Legal framework of peatland restoration in the Russian Federation

Mires disturbed by peat extraction and irrational drainage have become sources of fire in dry years, especially in forested areas. No wonder that in the latest five years, governmental authorities and civil society in Russia have given much attention to the problem of peatland conservation and restoration. A severe outbreak of forest fires in 2010 made local authorities come down to peatland rewetting activities, in particular on cutover peatlands in temperate areas of Russia – Moscow, Tver, Nizhny Novgorod, Vladimir, and some other provinces.

The development and implementation of peatland rewetting projects on various categories of land has identified some problems that are regulated by neither federal nor local legislation.

A brief analysis of laws regulating peatland exploitation and conservation

An analysis of laws that regulate issues of peatland use and conservation identified two groups of problems that need to be explained and amendments/updates made to respective sections of federal and/or regional legislations:

- uncertainties in the term "peatland" related to peatland use and public monitoring of peatland status;
- uncertainties in development and assessment procedures of peatland rewetting projects.

Peatlands as special natural objects

Under the project, main legislation pieces were analyzed, including the Land, Forest, and Water Codes, and considerable discrepancies were found in terms of peatland definition and their place in the system of land, water, and forest legislations.
Peatlands should be regarded and special natural objects having the following unique features:

- Peatland is a complex natural object that affects water balance, geochemical regime, and microclimate of adjacent areas.
- Peatlands comprise natural resources, such as water, land, biological and geological resources.
- Peatlands are a focus for many branches of economy, such as power industry, chemical industry, forestry, water management, agriculture, game management, construction sector, mining industry, environment conservation, recreation, and tourism. Exploitation and conservation of peatland resources is regulated by contradictory laws under the legislation on natural resources.
- Intact peatlands are commonly involved in traditional nature management.
- Nature conservation in Russia is mainly based on establishment of protected nature areas (SPA) and exclusion of these from economic use. However, the area of peatlands needed to support their natural functions by far exceeds capacities of existing and planned SPA.
- As a result of large-scale peatland reclamation projects implemented throughout the 20th century for agricultural and forestry purposes, large areas of abandoned drained peatlands have become potential sources of nature hazards, including peatland fires, floods, and dust storms.
- Construction of linear infrastructure (roads, oil and gas pipelines, etc.) leads to a fragmentation of peatland ecosystems, loss of valuable sites, and death of forest plantations.
- In environmental impact assessments of economic activities, peatland ecosystems should be considered especially vulnerable.

