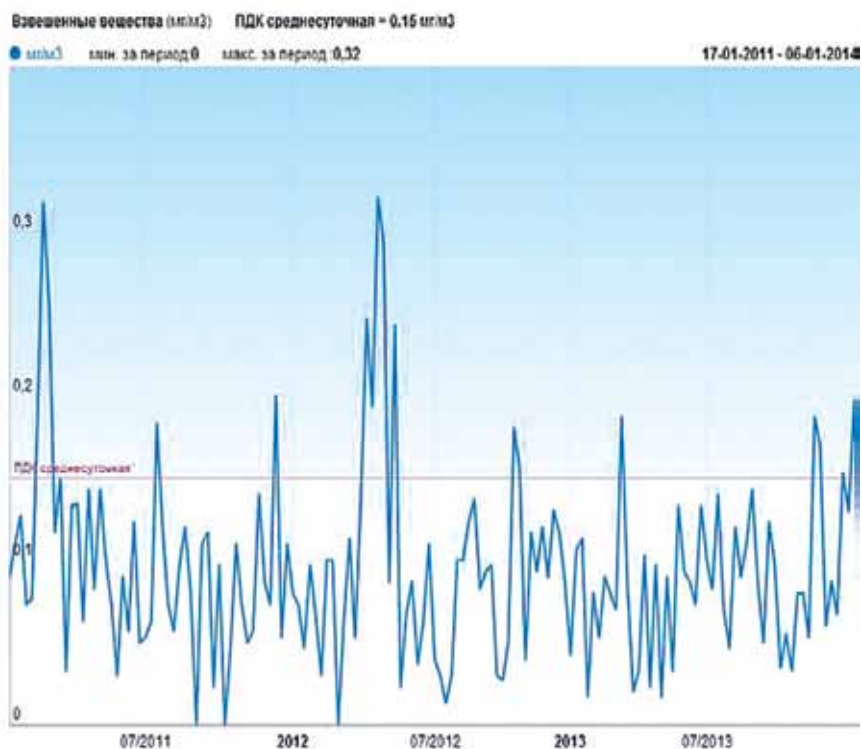
According to data collected by the stationary control station in Sochi’s center (in Tsvetnoi Bulvar), the situation has not changed over the past three years of observation. Suspended matter levels have fluctuated but still have remained consistently high, while one of the latest spikes over the maximum allowable limit was recorded on January 10, 2014, when Deputy Prime Minister Kozak said that Sochi air was “twice as clean”:³



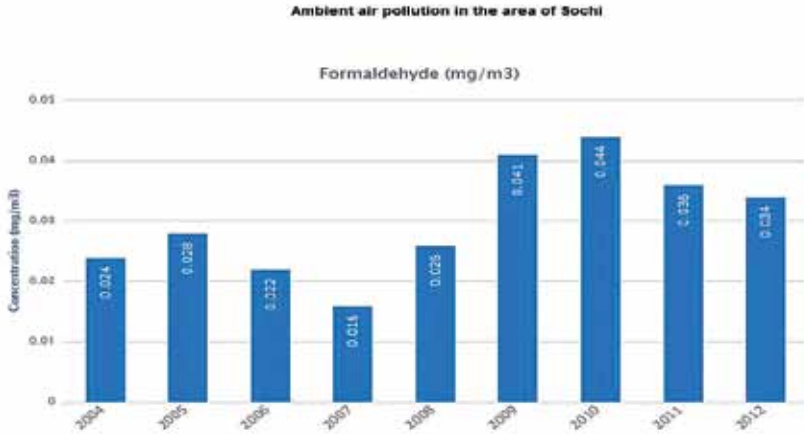


Data for suspended matter pollution in the air in Sochi as recorded by Roshydromet's air pollution monitoring station No. 4 in Tsvetnoi Bulvar from March 18, 2010 to February 8, 2014. On the day of Deputy Prime Minister Dmitry Kozak's claim about Sochi air being "twice as clean" as before the Olympic construction, suspended matter pollution level was documented at 0.167 mg/m³ over the maximum allowable limit of 0.15 mg/m³.

