CLIMATE AND WATER OF OHANGARON VALLEY

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Abstract: *This thesis is prepared on the climate and waters of Ohangaron valley, which has its own characteristics and where many mines are located. Differences in the climate of the region are analyzed in terms of relief and in terms of seasons. Information about hydrological classification, including rivers, lakes, reservoirs, etc.*

Key words: *valley, climate, mountain, river, lake, reservoir, ground water, water consumption*

The climate of the Ohangaron valley, where the mines are located, is sharply continental, like the Chirchik-Ohangaron district. Its geographical location, relief and orography are important factors in the climate of the valley. The influence of cold, warm and humid air masses coming from the north and the west is great in the south-western plain part of the valley, and the influence of these air masses is also felt in the mountainous part.

In the Ohangaron valley, especially in the south-western foothills, the summer heat lasts for a long time. The average air temperature in July is 26-27oC in the plains, and 20-24oC in the mountains. In summer, the highest air temperature can rise to 42-44 oC in the plains. Winter is not very severe in the valley.

Rainfall in the valley is very unevenly distributed. The amount of precipitation increases from the plains to the mountains. Precipitation falls most on the western and southwestern slopes facing the moist air. The amount of precipitation in front of the mountain is relative to the mountains. In the valley, winter snowfall is 65-125 days. Snow reaches up to 1 m on the mountain side. In general, the potential evaporation in the valley, especially in relation to the amount of precipitation that falls on the plain, is large, the humidity coefficient is equal to 0.4. In the valley, the mountain-valley, fyon and plain fresh wind blows. Unfavorable weather phenomena - spring evening, autumn morning frosts, hail, strong winds also occur. Mountain-valley wind is mainly in conditions where the weather remains the same in summer. During the day, the wind blows from the valley up the slope, and at night from the mountain to the valley. The issues of climate assessment for agriculture are

reflected in the scientific works of such factors as G. T. Selyaninov, D. I. Shashko, P. I. Koloskov, L. N. Babushkin, Sh. S. Zokirov. Sh.S.Zokirov proposed a tabular view of landscape climate (evaluation of thermal resources) [4].

If the climate of the landscape is evaluated according to this table, the climate conditions that may affect agricultural crops, morning and evening frosts, garmsel and other personal data will not be taken into account. And getting them is done with the help of information coefficients for the main score.

The surface waters of the region consist of the Ohangaron river and its tributaries and lakes.

Ohangaron river starts from Chotkal ridge near Kengsoz pass. The river receives water from the Ohangaron plateau from the southern slopes of the Chotkal range and the northern slopes of the Kurama mountains. The river is saturated with rainwater. Due to this, its water increases in April-May, and 51% of the annual flow falls on these months. The long-term average water consumption of the Ohangaron River near the village of Turk is 22.8 m3/s. with all its tributaries and 43 m3/s.

The main tributaries of the river: Arashan, Ertash, Goshsoy, Soldabulok, Nakboy, Almalyk, Karaqiya and others join the river after Turk village.

Yertoshsoy is a stream in Ohangaron district of Tashkent region, the right tributary of Ohangaron river. Adamtash in the Chotkal ridge starts from the southern slope of the pass. Its length is 17 km. Yertashsoy is mainly fed by snow, rain and spring water. Yershsoy village on the banks of Yertoshoy. Dukensoy, the right tributary of the Ohangaron River, is formed by the confluence of more than 60 tributaries flowing from the southern slopes of the Muzbel Pass in the Chotkal range, 33 km long. Dukentsoy is fed by snow, rain and spring water. Nishboshsoy - starting from the northern slope of the Kurama ridge, from a small snowfield at an altitude of 3550 m, it is 30 km long and is saturated with snow and rainwater. There are 75 tributaries, the total length of which is 141 km. According to hydrometeorological data, water consumption is more in May and less in September. The Ohangaron (Turkey) reservoir with a capacity of 80 million m3 is the reservoir for collecting flood waters of the river, and the lower Tuyabogiz reservoir (Tashkent Sea) was built in 1964.

The Tuyabogiz Reservoir, Tashkent Sea, is considered a hydrotechnical structure of medium power of the Ohangaron River, which was built in 1962 and regulates the water of the river all the time and seasonally. The total volume is 250 million m3. useful volume is 224 million m3. The water construction area is 20 sq km, the average depth is 12.5 m. Ohangaron Reservoir is a hydrotechnical facility in the Ohangaron riverbed. It was put into operation in 1989, the total volume is 260

million m3, direct m maximum capacity, 100 water transfer volume is 480 m3/s. Seasonally regulates the water of the Ohangaron River. It is used to irrigate lands in Ohangaron, Orta Chirchik, Piskent and Boka districts of Tashkent region. The surface waters of the region consist of the Ohangaron river and its tributaries and lakes. Ohangaron river starts from Chotkal ridge near Kengsoz pass. The river receives water from the Ohangaron plateau from the southern slopes of the Chotkal range and the northern slopes of the Kurama mountains. The river is saturated with rainwater. Due to this, its water increases in April-May.

There are many lakes in the Ohangaron valley, and the file area is very small, so only a local enterprise owns it.

The valley is rich in mineralized underground water and has healing properties.

It was found that there are artesian water basins at different depths in the mountain plains of the valley. According to the hydrogeological structure, the Ohangaron valley preserves a part of the pre-Tashkent artesian basin.

The hydrogeological support conditions of the region are considered to be directly related to its geological structure and are stable with relief structure, climate and oro-hydrographic conditions.

The described area is characterized by aquifers that have a bottom in layers, and the territorial distribution of the type of cracks is to irrigate the groundwater crack flow along the valley. Groundwater in the alluvial quaternary layers circulating in the area is composed of fresh water under the Karakiya River and its basin. Residue density in the water content is up to 0.3-1 g/l, the waters are sulfate-hydrocarbonate according to the anion content, and calcium based according to the cation content. Groundwater is formed due to the filtration of atmospheric precipitation, as well as surface streams are formed as a result of seepage of water flows, as a result of the release of water from the layers belonging to the Paleozoic era through cracks. The direction of movement of underground water is along the course of rivers. Groundwater is of the fracture type and is located in various lithological divisions, in the Paleozoic age - intrusive, effusive sedimentary and metamorphic layers. It is related to the level of cracks in the document related to the water content of the formation layers, to the depth of the filter, which is carried out in the structure of the lithic composition of the rocks. Sources of groundwater saturation are realized due to atmospheric precipitation and groundwater flows through regional ground dislocation zones. Groundwater circulating through the rift sakalarid layer of different origins is characterized by a non-uniform chemical composition and level of mineralization in the layers belonging to the Paleozoic

period. The composition of these underground waters is characterized by the content of ketones in a mixed state, from hydrocarbonate-calcium, sulfate-hydrocarbonate-calcium freshwater to weakly saline (0.58-1.90 g/l) sulfate type.

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