

Terms of Reference for Feasibility Study

Project Title: Restoration of Silash flooded forest.

Dates for the feasibility study: should be completed by September 15, 2020.

Location: Berehiv rayon, Zakarpats'ka oblast, Ukraine.

Executing Organisations: WWF Ukraine

Background and Rationale:

Botanical reserve, flooded forest Silash is located west of the village Velyka Bihan (Nagybégány) in Berehiv rayon of Zakarpats'ka oblast on the Ukrainian-Hungarian border. Northeast part of the forest boundary divided by the border. Total area is 75.5 ha.

On the other side of the border is located one of the forest territories of Szatmár-Beregi Landscape Protection Area. This area belongs to the Hortobágyi National Park Directorate. <http://www.hnp.hu/en/szervezeti-egyseg/conservation/oldal/szatmar--bereg-plain-landscape-protection-area>

In the middle of the XIX century the area was covered with a giant swamp forest, but by the beginning of the twentieth century only a small part of it has remained, which survived almost intact until now. In the past several small streams have flowed through the forest, which was a large wetland mainly due to (1) high groundwater levels and (2) periodical flooding. Much of the area was covered with mid-forested wetlands of elongated shape, formed along slow-flowing small streams and meanders.

Today, Silash forest is mainly made of elm and ash. In the lower, more moist areas, the narrow-leaved gum becomes dominant, forming a transition to alder-ash, alder forests and high-grass wetlands of moistened depressions. The remnants of alder-ash and alder forests are fragmented due to drainage. The grassy tier of these sites has been significantly transformed, and in its original state remained only in the micro depressions and in the transition to open wetlands.

The most threatening factor to the Silash flooded is a dehydration of the area due to the continuous drainage. For the longest part of a year, the former wetland forest areas, in particular fragments of forest meadows and willow trees, have suffered from a lack of moisture, resulting in changes in the vegetation cover, which is particularly visible in the grassed layer of forest coenoses and wetland vegetation.

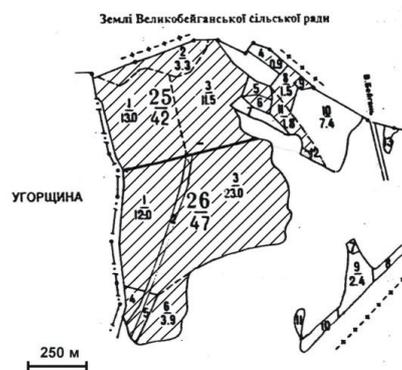
So far it was suggested increasing water level of the most low-lying areas of the forest, partial water retention in depressions and control of the water dynamics on the area.

Tisza River Basin Management Directorate in Uzhgorod has run a simulation model to estimate the area and configuration of the flooded areas at different levels of water and to calculate the volume of water for each option. This data will be available for the expert.

Pic 1: Satellite imagery of Silash forest. Coordinates (green sign): 48.2353278N 22.5155433E.



Карта-схема лісового природного комплексу "Сілаш"



Study Objective

Feasibility study is to be conducted in order to:

- (1) Evaluate whether a restoration effort should be attempted,
- (2) Define specific, measurable, realistic and timebound restoration goal(s) for the system and set achievable milestones,
- (3) Highlight potential pitfalls and gaps in knowledge before the design,
- (4) Identify restoration actions that can be undertaken to reach the desired state,
- (5) Gain a sound basis for ground work as well as guidelines on communication with community people
- (6) Create basis for further baseline and evaluation reports.

Study Results

The study will produce the following results:

- restoration goal(s) for the system and achievable milestones,
- an analysis showing the technical feasibility of the proposed project,
- an analysis of the potential risks including recommendations on how to mitigate these,
- alternatives for the project (draft design) be presented and discussed with the stakeholders,
- finalized implementation plan,
- a work plan (schedule on project timing/phasing), which will be used by WWF Ukraine for drafting financing proposal with estimated costs;
- baseline data for monitoring restoration success
- recommendations for the following steps and any further action to secure project implementation and sustainability

Outputs and Deliverables

- Outputs prior to the stakeholders consultations:
 - o First report that contains:
 - restoration goal(s) and achievable milestones,
 - alternatives for the project design
 - an analysis of the potential risks including recommendations on how to mitigate these,
- After the stakeholders consultation:
 - o Final report that contains:
 - Revised restoration goal(s) and achievable milestones,
 - Project design
 - an analysis of the potential risks including recommendations on how to mitigate these,
 - finalized implementation plan,
 - work plan (schedule on project timing/phasing), which will be used by WWF Ukraine for drafting financing proposal with estimated costs;
 - baseline data for monitoring restoration success
 - recommendations for the following steps and any further action to secure project implementation and sustainability

The language of the report is English. Working languages in the project is Ukrainian and English. If necessary, WWF Ukraine will provide translation.

Process

Phase 1: Desk Study and an online kick-off meeting between WWF Ukraine and the contracted consultant will clarify all open issues related to this assignment. The work plan developed at the end of this phase will finalise the methodology, data collection tools and site visit schedule.

Phase 2: Site trip to gather information and data from the beneficiaries, stakeholders, experts. Accommodation and travelling will be facilitated by the WWF Ukraine.

Phase 3 (conducted by WWF Ukraine): Meeting with the stakeholders. Presenting the alternatives of the project design. Providing comments to the consultant.

Phase 4: Preparing final report. Presenting the findings and final draft report to the contracting organisation online; commenting of draft by contracting organization; inclusion of feedback, where appropriate, and submission of final report.

Final report must include, but not limited to the following:

- restoration goal(s) for the system and achievable milestones,
- an analysis showing the technical feasibility of the proposed project,
- an analysis of the potential risks including recommendations on how to mitigate these,
- preliminary engineering design
- finalized implementation plan,
- a work plan
- assessment & monitoring plan
- baseline data for monitoring restoration success
- recommendations for the following steps and any further action to secure project implementation and sustainability

Contractor will work with in a close collaboration with WWF Ukraine. This is our first experience in restoration work, so we are very much rely on the expert's expertise and experience. Prior to start of the work, we shall prepare stakeholders map.

For any additional info please contact: Olga Denyshchuk odenyshchuk@wwf.ua

Interested experts are invited to submit the following documents:

- CV
- Financial Proposal specifying the daily rate and other expenses, if any
- Letter of interest and availability specifying the available date to start and other details

by May 30 2020 via email: odenyshchuk@wwf.ua.