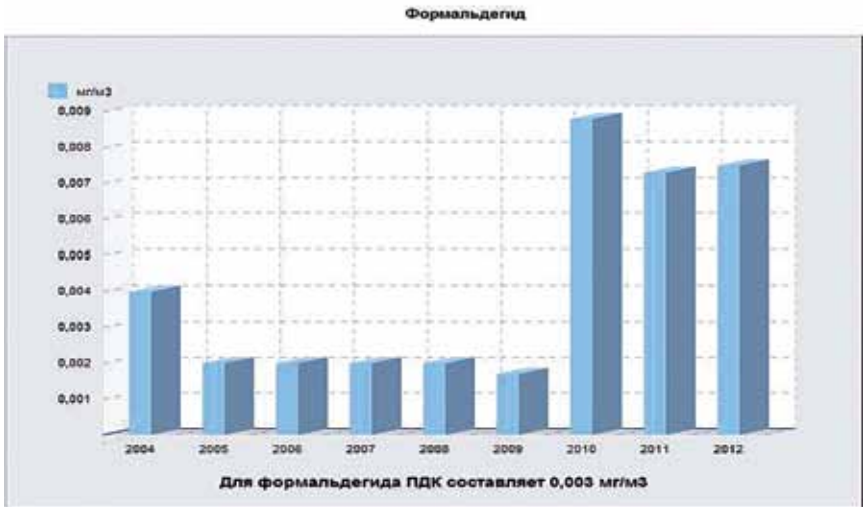
Пост наблюдения за загрязнением атмосферы №4. Цветной бульвар



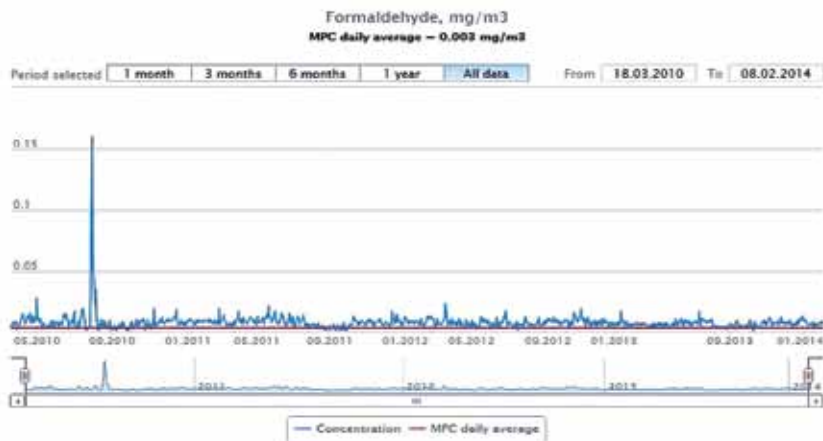
But suspended matter is far from being the most harmful pollutant where health risks of air pollution are concerned. Far worse is the situation with the Olympic atmosphere's pollution levels of formaldehyde, which is an extremely hazardous organic substance.⁴ It turns out that, according to Roshydromet's aggregated data, 2010 saw a dramatic rise in formaldehyde concentrations in Sochi's air, and for the next two years maximum permissible limits for this toxic substance continued to be surpassed by three times.



