

Update of Electronic Digital Maps of Zarafshan National Park

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Abstract:

This thesis, the basis for the careful preservation of National Nature Parks and their cadastre management is the updating of electronic digital maps and their inclusion in the national geoinformation database, as well as the effective use of National Nature Parks.

Keywords: Map, orthophotoplan, toponomics, cadastre, Arcgis.

Introduction

In our country, there are wonderful valleys of nature, untouched by human hands, with invaluable healing properties. Pure nature heals better than any doctor. What is the value of mountain springs and dense spruce forests, orchards and transparent lakes? These places need to be protected like an apple of our eye, and our country is doing the same by creating, among other things, National Parks and Preserves. One such national nature park is Zarafshan National Nature Park. It is famous for its pristine forest vegetation, biodiversity and natural conditions. Zarafshan National Nature Park was established in 1975 in the southeast of Samarkand region, along the right bank of Zarafshan river. Its area covers more than five thousand hectares of land.

The territory of the Zarafshan National Nature Park, along the river like a narrow line, 46 km. spread out in length. The main goal of the park was to preserve the unique flora untouched by human hands. Willow, poplar, tamarisk, chakanda, reed, licorice, broom, jiyda and many other fruit trees grow in the area. The chakanda plant in the Zarafshan National Nature Park is the only place

where it grows in the plains and not in the mountains. The fauna of Zarafshan National Nature Park is also very rich, there are more than 80 insects, more than 20 molluscs, and more than 240 vertebrates. A steppe turtle, a toad, a swamp frog, and an arrow snake are permanent residents of the area. There are 207 species of birds and 24 species of mammals, including pigs, foxes, skunks, muskrats, and prairie cats. In 2000, an attempt was made to place Bukhara deer in the territory of the reserve. Zarafshan National Nature Park is beautiful at any time of the year. In the spring, it is filled with flowers and abundant greenery, and in September-October, the forests are covered with autumn colors. In winter, under the snow, poplar groves and large white willows are especially pleasant.

The electronic digital map of the area is the most important in preserving the Zarafshan National Nature Park. The creation of such electronic digital maps was carried out according to the order of the Ministry of Ecology and Environmental Protection and Climate Change. Zarafshan National Nature Park consists of two parts. Zarafshan National Nature Park, Jomboy District, Samarkand Region, Zarafshan National Nature Park, Bulungur District, Samarkand Region. These areas total 5603 hectares.

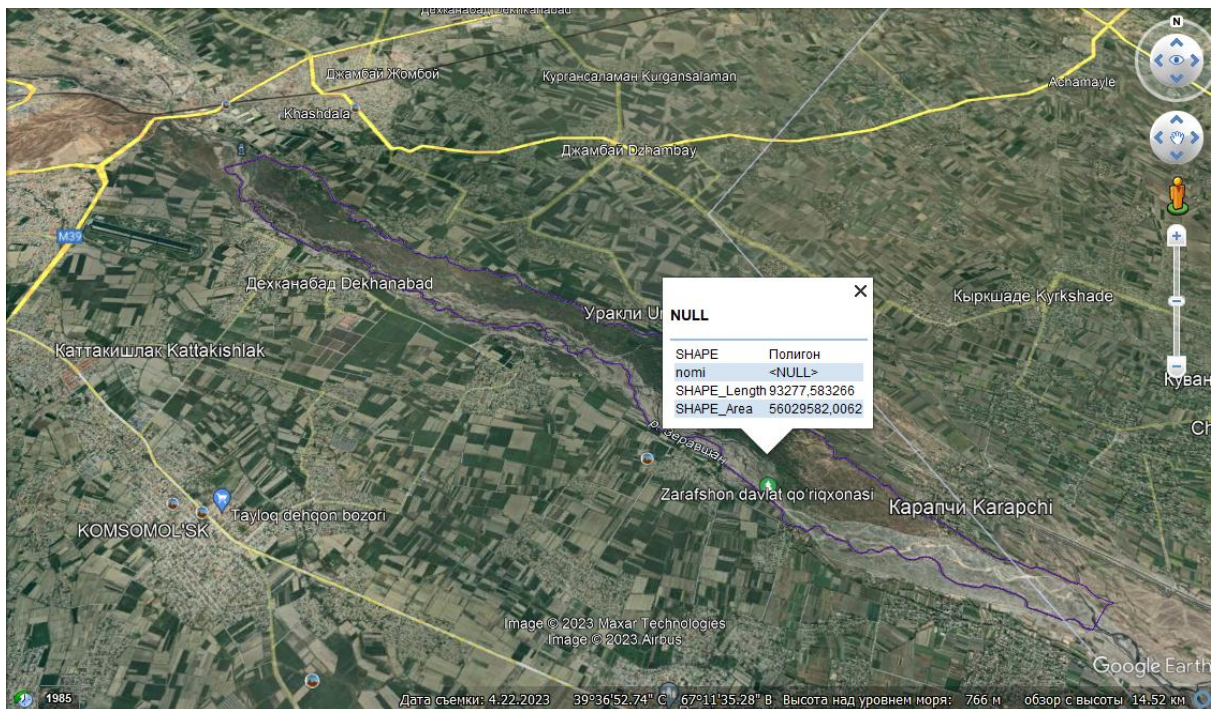


Figure 1: Google Earth view of Zarafshan National Nature Park.

