

CONSTRUCTION IMPACT ON THE NATURAL CONDITIONS OF THE 7-TH AND THE 12-TH MICROREGIONS' AREA OF THE TOWN SUMY

Svetlana Petrovskaya, Helen Shevchenko
Sumy State University, Ukraine

In the conditions of the scientific – technical progress the interrelation between society and nature has become much more complicated. The man has begun to interfere in natural processes, has conquered nature forces and with this keeps polluting and damages the environment.

The man from the earliest period of his development felt himself as a master of everything that surrounds him. Remember the proverb: "Don't rock the boat". One incorrect decision and it will take decades or centuries to correct fatal mistake.

The first paces are being taken now towards nature: different researches are being done, new technologies are being created, the production is being rearranged, the natural systems are being renewed. It goes without saying, that everything is right but there is one "but".

Nobody was thoughtful about the influence of building on the nature complexes of this or that territory. Influence of not an enterprise or some plant, but common block of flats. Frankly speaking there are not enough people who can imagine the true situation.

We explored catchment areas of the 7-th and the 12-th microregions and territories of Cheha Lake and some area of the river Psel. This place was not selected occasionally. Not so long ago there were bogs areas, gardens and old lakes. During the 80s a general plan was created. This is the only territory in our city, which settled so quickly. Only separate buildings were created in different parts of our city. That was the only territory with planned catchment areas and infrastructure. There were schools, shops, kinder gardens for comfortable leaving. There are no roads without traffic jams in our town. Such location was constructed almost thirty years ago, when nobody could foresee modern transport quantity. Engineers planned a city of the future, but, as usual, it is necessary to sacrifice for great idea. The sacrifice was nature. Absolute points of highlands increased from 3 till 6 meters. Plants and around stratum was taken off before the deposit. The wind, temperature and air have changed. Effluent brought sand, salt and petrol oil, that loaded Psel and Cheha Lake.

But human is one of the heaviest polluters of the nature. Imagine such situation. There are mountains of garbage on the pavement. Car owner washes his car near his house and petrol and oil gets into the river. He does not recognize of his really bad action. Roads near the water make a great impact on water's well being.

So, there are no any industrial enterprises in the region, so is the best field for exploring the influence of house building and the impact of a big people quantity on the nature.

The aim of our research is to define the strength of the process of building and its impact to the nature of the 7-th and the 12-th and territories of Cheha Lake and some area of the river Psel. The following methods were used to reach our aim as:

- historical: to study about the earlier conditions of the explored territory with the help of historical resources;
- observation method concerns to the modern physics and geographical conditions of the area;
- Sociological questioning method.

The following information was received as a result of the usage of mentioned methods. There are upper chocks, paleogene, upper quaternary and modern technogenic deposits in the geological consistence of the area. Before the panting out process the ground strata appeared to be light loam, meadow loam and bog type.

During the observation it was found out that microclimate of the region characterized with high dynamic and inconstancy in a twenty four hours and season rhythm. Such rather big continentality of microclimate is connected with a big area of asphalt roads and reinforced building.

As a result of observation, it is possible to admit that the following physical, geographical condition take place as:

- Before the beginning of the construction the upper layer of soil with the vegetation had been taken off because the construction was impossible on the swampy territories ;
- Approximately the whole swampy vegetation near the water has been destroyed;
- Hydrological territory conditions were changed. The proper lake appeared and became the beauty of our town;
- Wide roads with high buildings accompanied the creation "corridor winds", which makes the region' air better;
- large areas of asphalt and concrete increased the continentality of microclimate;
- recreation load of the nearest water became bigger;
- The pollution of the river and lake increased by means of upper drainage with sand and oil.

Nevertheless there are positive sides. Many people receive habitation, objects of social infrastructure (but not all planned). Such circumstance uploaded so analogical institutions in the other parts of the town. It increased quantity of work places. Sumy received wonderful and clear lake, and became a favorite place of a rest for Sumy dwellers.

As you can see the negative results is much more.

And it is not everything. From the first sight it is small item, all these blocks of flats. But what can we say about Nuclear Power Plants, about the waste of industrial production, about mining of mineral recourses? Here we can put only three dots.