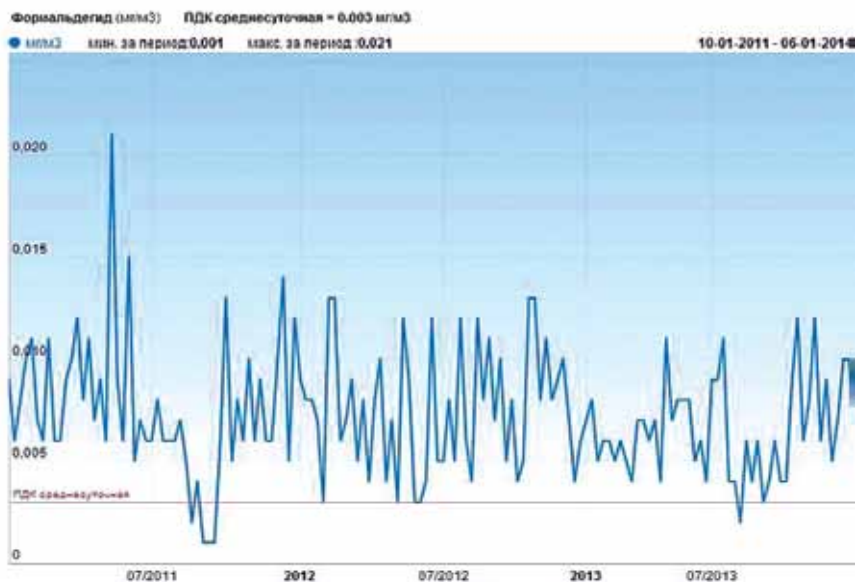
Aggregated data for formaldehyde pollution in the air in Sochi as recorded by Roshydromet in 2004 to 2012. The maximum permissible limit for formaldehyde concentrations is 0.003 mg/m³.



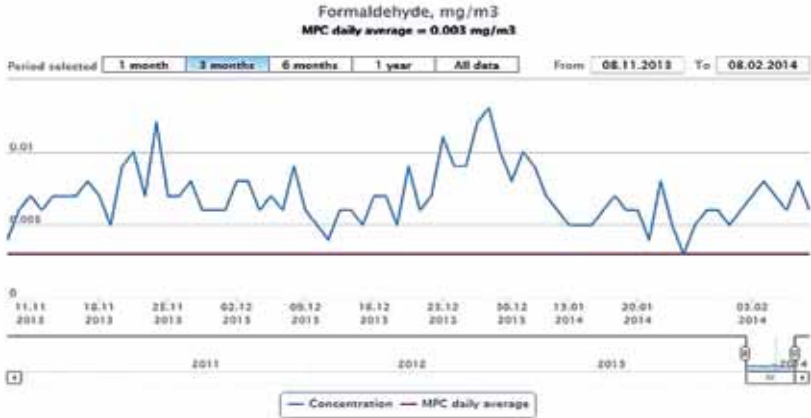
There is yet no aggregated information for formaldehyde for the year 2013, but, as revealed by data recorded by Roshydromet’s monitoring station No. 1, in Ulitsa Yana Fabritsiusa – the only station whose data for formaldehyde pollution in Sochi is posted on the agency’s website – the pollutant’s concentrations have exceeded the maximum permissible levels for four years in a row.⁵



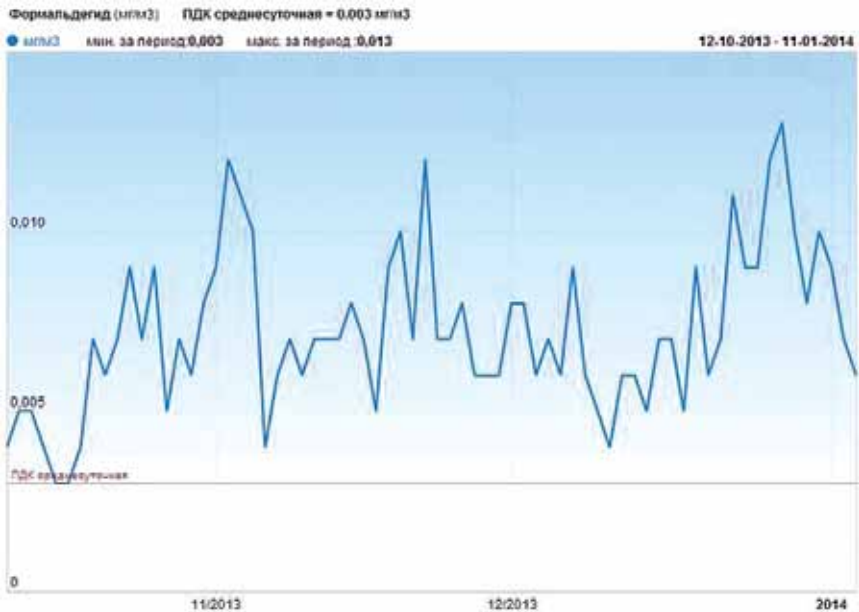
Data for daily average concentrations of formaldehyde in the air in Sochi as recorded by Roshydromet's air pollution monitoring station No. 1 in Ulitsa Yana Fabritsiusa from March 18, 2010 to February 8, 2014. The maximum permissible limit for formaldehyde concentrations is 0.003 mg/m³.



