

Documentation of the results in the BHP "Integration of ecological concerns into territorial planning of Ukraine at the level of United Territorial Communities (UTC)".

Preliminary note: The following text is in large parts a translation of the original Russian text of the Ukrainian project partners. For better comprehensibility, modifications were made in individual places by Anja May and Stefan Heiland.

(2) Landscape plan UTC Stepancy

The project also envisaged the further development of landscape planning methods in relation to the integration of its contents into the territorial plan at the local level, which was to be practically tested using the example of UTC Stepancy. The latter included the preparation of a landscape plan for the UTC Stepancy, which included recommendations for the corresponding territorial plan.

In this context, the landscape planning contents, which were developed in the previous project for the regional level (oblast), were taken into account to a large extent - considering the requirements and specifics of planning at the local level. In particular, the State Building Norms (DBN) adopted in 2018 for plans at the level of United Territorial Communities, in which the term "landscape planning" was newly introduced, should be mentioned here. However, landscape planning is interpreted very narrowly as recreation planning here. Overall, it became clear that DBNs need improvement in two directions. First, the issues of the territorial plan should be aligned with those of the landscape plan and the strategic environmental assessment, thereby strengthening them. Secondly, it is important to develop a mechanism for dovetailing the planning strands of the territorial plan and the landscape plan.

The landscape plan provides the basis for accomplishing the following tasks of the local territorial plan:

- Justification of future usage requirements and definition of priority uses, also in terms of sustainable urban development
- Identifying areas of special ecological, recreational, health, scientific, aesthetic, or cultural-historical value and establish legally regulated restrictions on their planning, development, and other uses
- Development of urban planning measures for more environmental protection, resource conservation, protection of ground monuments as well as population protection against natural and anthropogenic hazards

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In the early stages of planning, the landscape plan provides geospatial data on the baseline condition of the planning area as well as a planning-oriented environmental assessment. In the final stages of the planning process, it is the source of information for the main plan and the definition of future planning constraints in the territorial plan.

The methodical procedure for the integration of landscape planning into territorial planning developed in the previous consulting assistance project for the oblast level was concretized and differentiated accordingly within the framework of the present project for the subsequent planning level (cf. Fig. 1).

