

Scientists caution that the impacts of climate warming will hit rivers and river communities first and worst, in the form of increased droughts, floods, and waterborne diseases regimes. Climate crises has a direct impact on water supply in Poland. For example, in 2019, Poland has experienced prolonged draught and level in the main Polish river Vistula drastically dropped. Therefore, along with decreasing global warming pollution, river stewardship must be part of the solution.

River stewardship is one aspect of a broader concept of landscape stewardship, which comprises efforts to create, nurture and enable responsibility of landowners and resource users to manage and protect land and its natural and cultural heritage. One way to look at this kind of stewardship is through the lens of people and nature relationships. The contemporary western-scientific discourse understands people-nature relationship through the lens of Nature-Contribution-to-People (N-C-P). N-C-P recognizes that people value relationships with their surroundings developed through cultural practices. This perspective draws attention to peoples' practices in nature and puts forth that people benefit from interacting with nature and through those benefits (i.e. CES) they develop values of nature. Arguably, this is then the most suitable lens to study relational values emerging through outdoor leisure at river sites.

The research investigates transformative capacity of outdoor leisure practices to pave the way for river stewardship on the Polish countryside by integrating emotions and relational values under Nature-Contribution-to-People (NCN) framework. To accomplish the above goal, we ask in what way emotions and relational values embedded in outdoor leisure alongside rivers flowing through rural areas translate into river stewardship? We propose three sub questions: What kind of leisure activities foster river stewardship? What is the role of emotions and values in the above process? What are the differences between local residents and visitors participating in those activities? To this end, we employ concepts of emotions, relational values, place attachment, ecological solidarity, connection to nature and environmental stewardship to model river stewardship in the context of leisure practices. We are interested in rivers that are important locally and essential to the wellbeing of communities on the Polish countryside to expose the complexity of relations between outdoor leisure and river stewardship. This is still underexplored research area.

The project utilizes a sequential exploratory mixed methods approach integrating both qualitative and quantitative tools for data collection. We target three rural river sites in Poland (cases) with the goal to capitalize on potential differences in terms of local environmental heritage. Outdoor leisure participants (visitors and local residents) will be approached at selected river sites in rural areas of Poland. For the quantitative data collection, the preliminary goal of survey sampling design aims at about 400-500 usable survey responses at each rural river site, whereas specific quota can be adjusted to different types of leisure activities (e.g. with or without company; sport vs. no sport) and different seasons. We use social media (Instagram geotagged photos) as a proxy for seasonal change in how river sites are used by leisure participants. Visitors will be intercepted at the river sites (every 3rd) and asked to complete an on-site self-administered questionnaire. For the in-depth interviews we aim at about 20 leisure participants per rural river site.

We expect to learn about the potential of leisure activities at rural river sites to foster river stewardship among both residents and visitors. In particular the novelty of this project lies in that we seek to expose the role of emotions in how they relate to different leisure practices and how they translate into relational value of leisure at rural river sites. The study results will be disseminated through scientific articles, news articles, website and performance-art-experiment.