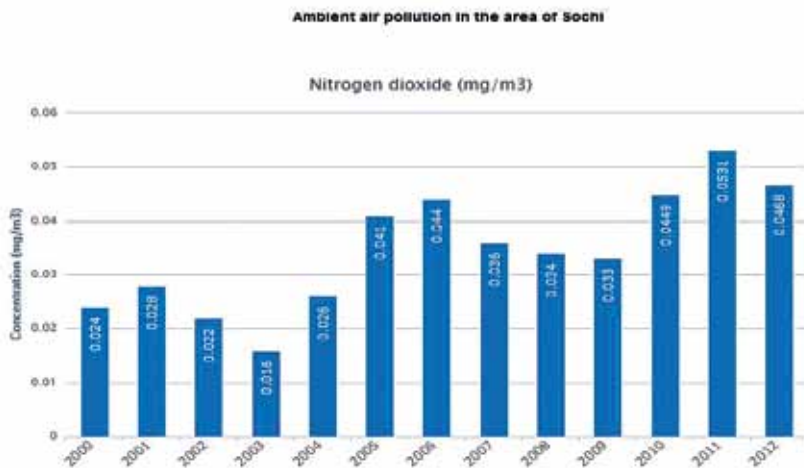
As of early 2014, the critical situation with formaldehyde pollution remained unchanged:



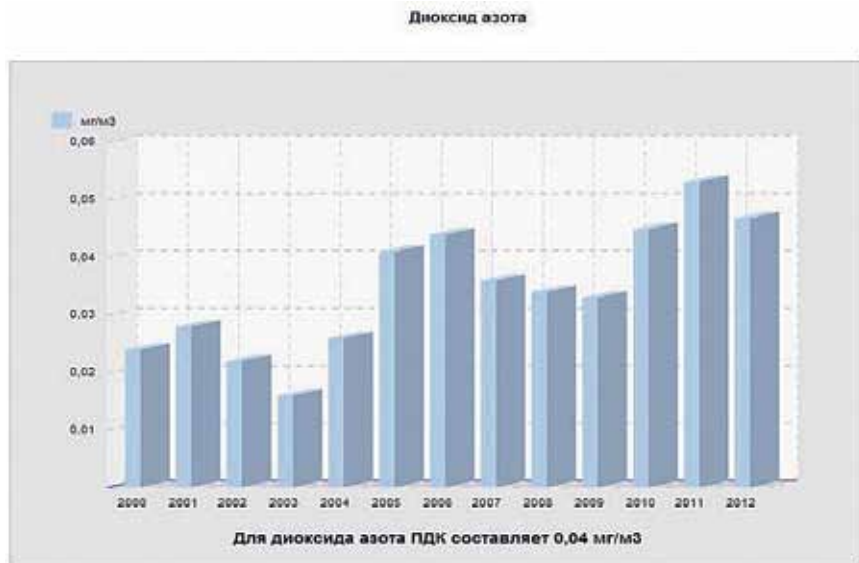
Daily average concentrations of formaldehyde in the air in Sochi as recorded by Roshydromet’s air pollution monitoring station No. 1 from November 8, 2013 to February, 2014



A similar situation can be observed with **nitrogen dioxide**, whose concentrations have over many years exceeded maximum permissible levels and have seen no abatement by 2014.