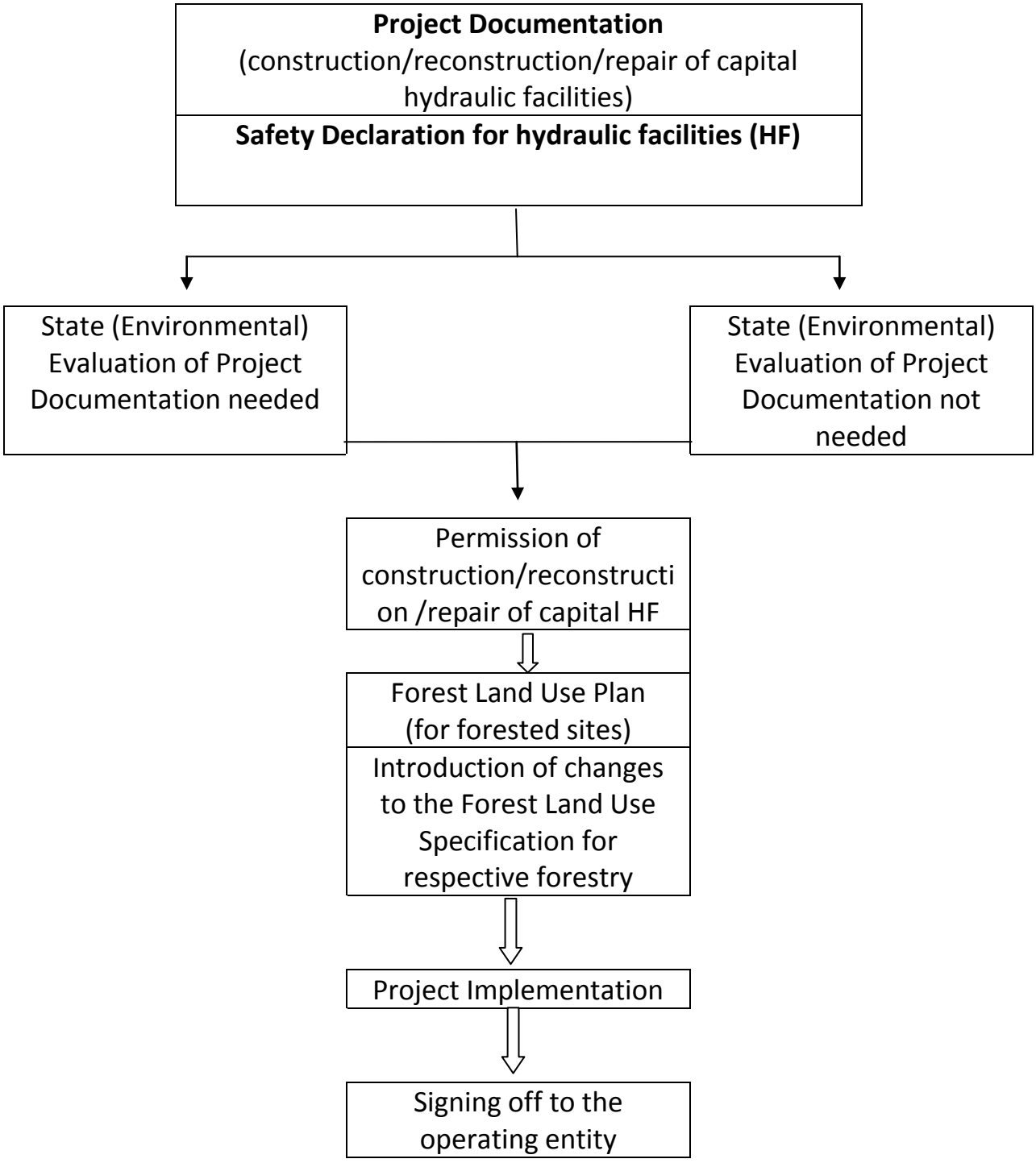
The above features of peatlands as unique natural objects stipulate the following problems in the development and implementation of peatland rewetting projects:
Technical problems are associated with selection of technical solutions and hydraulic facilities based on rewetting purposes and location of the project site.
Scientific-methodical problems are related to possible negative consequences of peatland rewetting for the environment, adjacent settlements and infrastructure. It would be wise to involve mire scientists in the development of site-bound rewetting projects.
Statutory regulation and procedural problems of peatland restoration are caused by discrepancies of peatland definitions in land, water, and forest legislations. Therefore, procedures of development and implementation of peatland rewetting projects have to undergo several assessments and receive authorizations from various institutions.
Depending on rewetting purposes, location of the project area, and configuration of hydraulic facilities to be built, rewetting projects should pass several instances, including various assessments. A standard procedure of rewetting project implementation is in the bottom of the page (PDF)

