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Forest Management Data Summary for the Far Eastern Federal Okrug

Ministry of Natural Resources of the Russian Federation

The Fire Situation in 2003

The natural fire danger and occurrence in the forests of the Far Eastern Federal Okrug are among the highest in the Russian Federation. Over 80% of its territory is classified as high fire risk territories.

By 1 September 2003, since the start of the fire season, the Far Eastern Federal Okrug has seen 3,300 forest fires affecting 806,200 hectares (ha) including 477,400 ha of forested land.

In the Far Eastern Federal Okrug, the subjects of the Russian Federation accounted for 7.2% of all forest fires (24,000) registered in the forests of the Russian Federation, while in terms of the forested area it accounts for 25% or 1.9 million ha.

As compared to 2002, there is a 1.3 times growth of forest fires, with a 1.3 times decrease in burned areas, including a 1.5 times decrease in burned forested land.

There is also a 120.7 ha decrease in the average area burned by one fire. An adequate response eliminated most of forest fires on the day of their occurrence and on smaller areas.

The above indicates increased effectiveness of Forest Fire Services of the said region. Fire management has been carried out in close cooperation with the governments of the subjects of the Russian Federation along with the mobilization of additional human and technical resources.

To render timely assistance in attacking forest fires, fire fighting service moved to the area 13 airborne fighting teams numbering 280 staff, with additional fire fighting means mobilized in other territorial units of the MNR.

The Forest Fire Service carried out a number of forest fire prevention activities. In the first six months of 2003, these included the construction of 4,600 km fire breaks (breaks, mineralized strips, forest edges, ditches, etc.), tendering of 10,000 km of fire breaks and mineral strips, construction of 200 km and repair of 654 km of fire prevention roads.

All the leskhozes, except the Jewish Autonomous Oblast leskhozes, met the targets for the construction and tendering of fire breaks.

Enforcement of fire fighting and prevention requirements and identification of those responsible for fires is characterized by the following figures. The first six months of this year caught 29 persons who were responsible for forest fires and 1,000 of those who violated fire safety rules in the forests. These indicators are lower as compared to the same period of last year. The amount of fines collected was 363,900 Rubles.

Forest Insect and Disease Control

A number of adverse factors influence the forests of the Far Eastern Federal Okrug leading to the weakening and destruction of forest stands.

The last decade analysis of the drying up of forest in the Okrug shows that forest fires contribute most to the weakening and destruction of forest stands. Over this period, forest fires destroyed 867,900 ha

of forested land (97 percent of the entire dry forest stands). Adverse weather conditions are the second leading factors of forest destruction (20,600 ha or 2.3 percent). The average acreage of dead forest stands in the Okrug comprise 0.32% of the forested land. Over this period, the highest intensity of forest destruction was found in Kamchanka Oblast and the Koriaksky Autonomous Okrug, followed by Sakhalin Oblast and Chukotka Autonomous Okrug (0.87 and 0.86 percent correspondingly).

The health and pathology situation in the Far Eastern Federal Okrug forests is characterized by a high level of forest stand drying, which in 2002 accounted for 157,500 ha or 47% of the entire forest lost in Russia. Forest fires are the main cause of forest stand destruction, having devastated 154,485 ha of forest stock (98%). Dendrophilous insects contributed to the drying of 1,705 ha (1.1%) of forests, while adverse weather conditions caused the drying of 805 ha (0.5%) of forest stand. In the Okrug, the dead forest area accounts for 0.57% of the forested land topping the average national indicator of 0.47%. Insufficient application of allowable cut leads to accumulation of matured and old trees in the structure of the forest stock and its subsequent deterioration as the process of natural dying of trees brings to life insects and diseases. The mature forest stand accumulates forest fuel reducing the carbon deposition, while the pets and disease hotspots, which it generates, tend to splash over to the adjacent forest areas.

In 2003 drought stress in forests was most intensive in Kamchatka Oblast, Koriaksky Autonomous Okrug, and the Republic of Sakha. The destruction of forest stands in these administrative units was caused by forest fires.