Aggregated data for nitrogen dioxide pollution in the air in Sochi as recorded by Roshydromet between 2000 and 2012. The maximum permissible limit for nitrogen dioxide concentrations is 0.04 mg/m³.



Now let us also take a look at a table included in the Sochi 2014 Bid Book, offering averaged air pollution data for Sochi before the preparations for the Olympic Games began.⁶



5.2 Sochi 5-year average Air Quality measures and World Health Organization standards

	Sochi (mg/m ³)	WHO (mg/m ³)	Meets/Exceeds Standards?
Carbon Monoxide	1.496	10 (8hrs)	Yes
PM 10	0.0258	0.05	Yes
Sulphur Dioxide	0.0003	0.2	Yes
Nitrogen Dioxide	0.0274	0.5	Yes

If data from this table is taken to be correct, then, it turns out, particulate matter (PM10) pollution levels rose by 2013 by three times (0.0258 mg/m³ against 0.0762 mg/m³ in 2013), nitrogen dioxide concentrations increased by 60% (0.0274 mg/m³ against 0.0468 mg/m³ in 2013), and sulfur dioxide concentrations were up by a quarter (0.0004 mg/m³ in 2013 over the table’s 0.0003 mg/m³). It can be thus concluded that it was precisely on account of the Olympic construction that Sochi residents spent seven years of their lives breathing – and still breathe – poisoned air, and that all statements made by top-ranking Olympic functionaries about air quality improvements are bald-faced cynical lies.

-
- 1 <http://ria.ru/sochi2014/20140110/988603976.html> (in Russian)
 - 2 <http://www.feerc.ru:8080/sochi/en/monitoring/air>
 - 3 <http://www.feerc.ru:8080/sochi/en/monitoring/air/oper/post4>
 - 4 <http://www.f-med.ru/toksikologia/formaldigid.php><http://www.epa.gov/iaq/formaldehyde.html>№Health_Effects
 - 5 <http://www.feerc.ru:8080/sochi/en/monitoring/air/oper/post1>
 - 6 http://mnr2014.ru/data/application/1333528400_p_1.pdf (in Russian)

Environmental Destruction for the Sake of the 2014 Sochi Winter Olympics Should Become a Lesson and Must Never Happen Again!

Statement by Environmental Watch on North Caucasus

Unfortunately, the damage caused by Olympic construction is irreparable: it is impossible to restore destroyed ecosystems of the Sochi National Park and Imeretinskaya lowland. However, it is possible to draw lessons for the future. Environmental Watch on North Caucasus call on the President and the Russian Government to stop the vicious practice of destroying unique ecosystems and violating the environmental rights of the population during the implementation of projects in the North Caucasus and throughout Russia. This can be done by changing environmental laws, expanding specially-protected natural territories, and by terminating and refusing to carry out environmentally destructive projects that threaten specially-protected natural territories.

We call for:

1. The revocation of amendments to federal legislation in regards to preparation to Sochi 2014 Winter Olympics that weakened environmental protection. It is necessary to restore legal norms prohibiting construction of sport and recreational venues on the territory of national parks and biosphere reserves and polygons; to revoke amendments allowing withdrawal the areas of specially-protected natural territories from protection and modification of their borders;



