KNOWLEDGE CONVERSION FOR ENHANCING MANAGEMENT OF EUROPEAN RIPARIAN ECOSYSTEMS AND SERVICES
COST CONVERGES

**WG 2 Workshop "Visualisation of European responses to riparian vegetation degradation"**
**Selfoss, Iceland September 17-18th 2018**
**Minutes**

## INTRODUCTION

Brief reminder done by Raga, Simon and Roland about:

1. WG 2 goals.

   *Text of the MoU: "Objective and methodology: WG2's objective is to identify the responses to RV degradation. A common grid will be elaborated to analyse three types of responses: production of knowledge, management practices and tools and social response. For the last one, the focus will be on policy/legislative awareness at the different scales of responsibility of water and nature management (EU, national and regional). For each type, a knowledge map will be built to present which response resides where (e.g. country, institutions, people) and to identify the patterns of knowledge flow (source, medium, target). Each map will be based on literature synthesis and consultation, seminars with local/national managers involved in the Action and regional/national legislation review."*
2. Workshop goals: to initiate the work, agree on the types of responses and draft frameworks to assess these responses (main approach, leading(s) volunteer(s) and schedule for the realization).
3. Next deadline : presentation of the methods and first result in the next Management Committee (spring 2019)
4. Available tools:
   a. for grant period 2 (until April 2019) = 6 STSMs for all the Action (launch end of September, deadline for proposals, end of October
   b. start to think about needs for Grant Period 2 (may 2019 to April 2020)

## PRESENTATIONS

On September 17th Ragnhildur Sigurdardottir started the meeting with a talk "**The Development of a Common Grid to Identify Changes to Riparian Vegetation in Europe"** followed by Simon Dufour with a talk titled „**Visualisation of European responses to riparian vegetation degradation**" (see presentation). These two talks set the stage for the future work to be completed by the meeting participants.
These talks were followed by formal and informal presentations dedicated to participant works, interests and willingness to contribute. The formal presentations were the following:

- Eleni Abraham
- Mirjana Bartula : Ecosystem Services Assessment of Wetlands in Croatia-Serbia cross border region (see presentation)
- Seppo Hellsten : short presentation (see presentation)
- Roland Jansson
- Antonis Kavvadias
- Mart Kulwik
- Jelena Milovanovic
- Patricia Maria Rodriguez-Gonzales : Responses to riparian degradation: Discussion on WG2 themes and tools
- Mari Tolkkinen
- Gorazd Urbanic : Establishing misalignments in riparian knowledge…:contribution to WG2 and relation to WG3 (see presentation)
- Ivan Bernez : Riparian communities as ecological indicators of headwater streams in an intensive agricultural catchment (see presentation)
- Roberto Martinez

## IDENTIFICATION OF THE RESPONSES TO ASSESS

Half day of discussions has been dedicated to check what are the responses (i.e. do we stay on the response listed in the MoU ?). A first list has been established (Table 1).

Table 1 : list of responses to analyse. Topics # 1 to 9 : discussed during the workshop, framework drafted, leading person identified ; topics without # : identify but need a volunteer to lead it

| # | Topic | Type of response | Dominant category | Leading person(s) | Involved persons (can be extended ; if you are interested => contact the leading person) |
|---|---|---|---|---|---|
| 1 (see 2) | Current Management | Management | Management | Raga | Simon, Eleni, Judy, Roberto, Mirjana, Gorazd, Patricia |
| 2 (see 1) | Legislation ° | Legislation, policies, administration | Social | Raga | Simon, Eleni, Judy, Roberto, Mirjana, Gorazd, Seppo |
| 3 | Restoration* measures | Restoration | Managment | Roland | Patricia, Seppo, Eleni, Antonis, Georgii, Raga, Roberto, Remigiusz, Ivan |
| 4 | Genetic conservation | Protection | Managment | Jelena | Patricia, Remigiusz, Georgii |
| 5a | Remote sensing methods | Tool development | Science, management | A. Michez, M. Laslier | Antonis, Remigiusz |
| 5b | Copernicus data | Tool development | Science, management | Rosario | A. Michez, Emilio, Simon, Patricia |
| 6 | Public/stakeholders awareness [+] | Social awareness | Social | Mart | |
| 7 | Ecosystem services | Scientific knowledge | Science | See WG1 | Mari |
| 8 | Scientific networks | Scientific knowledge | Science | Simon/Patricia | Review Paper + CONVERGES Proposal |
| 9 | Studied topics | Scientific knowledge | Science | Simon/Patricia | Review Paper (not specific to EU) |
| | indicators | Tool development | Science, management | | Gorazd, Antonis |
| | Models ^ | Tool development | Science, management | | Gorazd, Antonis |
| | management plan, Spatial planning | Tool development | Science, management | | |
| | platform (web) [#] | Tool development | Science, management | | |
| | Financial instruments | | | | |
| | Socio-economic | | | | |
| | Education, media | | | | |

° (directives, national laws, states, etc.)

* restoration in the broad sense, it includes restoration, rehabilitation, environmental flows, etc.

[+] including mobilization, NGO, etc.

^ Several recent reviews have been produced; need to check if it is enough.