The current drying process and full destruction of forest stands result in environmental deterioration and reduced value of forests. When valuating stumpage alone, the drying and destruction of forests reduced the value of forest by 2,327.9 million Rubles in 2002 due to the deteriorated timber quality. The program of forest sanitation is being carried out to normalize the sanitary and pathological situation in the forests. In 2002, these activities covered 19.7% of the forested land in the Okrug, which are in need of improvements. In the Jewish Autonomous Oblast, the improvement activities amounted to 56.9% of the demand, in Khabarovsk Krai – 35.7%, in Primorsky Krai – 22.0%, in Sakhalin Oblast – 26.4%, while in other regions of Russia there is a considerable underperformance in this respect. For example, in Magadan Oblast this indicator is 9.5%, in Kamchatka Oblast and Koriaksky Autonomous Oblast it is 0.5%, while in the Republic of Sakha it is as low as 0.05%. Information on forest sanitation programs in Chukotka Autonomous Oblast is not available.

In 2002, forest sanitation increased forest income in the Okrug by 179.8 million Rubles.

By the end of 2002, the hotspots of insects and diseases in the Far Eastern Okrug were found on the total area of 4,764,500 ha or 59% of all the hotspots in this country. Siberian Silkworm is the major insect for the Far Eastern forests. In 2002, the hotspots of this insect were found on the total area of 4,583,700 ha. Most affected from the outbreak were the Republic of Sakha and Khabarovsk Krai.

In 2002, aviation-based response, carried out on 114,000 ha to control this insect in Khabarovsk Krai and natural factors reduced the area of mass breeding of Siberian Silkworm by 2,179 ha. The year of 2003 saw the insect control response in the Republic of Sakha and Khabarovsk Krai covering the total area of 86.6 thousand ha.

Over the last decade, the average cumulative area of hotspots in the Okrug amounted to 1,896,700 ha, ranging from 1,100 ha in 1993 to 6,893,700 ha in 2001. The Siberian Silkworm hotspots occupied most of the insect populated area (1,744,100 ha or 91.9%) followed by 7.9% of hotspots of leaf-eating insects. Over this period, the Okrug forests experienced aviation response to dendrophilous insects in Primorsky and Khabarovsk Krais, as well as in the Republic of Sakha.

The Okrug has organized and is carrying out a pathological monitoring of the forests on the total area of over 2.1 million ha.

The Roslesozashita State Agency is conducting monitoring of Rosy Silkworm, which is quarantine specie. This allows for a free export of forest products through the ports of Nakhodka and Vladivostok.

In the Okrug, forest protection is the responsibility of the State Forest Service officials and specialized forest protection organizations. Primorsky Krai is covered by the Center for Protection of Primorsky Krai Forests (a branch of Rosleszashita), while Khabarovsk Krai and Amur Oblast are covered by Insects and Disease Control Stations

Illegal Logging

In recent years, the Asia Pacific markets have been witnessing an increased demand for hardwood, in particular *Fraxinus mandshurica*, driving its harvesting beyond the share of the species in the commercial stock. Analysis of the industrial export of this wood species and the official license data shows that illegal felling has been taking place.

The China market consumes over 77% of the harvested wood. This is due to the fact that the Chinese Government adopted the plan for the development of its processing sector and creation of new jobs while stopping forest harvesting in certain territories for a long-term period.

Along with China, the Republic of Korea has also increased its presence at Russia's wood market. Wood exports into that country used to be low, while recently it increased significantly.

Of particular concern is the harvesting situation with valuable wood trees in the Far Eastern Federal Okrug. Here, illegal felling is carried out by well organized mobile teams furnished with harvesting and wood loading machines, as well as communication means. Those involved in illegal felling use violence including murder of state forest service officers, who would identify illegal harvesters.

Wood harvested in Siberia constitutes a considerable share of wood exports through the Far Eastern Federal Okrug subjects of the Federation.

The pattern of illegal felling in the Far Eastern Federal Okrug indicates that it is on the increase. In the first six months of 2003, state forest service officers found 942 cases of illegal felling in the Far Eastern Federal Okrug totalling 36,200 m^3 worth 467.3 million Rubles. Most of illegal felling takes place in Primorsky Krai (340 cases, 11,900 m^3, 339.4 million Rubles), Khabarovsk Krai (147 cases, 7,500 m^3, 79.7 million Rubles), and Amur Oblast (269 cases, 9,300 m^3, 34.4 million Rubles).

