ARPHA Conference Abstracts 4: e65141
doi: 10.3897/aca.4.e65141

Conference Abstract

The Wild Rivers Program: Development of a “Wild Rivers” Conservation Label to be used by River Management

Denis Caudron‡, Lucie Galland‡, Melanie Taquet‡, Valentin Vasselon§

‡ Wild Rivers Project, Rumilly, France
§ SCIMABIO-Interface, Thonon-les-Bains, France

Corresponding author: Valentin Vasselon (valentin.vasselon@scimabio-interface.fr)

Received: 26 Feb 2021 | Published: 04 Mar 2021

Citation: Caudron D, Galland L, Taquet M, Vasselon V (2021) The Wild Rivers Program: Development of a “Wild Rivers” Conservation Label to be used by River Management. ARPHA Conference Abstracts 4: e65141. https://doi.org/10.3897/aca.4.e65141

Abstract

A wild river is a living river, which is at baseline, well-preserved, and which runs freely and is home to a rich biodiversity in its high quality waters and on its banks. In Europe there are very few rivers which could be considered “wild”, which function at a high ecological level, since wild rivers, in the true sense of the term, no longer exist.

Based on the fact that these rivers remain threatened, and that the existing tools (technical, regulatory, and financial) are insufficient and not adapted to ensure their preservation over the long term, the Wild Rivers project was founded in 2007, through a meeting of environmental defenders, scientists, fishermen, managers of land and river natural resources, and elected officials, all of whom were anxious to save the last of the French rivers which were still preserved, with a human impact that would be compatible with the conservation of the ecosystem.

In 2014 the “Wild Rivers Site” label was created in France, as a conservation tool for rivers, both voluntary and non-regulatory, which allows the support necessary to enable the territorial players to preserve their rivers in harmony with the activity in the surrounding valleys. It also identifies and highlights these unique watercourses.

The Valserine in the Ain region was the first river to obtain the Wild Rivers Site label. Today 28 rivers in France are labelled “Wild Rivers Sites” and the 22 management structures of these rivers are members of the Wild Rivers Site Network.

To obtain the label, a river must fulfill two sets of criteria

1. The criteria grid: The watercourse must obtain a mark over 70/100. The grid is composed of 47 criteria evaluating the quality of the area, of which 12 are eliminatory, 8 are unrated, and 9 are under a bonus/penalty scheme

2. The program of actions taken by local players: The local managers must put in place a system of governance built around actions to be taken over a period of years, shared among them, and ambitious, going beyond the regulatory objectives of the European Directive Framework. It allows for the restoration of penalty points and the establishment of innovative conservation activities.

The Wild Rivers Sites are also an open air laboratory for the development and use of innovative methods in order to provide new information on aquatic environments, and to improve their management and conservation. Numerous steps have already been taken within the network, such as the Ecosystem Services Study (Costa and Hernandez 2019); on the study of the genetic makeup of the brown trout population. Recently, the use of genetic study using environmental DNA to complete biodiversity inventories has also been deployed to study benthic diatoms (DNA of Diatoms Project 2020-2022). This project seeks to use DNA metabarcoding to respond to a number of objectives: i) inventory of the species of diatoms and their community structure in these watercourses which are generally seldom studied; ii) complete ecological status studies; iii) develop new genetic metrics and taxonomies adapted to the conservation of wild river watercourses.

It is in this spirit that the Wild Rivers program was developed, and has received numerous positive responses on the behalf of watercourse management in France. Thanks to this impetus, work has been conducted to extend this conservation label to water sources in other countries (Switzerland, Ireland, Spain), with the future plan of building a European network dedicated to the conservation of Wild Rivers.

Keywords

Conservation, Label, ADN, Ecological assessment

Presenting author

Denis Caudron

Presented at

1st DNAQUA International Conference (March 9-11, 2021)

References

- Costa PD, Hernandez D (2019) The Economic Value of Ecosystem Conservation: A Discrete Choice Experiment at the Taravo River Basin in Corsica. Unpublished https://doi.org/10.13140/rg.2.2.27804.74888