**Description of publication**

1. Environmental problems often span a set of challenges that each might engage different policy actors across different policy domains. These challenges, or *policy issues*, nonetheless exhibit interdependencies that may constrain the ability of actors to work together toward joint solutions.
2. Still, we have limited knowledge about whether and how policy issue interdependencies actually shape how actors collaborate.
3. Using data derived from two venues for collaborative water governance in the Norrström basin, Sweden, we investigate whether and how policy issues and policy issue interdependencies influence actors’ selection of collaborative partners. We test two alternative sets of propositions; one set assumes that partner selection is driven by actors’ engagement in policy issues and their interdependencies, while the other set emphasisessocial positions and actor attributes.
4. Our results show that in one venue, actors’ choices of collaborative partner were associated with factors from both sets, but not with policy issue interdependencies specifically. In the other venue, only actor and relational attributes shaped social tie formation. These results suggest that how actors interact does not necessarily align with the policy issues and the policy issue interdependencies defined by the environmental problem they are to address.
5. Our results provide an important step towards arriving at evidence-based recommendations for more effective collaborative efforts in addressing complex environmental problems that no actor can address alone.

**Survey questions for collection of actor-actor and actor-issue data (as written in the associated publication Hedlund et al., 2020):**

“From a predefined list of participants in each venue, respondents could choose with whom they collaborate with in relation to information-sharing or/and co-organisation of activities. We specified collaboration as “regular professional contacts with whom you aim to share information and/or co-organise activities”. Actors were asked to select the extent of collaboration with other participants between a “high level”, “moderate” or “little”, or leave blank to indicate no collaboration with any given individual. For actor-to-issue ties, we listed the defined policy issues and asked respondents “What policy issues to you engage in?” (a “high level”, “moderate”, “little”, “nothing”) to collect data on actor engagement in each policy issue.”

Data on policy issue networks were developed through a triangulation of qualitative material and a causal mapping. Both are presented in the publication.