1. Fish assemblages

Fish are good indicators of river ecological status.

**methodology**
- quick and precise estimation of present ecological status

**Fish data**
- qualitative (presence/absence of fish species) and quantitative sampling (biomass, abundance)

**Goals:** density-dependent relations, inter-species interactions, crayfish vs fisheries management issues
2. Crayfish sampling methods (snorkeling)

Goal: Comparison and calibration with other sampling methods

Methodology

- quick and precise estimation
  (www.opb.org/programs/ofg/videos/view/267-Fish-Cam)

Fish and crayfish data

- qualitative (presence/absence of fish species) and quantitative sampling (abundance)
3. Predator – prey interactions study (fish, crayfish,)

Goals: Predators affect prey communities through community structure, but prey show changes in their activity and/or habitat shifts as temporal/spatial responses to minimize predation risk.

1) **Mustela vision** *(predator)*
   - **Fish** *(predator)*  →  **Crayfish** *(prey)*

2) **Fish** *(predator)*  ↔  **Crayfish** *(prey)*

3) **Crayfish**

1 month intensive animals tracking and environmental variables monitoring *(macrohabitat use, home range, longitudinal movement, diurnal activity)*