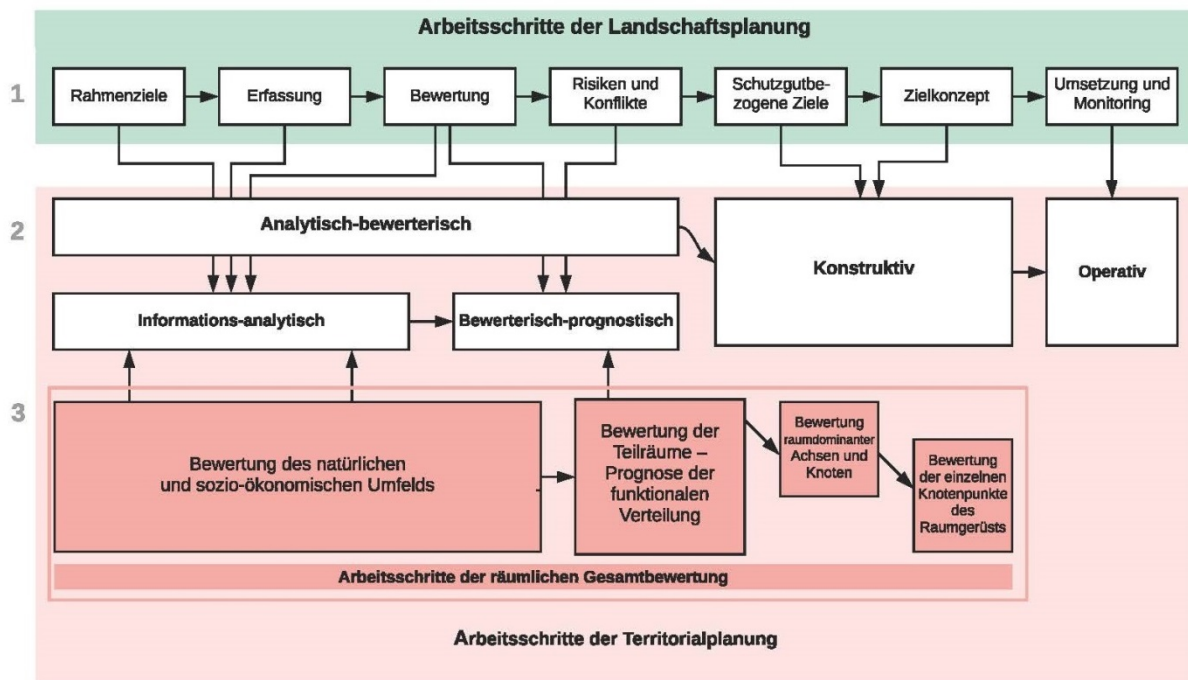


Fig. 1: Mutual assignment of landscape and territorial planning work steps. 1 - Work steps of landscape planning; 2 - Work steps of territorial planning; 3 - Work steps of the overall spatial assessment.

Fig. 1 summarizes the contributions of landscape planning to territorial planning in the different work steps. In particular, the landscape plan provides:

- Comprehensive data and assessment bases on the natural conditions and the state of the protected assets, their sensitivity to and vulnerability to stresses due to land use
- Knowledge on the spatial distribution of valuable areas as well as risks of landscape degradation due to land uses or special natural conditions
- Objectives related to the protected goods as well as an integrated nature conservation target concept and thus argumentation bases for the determination of priority or reserved areas for nature and landscape in the territorial plan.

The **analytical-assessment work step of** territorial planning is composed of the **information-analytical sub-step** (collection and analysis of data) and the assessment-prognostic sub-step (identification of the main problems and determination of possibilities to improve the environmental situation). The landscape plan is a comprehensive information and evaluation basis for this. It provides data on the natural conditions and an assessment of the state of the protected assets, including their sensitivity to stresses caused by use (e.g. sensitivity of soils to pollutant input) or their vulnerability to e.g. floods, inundation and erosion. This provides the planners of the territorial plan with a decision-making basis for weighing up the different utilization claims with regard to a balanced ecologically-oriented development of the planning area.

For the **evaluative-prognostic substep**, the landscape plan provides data on the spatial distribution of existing and potential risks of landscape degradation due to management or special natural conditions.

The **constructive step of** territorial planning includes the definition of the goal of planning, the elaboration and evaluation of planning alternatives, and the selection of an "optimal" alternative (compromise solution). The aim here is to achieve a balance between planning (development), nature conservation and cultural heritage. In this step, the planning area is divided functionally (map of functional zones), i.e., categories of land with similar characteristic features are delineated, to which possible types of land use are assigned: Residential, agriculture, industry, recreation, nature conservation and others. The landscape plan contributes the objectives related to the protected goods as well as the integrated nature conservation objective concept. It provides the argumentation basis for the definition of priority or reserved areas for nature and landscape in the territorial plan as well as for the deviation of planning decisions from the functional zoning. Due to the required consideration of ecological issues, i.e. integration of the landscape plan, the main plan can be drafted in the constructive work step. This meets the requirements of Ukrainian legislation for ensuring ecological safety and balanced (sustainable) use and development of the municipal territory.

In the **operational step of** territorial planning, the plans are prepared for implementation. There is an official examination of the territorial plan, the financing and realization of the plan as well as the implementation of a monitoring.

Box 1: The box explains the work steps from Fig. 1 in more detail according to the Ukrainian terminology.

