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Mineral Resource Base of Mostovskoy District

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Abstract

The article presents data on the composition, reserves and extraction of raw materials for the production of building materials, as well as the reserves and use of thermal and mineral waters based on the analysis of maps, stock materials and literary sources.

Keywords: mineral resource base, extraction, resource, reserves, groundwater.

Аннотация

В статье представлены данные по составу, запасам и добыче сырья для производства строительных материалов, а также запасов и использования термальных и минеральных вод на основании анализа карт, фондовых материалов и литературных источников.

Ключевые слова: минерально-сырьевая база, добыча, ресурс, запасы, подземные воды.

Introduction

Mostovskoy District is one of the most promising regions of the Krasnodar Territory due to the availability of various natural resources that determine its specialization. Currently, the significance in the socio-economic development of the district is in such activities as the extraction and processing of raw materials for the production of construction materials, as well as the tourist and recreational complex. For the prospective development of the latter, the expansion of the use of mineral and thermal water resources is very important.

In connection with the above mentioned, it is of scientific and practical interest to study the current state of the resource and raw material base of Mostovskoy district to assess the prospects and develop proposals for their use. At the same time, it is necessary to consider and take into account the planning of the environmental consequences of these activities.

The description of the research

The present study of the mineral resource base of Mostovskoy district was conducted due to cartographic and literary sources [1]. An analysis of reserves and extraction of raw materials for the production of construction materials, as well as the reserves and the use of thermal and mineral waters was carried out.

Table 1

Fields of raw material extraction in Mostovskoy district

<i>Resource name</i>	<i>Area, km²</i>	<i>Deposit name</i>	<i>Stock level thousand m³</i>
<i>Rock salt</i>	<i>53</i>	<i>Shedokskoye deposit, Gubskiy deposit</i>	<i>2 000</i>
<i>Gypsum</i>	<i>21</i>	<i>Beslenevskoye deposit, Shedokskoye deposit</i>	<i>53 722</i>
<i>Building stone (to a depth of 50m)</i>	<i>15</i>	<i>Beslenevskoye deposit</i>	<i>52 660</i>
<i>Sand and gravel mix</i>	<i>17</i>	<i>Shedokskoye deposit Psebai deposit</i>	<i>103 987</i>
<i>Brick raw material</i>	<i>9</i>	<i>Gubskiy deposit</i>	<i>4 038</i>
<i>Construction sands</i>	<i>7</i>	<i>Beslenevskoye deposit</i>	<i>3 728</i>
<i>Thermal water</i>	<i>–</i>	<i>Mostovskoye, Novo-Yaroslavskoye, Mezhchokhrakskoye, Ulyanovskoye deposits</i>	<i>111,3</i>
<i>Mineral water</i>	<i>–</i>	<i>Gubskiy deposit</i>	<i>89,2</i>

There are reserves of construction materials in the region. Gypsum and sand-and-gravel mixture deposits are present in the largest reserves. Gypsum reserves amount up to 76 thousand m^3 in total. One of the biggest gypsum deposits are Shedokskoye and Beslenevskoye (Tabl. 1). Reserves of sand-gravel mixture amount up to 118 thousand m^3 , the largest deposits are Shedokskoye and Psebaiskoye. Total brick reserves amount up to 4.2 thousand m^3 . Gubskoye is a major brick deposit. The construction sand reserves amount up to about 4,000 m^3 and are explored in the Beslenevskoye deposit.

Figure 1. Location of mineral resources on the district

In the Mostovskoy district there are production facilities that are engaged in processing and extraction of gypsum “Knauf Gypsum Kuban”, “Beslenevsky Gypsum Plant”, as well as the production of raw brick “Gubskiy Brickyard”. Agro-industrial complex “Zarechny” and “Psebai Construction Materials Plant” are engaged in extraction and processing of sand-gravel mixture and construction sand [3].

In the Mostovskoy district there are areas that are not developed due to insufficient geological study. These are areas of white fine-grained quartz sand [2].

In this region, thermal and mineral springs have an important recreational value. Recently, the deposits have been actively developed and have the prospect of further development of the tourist and recreational complex. Today, several deposits are being exploited: Mostovskoe, Novo-Yaroslavl'skoe, Ulyanovskoe and Mezchokhrak'skoe [4].

Figure 2. Thermal water deposits

Figure 3. Mineral water deposits

The reason for insignificant development of thermal and mineral water deposits is the lack of funds for prospecting works.

Conclusion

Thus, the mineral resource base is a great contribution to the socio-economic development of the district. According to the data obtained through the analysis of cartographic and literary materials, we can say that at the moment the territory of Mostovskoy district is not well developed and geologically studied. Today, Mostovskoy District area is of practical interest. The study of the current state of the resource and raw material base is of great importance for the development of proposals of the use.

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