The State Forest Service, on its own and in cooperation with the territorial units of the federal authorities, has been taking action to improve the situation concerning illegal felling.

At the same time, the current illegal felling response is far from being adequate. Despite the action taken by the State Forest Service of the Russian Federation, stabilizing the situation with illegal felling requires that certain federal and regional level issues are addressed as soon as possible.

For example, one of the factors influencing the operation of the State Forest Service is poor logistical provision of the State Forest Service caused by inadequate budget funding of the State Forest Service.

Another big concern is inadequate regulatory and legislation framework at the level of subjects of the Russian Federation concerning forest use management, quantitative and qualitative assessment of forest resources, and control over harvesting, transportation, processing and sales (including exports) of wood.

There is also a need to change the basic forest instrument, the Forest Code of the Russian Federation, and to develop a number of federal-level legal and regulatory instruments concerning illegal felling.

Taking into consideration that illegal felling of valuable wood trees comprises a number of various violations related to illegal felling, transportation, processing and sale of illegal products at the internal and foreign markets, including price and customs violations, there is a need in clear-cut cooperation of various federal authorities, which are responsible for this aspect, including their territorial units and authorities of the subjects of the Russian Federation.

The MNR is of the opinion that at the level of the Federal Government, prompt decision taking and coordination of the competent federal authorities, which are responsible for the control over illegal felling and informal wood market, could be managed through an Interagency Committee. At the regional level, these functions could be carried out by establishing similar committees under the relevant authorities of the subjects of the Russian Federation.

In view of this, MNR is working on the preparation of draft resolutions of the Government of the Russian Federation on the establishment of an Interagency Committee to combat illegal felling,

transportation, processing and sale of wood, as well as the Interagency Charter and its composition.

Generally, this issue should be addressed at the federal level through a set of policies for stronger state control over the harvesting and sale of wood at the internal and foreign markets, as well as through a higher status, improved legal and social protection of officers of the State Forest Service of the Russian Federation, and improved firearms and hardware provision.

Forest Management Roads

The level of forest management and compliance with the forest legislation concerning the implementation of prescribed forestry activities and programs is largely determined by forestry road network.

Increasing the productivity and improving the sound use of forest resources requires developed forest transport infrastructure. Under Article 91 of the Forest Code of the Russian Federation, construction of forestry roads, as an element of this infrastructure, is a direct responsibility of leskhozes of Russia's Ministry of Natural Resources (MRN).

It should be noted that the forestry road network in the forests of the Far Eastern Federal Okrug is clearly underdeveloped featuring the lowest indicators as compared to other regions and subjects of the Russian Federation, apart from Primorsky Krai and Sakhalin Oblast.

Table 1. Forestry road network in the Far eastern Federal Okrug (FEFO)

MNR Territorial Bodies	Administered Forests (x 1000 ha)	Forested Land (x 1000 ha)	Availability of Forest Roads			Development Indicator (km/1000 ha)
			Total km	Logging Roads	Forestry Roads	
Primorsky Krai GUPR	12,870.7	12,302.2	39,242	20,699	12,172	0.99
Khabarovsk Krai GUPR	75,308.6	53,666.4	65,451	32,850	15,880	0.29
Jewish Autonomous Oblast GUPR	2280.8	1628.4	3896	2908	55	0.03
Amur Oblast GUPR	31,644.4	23,129.7	30,269	17,654	4814	0.20
Kamchatka Oblast UPR	16,328.4	9650.2	9091	1411	4980	0.51
Koriaksky Autonomous Oblast UPR	28,919.3	10,236.9	950	395	32	0.003
Magadan Oblast UPR	45,728.1	17,733.3	5795	1272	1448	0.08
Chukotka AO UPR	27,698.4	5133.2	1402	0	0	0
Republic of Sakha GUPR	255,610.8	143,969.1	30,684	5830	1212	0.008
Sakhalin Oblast UPR	7,077.5	5561.2	16,024	5123	6567	1.18
Subtotal for FEFO	**503,467**	**283,011**	**202,804**	**88,142**	**47,160**	**0.16**
Total for MNR	**1,172,322.3**	**769,785**	**1,472,017**	**405,058**	**592,348**	**0.61**

Development of forestry road networks in the forests of all the subjects of the Far Eastern Federal Okrug is a common responsibility of the authorities of all levels. Addressing this challenge will improve forest management, fire management, organization and implementation of forest use, with a positive impact on the social development of the region.