2. Ensuring expansion of the territory of the Caucasian Reserve and the Sochi National Park through the inclusion of undamaged natural territories, which do not yet enjoy protected status;
3. The creation of a reserve (zapovednik) on the territory of wetlands of international importance “the Kuban River Delta” as it was stipulated in the Order of the Government of the Russian Federation (№ 572-r of April 23, 1994). Such action would be a compensatory measure for damage to ornithological flora and wetlands in the region as a result of the complete destruction of the Imeretinskaya lowland’s landscape;
4. Expansion of the territory of the Utrish Reserve as it was provided in its original scientific substantiation; include the area of Utrish lagoons as well as the areas kept for building roads and communications;
5. Official renunciation of all plans for construction of new ski resorts on Lagonaki plateau and Fisht-Oshtensky mountain ridge; drop all initiatives to amend the borders of the Western Caucasus UNESCO World Natural Heritage site with the purpose of legalizing construction of the ski resorts;
6. Cessation of plans to degrade the protective status of the Teberdinsky Reserve down to a national park status, ensuring the establishment of an environmental corridor between the Caucasian and Teberdinsky Reserves and ensure its real protective status;
7. Cessation of construction of the Lunnaya Polyana ski resort and its infrastructure, which are concealed as the scientific center Biosphere on the territory of the Western Caucasus UNESCO World Heritage site. In accordance with requirements of UNESCO World Heritage Committee, ensure that Biosphere functions as a center for scientific research, monitoring and raising public awareness (and not with recreational purposes).
8. Cessation of construction of the so-called “Motorway route to the weather station of Caucasian reserve.” Its construction has been carried out with gross violations of environmental laws in the valley of the Shakhe River on the territory of the Caucasian reserve and the Sochi National Park.



9. Dismantling of the Port “Imeretinsky”, which was built for the transshipment of Olympic construction cargo. Port facilities block pebbles from being carried by the Mzymta River along the shore; they also prevent the shoring up of the beaches along the Imeretinskaya lowland;
10. Cessation of plans to build any roads on the territory of Caucasian Reserve and Sochi National Park;
11. Taking effective actions to ensure that Russian citizens enjoy free access to the entire Russian seashore of the Black Sea in accordance with the Water Code of the Russian Federation;
12. Implementation of a real “Zero Waste” standard in Sochi: local waste sorting and further recycling. We believe that mixed waste removal beyond the Sochi limits with the purpose of waste burial or incineration is an absolutely unacceptable practice;
13. Implementation of promises and declarations regarding restoration of landscapes and ecosystems of the Mzymta River valley; development of a detailed, scientifically proven plan on such measures; ensuring the financing of those actions.



Environmental Watch on North Caucasus

Text: Suren Gazaryan, Dmitry Shevchenko

Analitics and cartography: Suren Gazaryan, Andrey Filimonov

Photography: Andrey Rudomakha, Dmitry Kaptsov, Suren Gazaryan, Tatiana Lvova, Vladimir Kimaev, Yulia Naberezhnaya, Michael Plotnikov, Elena Moiseeva, Dmitry Shevchenko

Front-page image: Michael Plotnikov

Translation from Russian: Yulia Genin, Maria Antonova, Kate Watters, Maria Kaminskaya, Charles Digges, Karena Avedissian

The review is prepared with the support of CEE Bankwatch Network (<http://bankwatch.org>), Both ENDS (<http://www.bothends.org/>) and Global Green-grants Fund (<http://www.greengrants.org/>) based on information by Environmental Watch on North Caucasus and public sources. The content of the review, opinion and evaluation reflect Environmental Watch on North Caucasus' view-point.

***“If they come and start - flaunting the Constitution,
shouting that you cannot cut fir and pine trees - then it is
easier to change the Constitution”***

*Leonid Tyagachev,
President of the Russian
Olympic Committee 2001-2010*



<http://ewnc.org/>



envwnc@gmail.com



(8772) 54-06-07

Support Environmental Watch - contribute to environmental protection!

Environmental Watch on North Caucasus is a non-for-profit organization and its work is fully supported by voluntary contributions. We do not accept governmental subsidies and support from companies exploiting natural resources. We count on those who care about environment and our common future.

Thanks to your support:

- we will continue analyzing the impact of 2014 Sochi Winter Olympics and we will demand real compensation to the environment from the authorities;
- we will continue protecting unique natural territories of Caucasus and Russian Black Sea coast;
- we will be able to conduct public investigations on environmental crimes and to defend environmental human rights;
- we will be able to maintain and improve our web-site <http://ewnc.org/>, distribute information on environmental problems and violations and seek for broad public support.

We need Your support!



Z323633979291

(for transfers in U.S. dollars)

E389580522095

(for transfers in Euros)