

Historically, water was one of the most important factor deciding about the location of cities. It is directly connected with transportation, economy and agriculture. Nowadays, when almost half of the world population lives in cities, gradual contamination and overexploitation of water is visible. However, recently after the years of almost uncontrolled development of our cities, we can also observe the time when humans look reflectively back and try to redefine the meaning of the landscape and its almost lost connection with the nature. The good example may be the development of banks of the Vistula river, where different (formal and informal) functions are being created.

This movement is reflected in both theory and design. Therefore, today many urban ecosystem protection and development theories such as green and blue infrastructure are created. Blue infrastructure (BI) is a concept that describes all the water ecosystems and elements for example: sea, lakes, rivers, brooks, artificial ponds, rain gardens and other water features, in the context of their connectivity. It is connected with Ecosystem Services (ES) theory which describes all benefits which humans obtain from different ecosystems such as: air purification, food and water supply as well as education or place attachment and many more. Therefore, it is in the interest of humans to assure the sustainable development of ecosystems, so they do not lose the capacity to deliver benefits.

By delivering of different benefits water has a positive impact on humans' health and well being by offering specific places for relaxation, education and enjoyment. Moreover, blue elements are a part of the cultural urban landscape, which is created by humans, during the everyday process of development and use of the space. That is why, besides ES, it is also important because of its functions, forms (architecture) and meaning (for users). Therefore, in the present research we study ES appreciation by users in the context of form, functions and meanings of everyday public spaces.

Taking under consideration above mentioned aspects our goal is **to recognise types of blue infrastructure elements in Warsaw. We aim to study forms (shape, composition, elements of the space) and functions of blue infrastructure elements. We also study meanings which are reflected in both: values and ecosystem benefits perceived by users, from their subjective perspective as well as ecosystem services and benefits appreciation.** Therefore, we will answer following questions:

- What forms of blue infrastructure elements can be found in Warsaw?
- What functions do they provide and how inhabitants are using them?
- What are the preferences of inhabitants towards blue infrastructure elements?
- What is the appreciation of ecosystem services benefits and values delivered by blue infrastructure?

As humans are important part of the cultural landscape their perception and creation are complementary aspect of our everyday surrounding. Therefore, presented study will be a kind of “brick” which together with ecological and economical aspects will give solid base for planning and design solutions. This would assure better quality of water ecosystems and public spaces, and in consequence possible impact on frequency of use and types of activities of humans. Consequently, it will have positive influence on health and well being of inhabitants and in broader picture good functioning of ecosystems and the cultural landscape.