

BORIS V. GEORGIEVSKIY (*) & ARCADY V. TEVELEV (*)

DYNAMICALLY INDUCED PATTERNS OF DISTRIBUTION OF MINOR RESERVOIRS ON THE EAST URALIAN PLATEAU (RUSSIA)

ABSTRACT: GEORGIEVSKIY B.V. & TEVELEV A.V., *Dynamically induced patterns of distribution of minor reservoirs on the East Uralian Plateau (Russia)*. (IT ISSN 1724-4757, 2007).

The small ponds and pools located along minor stream valleys crossing the East Uralian Plateau were investigated as traces of increased human impact on the landscape. A complex analysis of ponds and pools spatial and temporal features was conducted using remote sensing data and digital elevation models integrated into a comprehensive GIS project.

The data obtained allow us to reveal some regularity in the spatial distribution of reservoirs with various hydrological parameters. Based on long-term remote sensing observations we demonstrate a zonal distribution type of small ponds linked to the landscape dynamics of the reservoir area.

In spite of the artificial nature of reservoirs we suggest a strong correlation between their spatial distribution and the modern (e.g. Alpine) structure of the South Urals. We show that zoning of increased human impact areas along the East Uralian Plateau can be derived from regional neo-tectonic regime expressed in topography.

KEY WORDS: Human impact, Small ponds, Neotectonics, Remote sensing, East Uralian Plateau, Russia.

(*) Department of Dynamic Geology, Faculty of Geology, Moscow State University, Leninskiye Gory, Moscow 119899, Russia e-mail: bvgeo@mail.ru