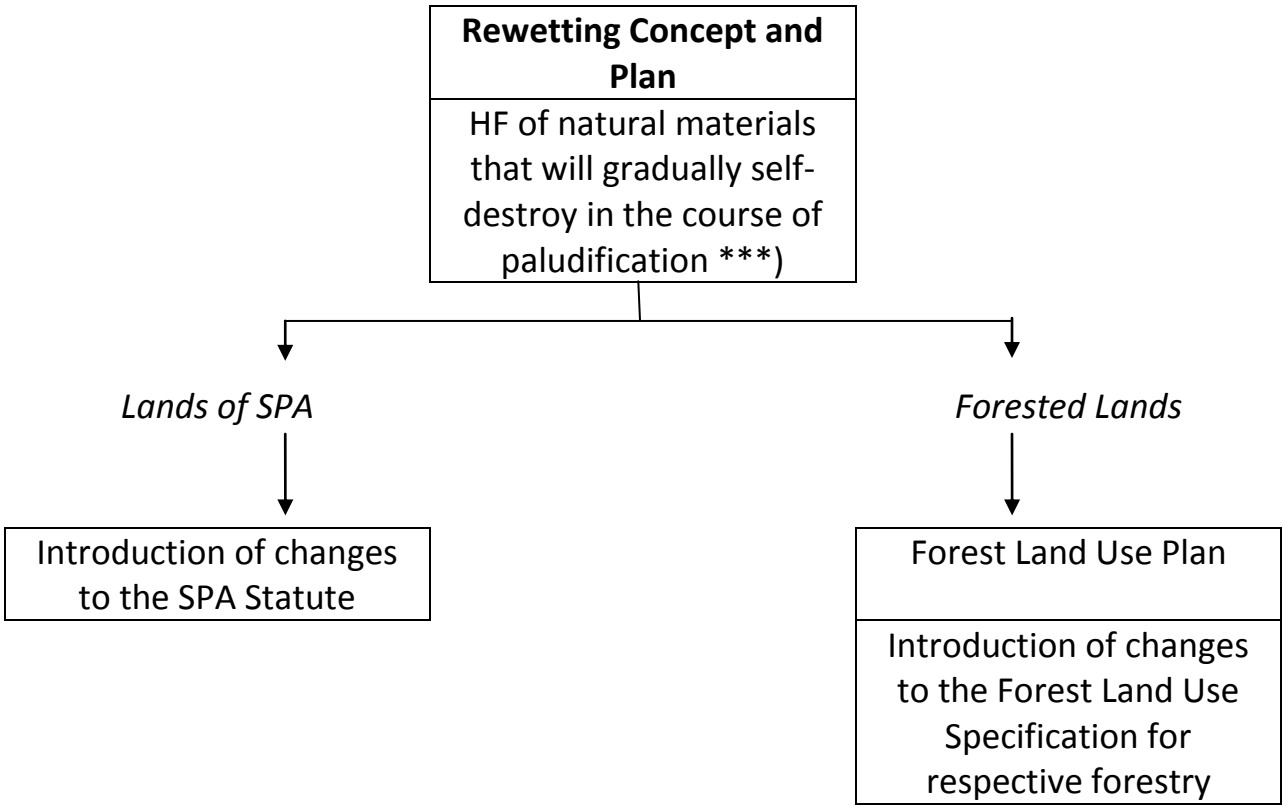
Recommendations based on the detailed analysis of rewetting projects in the Moscow, Novgorod, and Tver provinces are as follows:

1. To competently select technical and technological solutions, it is wise to develop a scientific rationale of the project that includes the following sections:

- location, structure, and soil composition of the rewetting site;
- current status of the rewetting area;
- general characterization of fire hazard in the rewetting area and distribution of sites according to fire hazard classes;
- description of adjacent areas and land users;
- characterization of the peat layer and bedrocks;
- hydrological characterization of the rewetting area, mapping sites according to their degradation status;
- wildlife in the rewetting area;
- rewetting strategy;
- brief characterization of proposed ecological restoration plan that includes dam locations, dam types, construction methods for dams and other facilities, and cost estimate;
- assessment of impacts of hydrological regime restoration activities on adjacent areas.