[#] Examples are available in Portugal, Scotland and Wallonia

## FRAMEWORKS TO ASSESS THE RESPONSES

Following the identification of the diverse responses, some of them have been discussed in detail (see table below). A framework has been defined and a schedule to implement this framework has been built.

| # | Topic | How to assess the response? | remarks | Schedule |
|---|---|---|---|---|
| 1 (see 1) | Current Management | - several workshops with some practitioners (focus group)<br>- and/or questionnaires (if needed) | Several meetings with selected managers => what are you doing? What are you missing in terms of knowledge, tools? Etc.<br>One meeting at the beginning of the next grant period and, depending on the feedback from this meeting, some others in different areas (Scandinavia, Iberian peninsula, ?) | Meeting in France: September 2019 |
| 2 (see 1) | Legislation ° | Text analysis<br>Questionnaire | Analysis of the main EU directives (looking for references to riparian vegetation)<br>Analysis of national frameworks (table ?) | For EU Directive => December 2018<br>Draft of the table to analyse national framework => January 2019 |
| 3 | Restoration* measures | *See below* | | |
| 4 | Genetic conservation | *See below* | | |
| 5a | Remote sensing methods | Literature review | Lead by A. Michez (BE) and M. Laslier (FR)<br>(Includes the STSM of M. Laslier) | Spring 2019 |
| 5b | Copernicus data | Assessment of the consistency of Copernicus data | Selection of site and comparison of landscape metric calculated using aerialphotos and Copernicus data<br>Lead by Maria do Rosário Pereira Fernandes (PT)<br>(Includes the STSM of E. Politti) | Spring 2019 |
| 6 | Public/stakeholders awareness + | Review | 1) project solutions review<br>2) preliminary catalogue of stakeholders (Simon) + FIN (Mari) and FRA (Simon) trial keyword searches in national e-press<br>3) scientific key sources of knowledge<br>4) action participants engagement exercise | 1) Mart: 22. Oct 2018<br>2) Simon: 10. Oct 2018<br>3) Monika: 22. Oct 2018<br>4) Mart: 22. Oct 2018 |

## RESTORATION MEASURES

*Notes from Roland Jansson*

The primary action will be to draft a review paper on management actions (restoration measures in a broad sense, as well as conservation and management actions that cannot be seen as recurrent, day-to-day actions) to enhance riparian vegetation.

First, we will collate a list of management actions that have been discussed in the scientific literature. The IUCN report from Scotland[1] (and a subsequent list that is being discussed within the IUCN steering group as a follow-up of that report), REFORM project reports, Gonzalez et al. 2015[2], and a manuscript in preparation by Jansson et al. will be starting points.

[1] Addy, S. et al. 2016. River Restoration and Biodiversity: Nature-based solutions for restoring rivers in the UK and Republic of Ireland. CREW reference: CRW2014/10

[2] González, E., Sher, A.A., Tabacchi, E., Masip, A. & Poulin, M. (2015) Restoration of riparian vegetation: A global review of implementation and evaluation approaches in the international, peer-reviewed literature. Journal of Environmental Management, 158, 85-94.

Next, we will classify and describe each management action according to a number of factors:

- Drivers of state change/degradation for which the management action is a remedy (type of land use, etc.)
- Mechanism for improvement: (a) description of suggested mechanism (b) classification of mechanism into change of processes or state change.
- Goal of the management action: (a) enhancing ecosystem functions or biodiversity (b) reference conditions that are equivalent to pristine conditions, or some traditionally managed state.
- Spatial scale of effect (local, reach or catchment/regional) and the geographical context of the action (climate, fluvial pattern, dominant landuse).
- Example papers presenting or discussing the management action. This will be presented as an annotated bibliography as a separate deliverable.

Roland will produce a first draft list of management actions and the structure of a table outlining factors according to which the management actions will be classified and described, and all are encouraged to contribute. Then we will have a Skype meeting later in the autumn discussing the list and factors, and the structure of a paper or papers.

As a second step, we aim to assess the evidence that each management action has had a measurable effect in bringing ecosystems closer to the reference conditions. We will search both for peer-reviewed papers and "grey" literature reports. We also talked about collating a list of projects where management actions have been implemented.

We discussed the potential of STSMs to work on review papers discussed, presenting the first results and discuss further work on the Management Committee meeting in March-April 2019

## GENETIC CONSERVATION

*Notes from Patricia María RODRÍGUEZ – GONZALEZ, Portugal, Remigiusz PIELECH, Poland, Georgi Hinkov, Bulgaria, Jelena Milovanovic, Serbia*

| Expected Output | Methodology | Deadline | COST Tool |
|---|---|---|---|
| *Directory of experts*: sub-group members will develop a list of experts in the area of riparian genetic conservation from all participating countries through communication with country representatives to nominate provisional contacts for the directory of experts | Contact database | 15/12/2018 | N/A |
| *List of references*: Bibliography/reference list of relevant titles related to genetic conservation of riparian species in Europe will be developed through questionnaire distributed to experts from the Directory (asking for up to 5 most relevant titles). In this way, a list of native riparian species in a given country will also be defined bearing in mind that these species may not the same across different countries. Titles of scientific papers will define a frame for specified riparian species list. Thereafter, members of the sub-group will expand the list adding titles relevant worldwide. | Questionnaire | 1/02/2019 | N/A |
| *Progress report I*: Members of the sub-group will prepare first progress report and present it during the CONVERGES meeting planned for March 2019 in Prague. The report will contain information on the directory of experts, bibliography, preliminary literature review on knowledge gaps in genetic research and conservation of riparian ecosystems and a draft structured interview for the experts registered in the Directory. | Information analysis, literature review and structured interview | 15/03/2019 | N/A |
| *Brief country reports:* Members of the sub-group will develop short structured interview for the experts registered in the Directory to collect information about genetic conservation in riparian ecosystems on the country level | Structured interview | 15/06/2019 | N/A |
| *Progress report II*: First draft of a review paper will be prepared on state of the art in genetic conservation of riparian ecosystems/species and based on literature review and information collected from the experts (using the Directory) from all participating countries | Systematic review and data analysis | 15/10/2019 | N/A |
| *Review paper:* Review paper on the state of art in genetic conservation of riparian ecosystems/species will be prepared for publishing until autumn 2020 | Systematic review and data analysis | 15/10/2020 | Publication fee |