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of Life Sciences
and Technologies

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STUDENTS ON THEIR WAY TO SCIENCE
(undergraduate, graduate, post-graduate students)
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CHANGE OF SOURCES OF THE RIVERS AS ENVIRONMENTAL PROBLEM

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The river — a natural water stream of the considerable sizes with the natural course on the course from a source down to the mouth and eating at the expense of a superficial and underground drain from his pool. A river drain — one of components of water balance of earth. The river mode in general — fluctuations of water levels, the movement of deposits (a firm drain), formation of river courses is defined by the mode of river drains. The mode of a river drain depends on many reasons as natural, and from impact of anthropogenic activity [1].

Source of the rivers — the point has begun beds of the river, a constant water stream. On the map the source usually is represented a conditional point. The hydrological mode — the natural changes of hydrological elements of a water object in time caused physiographic and first of all by climatic conditions of the pool [1].

The hydrological mode includes long-term intra annual or seasonal and daily fluctuations: water level; water expenses; ice; water temperatures; quantity and composition of solid material which is transferred by a stream; structure and concentration of the dissolved chemicals; changes of the bed of the river. Therefore studying of cards of the different periods allows to estimate dynamics of the hydrological mode of the territory which reflect influence as natural factors, and impact of anthropogenic activity [2].

On the example of sources of the rivers of the basin of Neman it is possible to track similar interrelation. Maps 19th century, 1950, 1980 of years and modern, have been studied 2016.

The Kotra river (the right inflow of Neman) — before her source was on coordinates N 54.0170, E 24.6714 (1950-1980), now he is noted on coordinates N 54.0142, E 24.6422. The Neris river (the right inflow of Neman) — earlier N 54.6937, E 27.8708 (the second half of the 19th century), now — N 54.6903, E 27.8672. The Ditva river (the right inflow of Neman) — earlier N 54.1543, E 25.1019 (1950-1980), and now — N 54.1534, E 25.0993. The Izva river (the left inflow of Neman), earlier N 53.6616, E 25.6774 (1950-1980), and now — N 53.6628, E 25.6905.

Thus, all explored rivers have changed the provision of the sources that is the evidence of change of the hydrological mode of the territory of a reservoir. The reasons of such changes demand further research.

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