

Cultural ecosystem services and ecosystem disservices of the urban riverscape: towards an integrated approach

The growth of urbanized areas and the rush of the everyday life in the city make keeping the connection between city residents and nature more and more difficult. Parks, squares, urban forests, as well as river valleys and water reservoirs, have become the easiest way to contact nature. These areas bring multiple benefits to their users. Some of these benefits, associated with cultural ecosystem services, are characterised by influencing both physical and mental well-being of urban dwellers. Among benefits from visits to the park or along the river, recreational opportunities, aesthetic values, social interactions and educative role of nature can be distinguished. On the other hand, urban nature can negatively impact the city residents by the ecosystem disservices. These disbenefits can be linked directly with nature (e.g. unpleasant smells, disturbing insects, fear of the contact with wild animals) or with the human influence of the urban nature (e.g. lack of amenities, conflicts with other groups of users). To unveil the complete picture of the experience of nature by city residents, the integrated approach on its positive and negative aspects is needed.

In the project, the integrated approach to experiencing nature is tested on the urban riverscape and its users. Rivers are perceived as a key element of urban green-blue infrastructure. Due to their linearity, they act as corridors that connect different city areas; thus, they can attract different groups of visitors. During the project, the following questions will be addressed:

- What are the ecological and social factors that shape the experiences of the urban riverscape?
- How important are benefits and disbenefits from urban riverscape for its visitors?
- What are the spatial patterns of the experienced benefits and disbenefits?
- Do positive and negative experiences form bundles and, if yes, what is their character?
- What is the role of local stakeholders (e.g. civilians, politicians, activists, entrepreneurs) in the sustainable management of the urban riverscape?

The research will be conducted along the Vistula River in Warsaw, Poland. Methods originating from both the environmental and social sciences will be used. The emphasis will be placed on the spatial analysis of the obtained data and creating maps that will show the diversity of ways in which the urban riverscape is experienced.

The research will contribute to a better understanding of relationships between city residents and the riverscape. The obtained results are important in the context of the sustainable management of these areas. The project will contribute to the body of research on cultural ecosystem services and ecosystem disservices by conceptual and methodological integration of both positive and negative aspects of the urban riverscape experience.