It is necessary, through joint effort, to change the current down trend of forestry road construction volumes.

There are good reasons to believe that this objective is attainable. The Forests Sub-Programme under the Earmarked Federal Program "Ecology and Natural Resources", approved by Resolution 860 of the Government of the Russian Federation, dated 7 December 2001, sets forth the target of 5,417 km of forestry roads to be constructed in 2002-2010 and provides for financing of this Subprogram. In 2002, leskhozes of Russia's MNR built and repaired 138.5 km of forestry roads. Under the Program, the year

of 2003 will see the construction of 34 km of forestry roads in Primorsky Krai, Amur and Sakhalin Oblasts worth of 3 million Rubles.

Table 2. Construction of Forestry Roads 2002-2003.

MNR Territorial Bodies	Targets	Actual Status	Expenses	Targets	Expenses
	2002	2002	2002	2003	2003
	km	km	Rubles (x 1000)	km	Rubles (x 1000)
Khabarovsk Krai GUPR		3	270	3	1212
Amur Oblast GUPR	6	6		6	1366
Kamchatka Oblast UPR		103.5	10	14	357
Magadan Oblast UPR					
Sakhalin Oblast UPR	11	10	366.1	6	387
Republic of Sakha GUPR					
Primorsky Krai GUPR	5	19	14.9	5	51.2
Subtotal for FEFO	**22**	**138.5**	**660.9**	**34**	**3051.2**
Total for MNR	**400**	**448.7**	**8240.7**	**400**	**90,700**

This is surely not sufficient. Given the fact, that along with forestry objectives forestry roads promote social development at the regional and local levels, one should recognize that budget financing should be complemented by investments from local governments, forest users and tenants.

Reforestation

The current volumes of reforestation operations in the Far Eastern Federal Okrug provide for the timely reforestation of the harvested area. In 2002, final harvesting and environmental harvesting operations consumed 100,800 hectares (ha) of the Okrug forested land, administered by Russia's MRN. Reforestation operations were carried out on 234,800 ha including planting and seeding of 25,800 ha. Some 323,400 ha of saplings were classified as commercial stock. The reforestation operations expenses were 204.9 million Rubles, out of which the regional and local budgets contributed 73.3 million Rubles. Most of the reforestation expenses were born by the leskhozes (132.1 million Rubles or 64%).

In accordance with the Program for Reforestation of Russia's Forests in 2003-2010 developed as a follow up of the Ecology and Natural Resources of Russia Earmarked Federal Program (2002-2010) and approved by the Government of the Russian Federation, the Far Eastern Region will carry out in 2003 reforestation on 209,000 hectares including planting and seeding of 21,500 ha, sapling thinning on 22,600 ha, and commercialization of 272,000 ha of saplings. The subjects of the Russian Federation assigned 110.3 million Rubles for reforestation, which is only 20% of the requirement. Khabarovsk Krai and Sakhalin Oblast allocations will only be 6% of the requirement.

As of 1 August 2003, reforestation operations were carried out on 71,400 ha including plating and seeding of 21,300 ha, tending of 5,600 ha of plantations, and establishment of seeding blocks in the nurseries. In the first six months of 2003, reforestation expenses were 83.1 million Rubles, with the subjects of the Russian Federation and local governments having allocated 42.9 million Rubles or 52%. Khabarovsk Krai made no budget allocations for this expenditure.

Khabarovsk Krai and Jewish Autonomous Oblast have no regional reforestation programs, which are subject to approval by the authorities of these subjects of the Russian Federation.