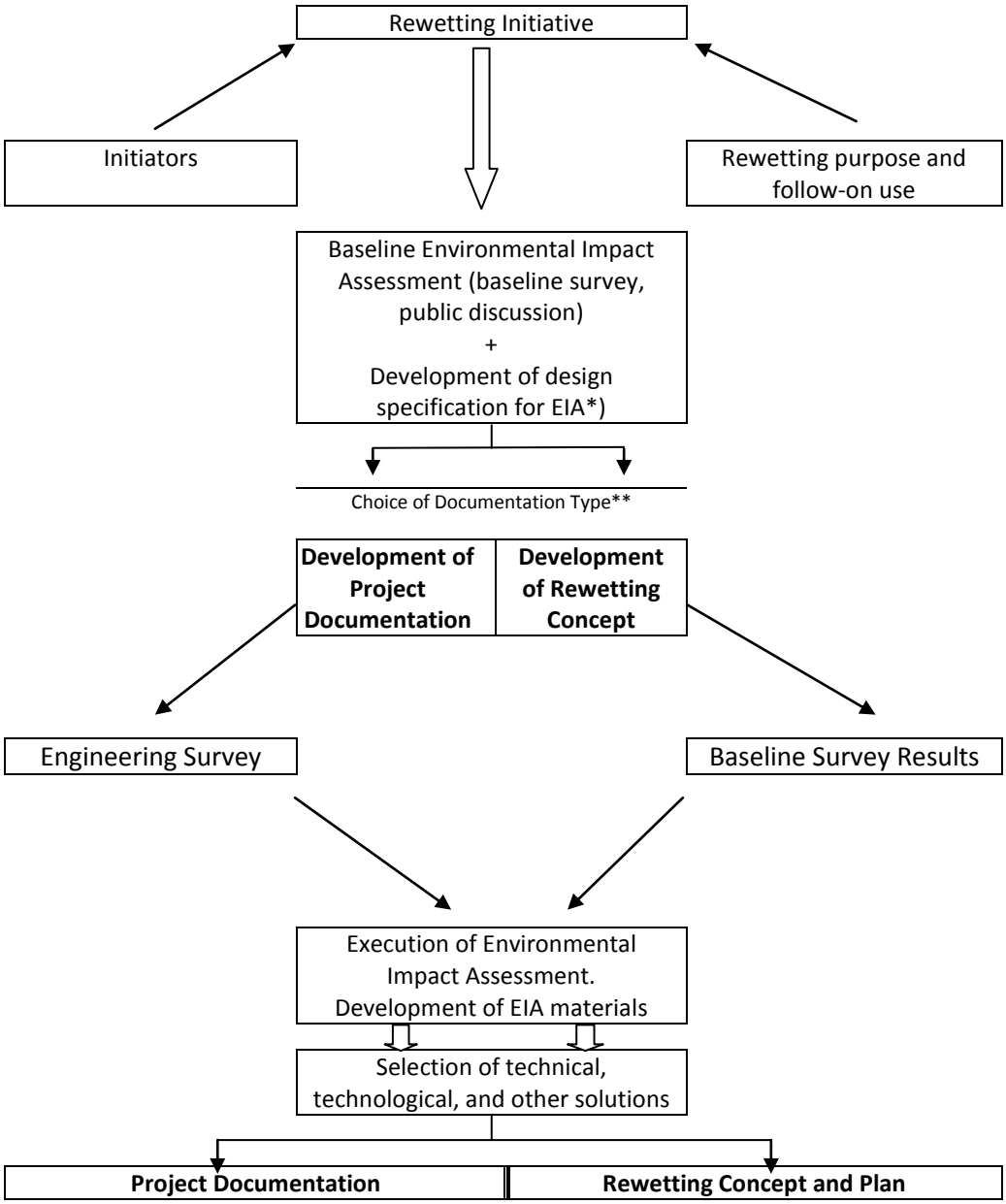
2. To prevent large-scale negative consequences of peatland restoration and with due account for a great number of stakeholders, an environmental impact assessment of project activities should be carried out prior to the development of a rewetting project, with EIA materials being its output. It is wise to include this requirement in the legislation thus updating a list of objects that require an environmental impact assessment independent of state expert examinations of project documentation.
3. In the course of peatland rewetting, use dams and dikes of natural materials that will gradually grow over with mire vegetation. Peatland rewetting projects that involve building such structures stand out for low costs and environmental friendliness. Such projects do not require a state expert examination of project documentation. It is reasonable to exclude the above hydraulic facilities from the list of facilities subject to safety evaluation. Supervision and monitoring of the rewetting process should be delegated to owners (tenants) of respective land plots.


Project Documentation
(construction/reconstruction/repair of capital hydraulic facilities)
Safety Declaration for hydraulic facilities (HF)
State (Environmental) Evaluation of Project Documentation needed
State (Environmental) Evaluation of Project Documentation not needed
Permission of construction/reconstruction /repair of capital HF
Forest Land Use Plan (for forested sites)
Introduction of changes to the Forest Land Use Specification for respective forestry
Project Implementation
Signing off to the operating entity



***) Changes to the legislation should be made in order to remove the requirement to develop Safety Declaration for such HF.

STANDARD REWETTING PROCEDURE



*) Mandatory execution of EIA is provided by Art. 3 of the RF Federal Law "On EIA". However, there is no control over observation of this law.

**) Choice of documentation type depends on the project location and composition (material) of hydraulic facilities used.