Arcgis 10.8 software was used to create electronic digital maps of Zarafshan National Nature Park and an electronic database was created. In demarcating the borders, it is necessary to use the maps of agricultural areas (arrays) in the scale of 1:10,000 in 2018, the duty maps of the agricultural areas (arrays) in the scale of 2018 in the scale of 1:10,000, orthophoto plans created on the basis of aerial photographs in 2022, district the information obtained from the construction department and the district statistics department, the information from the database of the state register "Names of Geographical Objects" maintained by the Republican Toponomics Service were used.

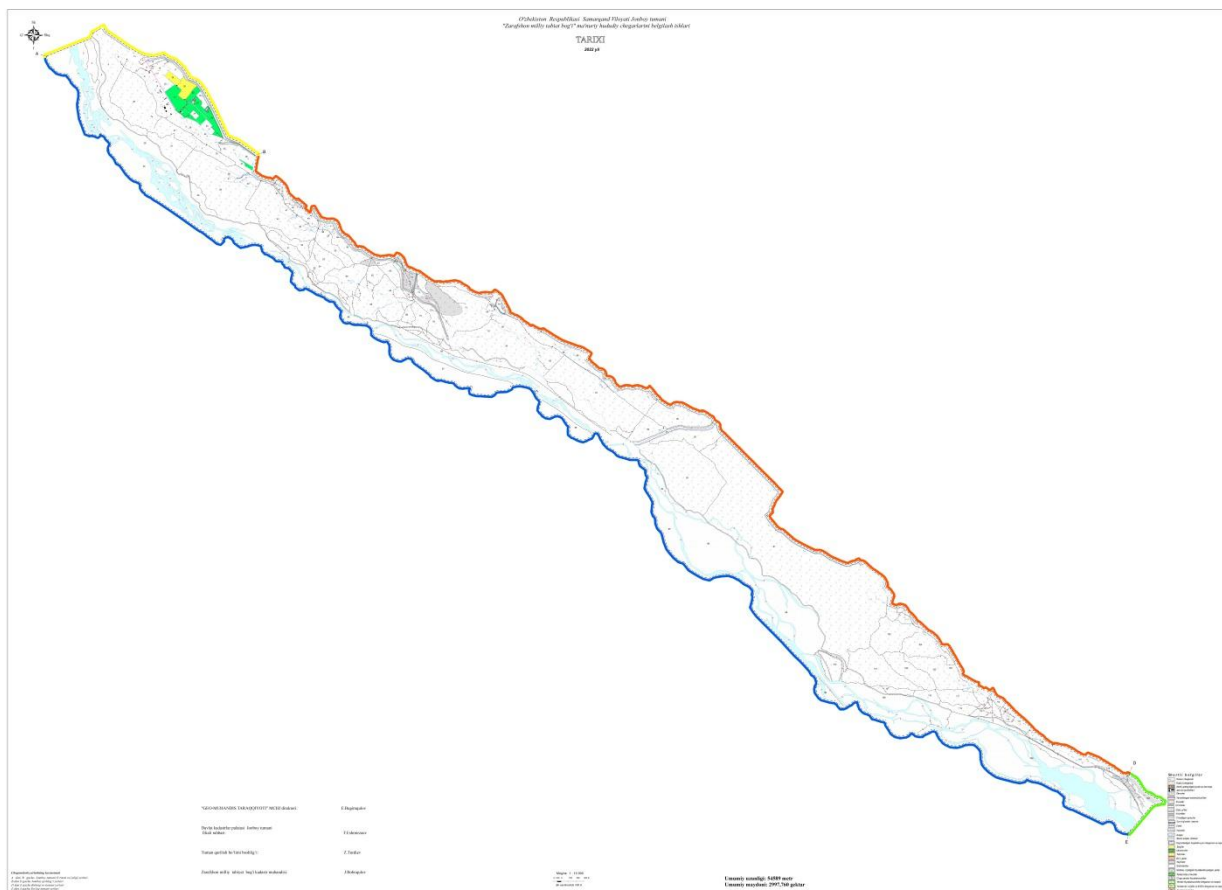


Figure 2: Electronic digital map of Zarafshan National Nature Park drawn in Arcgis 10.8 software (Jomboy district territory)

Today, the creation of such digital maps is the need of the hour and serves as a basis for determining the exact coordinates of the place and creating the cadastre of the area.

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