





### THE RIVER CONNECTIVITY CONFERENCE

LIFE project LJUBLJANICA CONNECTS

# **BOOK OF ABSTRACTS**











22 and 23 October 2015, Ljubljana, Slovenia

# **ABSTRACTS SESSION 1: Huchen and its status in Europe**

### THE RIVER CONNECTIVITY CONFERENCE







### Connectivity Solution for huchen Hucho hucho (L.) in human-altered habitats

Predrag Simonović, University of Belgrade, Faculty of Biology, Belgrade, Serbia Danilo Mrdak, University of Montenegro, Faculty of Science and Mathematics, Podgorica, Montenegro

Marina Piria, University of Zagreb, Faculty of Agriculture, Department of Fisheries, Agriculture and Special Zoology, Zagreb, Croatia

Karol Hensel, Comenius University, Department of Zoology, Bratislava, Slovakia

Considering huchen globally endangered (E), and the largest, endemic salmonid fish species, threatened severely by high dams construction, there is a strong need for stopping of its recent decline. Contradiction about the huchen migratory behaviour and consistent records about their lacking from the fish ladders impose considering other solutions compensating the deleterious effects (decline in reservoir sections due to comprehensive alteration of environment; suppression of natural spawning in downstream sections due to hydropeaking; river bed siltation by flushing of reservoirs and decrease in general productivity of the riverine ecosystem; river bed erosion, sinking of the river bed and destroying of gravel bars and send banks, the habitats and spawning grounds) of high dams on them. Establishment of hatcheries revealed only limited success due to making them feral instead of native and due to decrease of genetic variability in fragmented populations. Still remains the strong need for extensive research about the type of fish ladder, slope, flow rate and quality of feeding water and hydraulic signals appropriate for huchen to enter into the ladder in downstream and upstream directions. However, it is also necessary to think about the preconditions that constructors of future high dams and those who runs the recent ones should fulfil to make them more environment-friendly. Those preconditions are related to minimal length of flowing riverine stretches, the least number of tributaries there appropriate for huchen natural spawning, as well as the management measures that are to be applied to minimize the harmful effects of high dams (e.g., accessibility to spawning sites in tributaries, providing of sufficient amount of the water of appropriate quality in them during the spawning season, catch of young-of-theyear huchen and the way of their dispersal throughout the catchment in concern, etc.).

### **ADDITIONAL INFORMATION**

## THE RIVER CONNECTIVITY CONFERENCE







#### **CONFERENCE COMMITEES**

#### Scientific committee

Prof. dr. Mitja Brilly, University Of Ljubljana, Faculty of Civil and Geodetic Engineering

Prof. dr. Avdul Adrović, University of Tuzla, Tuzla, Department of Biology

Prof. dr. Anton Brancelj, The National Institute of Biology

Prof. dr. Marko Ćaleta, University of Zagreb, Faculty of Science, Department of Biology

Prof. dr. Predrag Simonović, University of Belgrade, Faculty of Biology

#### **Organization committee**

Andrej Vidmar, MSc, University Of Ljubljana, Faculty of Civil and Geodetic Engineering Zoran Stojič, MSc, Geateh d.o.o

Klaudija Sapač, University Of Ljubljana, Faculty of Civil and Geodetic Engineering Matej Sečnik, University Of Ljubljana, Faculty of Civil and Geodetic Engineering Anja Vihar, University Of Ljubljana, Faculty of Civil and Geodetic Engineering Katarina Zabret, University Of Ljubljana, Faculty of Civil and Geodetic Engineering

### **CONFERENCE LOCATION**

University of Ljubljana, Faculty of Civil and Geodetic Engineering, Department for Environmental Civil Engineering, Hajdrihova 28, 1000 Ljubljana