Within the scope of the State Building Standards (DBN), both the results of the protected property assessment and the risk and conflict analysis can be integrated 1:1 into the territorial plan or serve as a basis for the preparation of the following subplans (maps) of the territorial plan:

- Exposure to natural or anthropogenic hazards
- Technical development of the area and protection of critical infrastructures from natural and anthropogenic damaging events.
- Existing restrictions and future planning constraints, particularly areas of the Protected Areas Fund.
- Spatial implementation of the development strategy of the municipality area: Presentation of areas and objects to be realized according to the strategic and operational goals of the development strategy, especially from the areas of industry, agro-industrial agriculture, recreation and tourism (if this area has been additionally worked on).

Based on the results of the project, it was possible to develop detailed proposals for the improvement of construction and planning legislation, in particular the Territorial Planning Law and the State Construction Standards. In June 2020, the Omnibus Amendment Law on Land Use Planning (No. 711-IX) was passed, in which the term "landscape planning" is now enshrined. It goes into effect in June 2021. The law leads to consequential amendments in other laws. In the Territorial Planning Law, the term "spatial comprehensive plan" is introduced, which includes a landscape plan as a subplan. At present, the issue is the formulation of the sub-legislative regulations. For this purpose, the Ministry of Development of Municipalities and Territories of Ukraine involves various experts, including the three Ukrainian institutes involved in the project.

For the model UTG of Stepancy, ArcGIS was used to develop maps valuating the state of natural assets (water, soil, species & biotopes, landscapes), a map of conflicts and hazards, and an integrated concept of objectives and measures with 17 objectives and 18 measures.

In addition, the landscape plan contains proposals for the representation of future land use in the territorial plan of UTC Stepancy (map and explanatory text). The terminology of landscape planning was "translated" into that of territorial planning. The map contains priority and reserved areas for nature and landscape as well as various land uses, and areas for measures aiming at the protection, maintenance and development of nature and landscape. For example, the protection of floodplains and wetlands are presented in the territorial plan as "part of the ecological network" in the area category "nature conservation", the restoration and development of near-natural biotopes in agricultural landscapes as "area of the forest fund (forests or meadows)" in coupling with the area categories "agriculture" or "recreation".

The landscape plan of UTC Stepancy is available in Ukrainian language. It consists of 21 maps and a explanatory section of 43 pages. The appendices on the next pages contain a list of the maps of the landscape plan, the integrated concept of objectives and measures, proposals for the representation of future land use and the table of contents of the explanatory report.

Attachments

Tab. 1: Map series Landscape Plan United Territorial Municipality Stepancy

Map No. 1	Current land use
Map No. 2	Suitable areas for residential development. Natural or anthropogenic hazards
Map No. 3	Climate/air. Potential negative impacts of climate change
Map No. 4	Surface and ground water. Water network and water catchment areas. Surface and groundwater runoff
Map No. 5	Surface and ground water. Groundwater flood distance
Map No. 6	Surface and groundwater. Water quality (sensitivity of surface waters to pollutant input)
Map No. 7	Surface and ground water. Sensitivity of groundwater to pollutant input
Map No. 8	Surface and groundwater. Sensitivity of water-bearing intermediate layers to pollutant input
Map No. 9	Soil. Soil types and soil species
Map No. 10	Soil. Yield capacity and biotope protection function of soils
Map No. 11	Soil. Soil moisture
Map No. 12	Soil. Sensitivity of the soil to water and wind erosion.
Map No. 13	Soil. Sensitivity of the soil to heavy metal and pesticide input.
Map No. 14	Species and biotopes. Biotope types
Map No. 15	Species and biotopes. Significance for the preservation of biological diversity
Map No. 16	Landscape. Demarcation of landscape units - natural arrangement (reconstruction of former landscape conditions).
Map No. 17	Landscape. Recreational suitability
Map No. 18	Landscape. Aesthetic attractiveness of landscapes and importance for tourism and recreation.
Map No. 19	Conflicts
Map No. 20	Landscape plan - integrated concept on conservation targets and measures
Map No. 21	Landscape plan - proposals for the representation of future land use in the territorial plan for the UTC Stepancy.

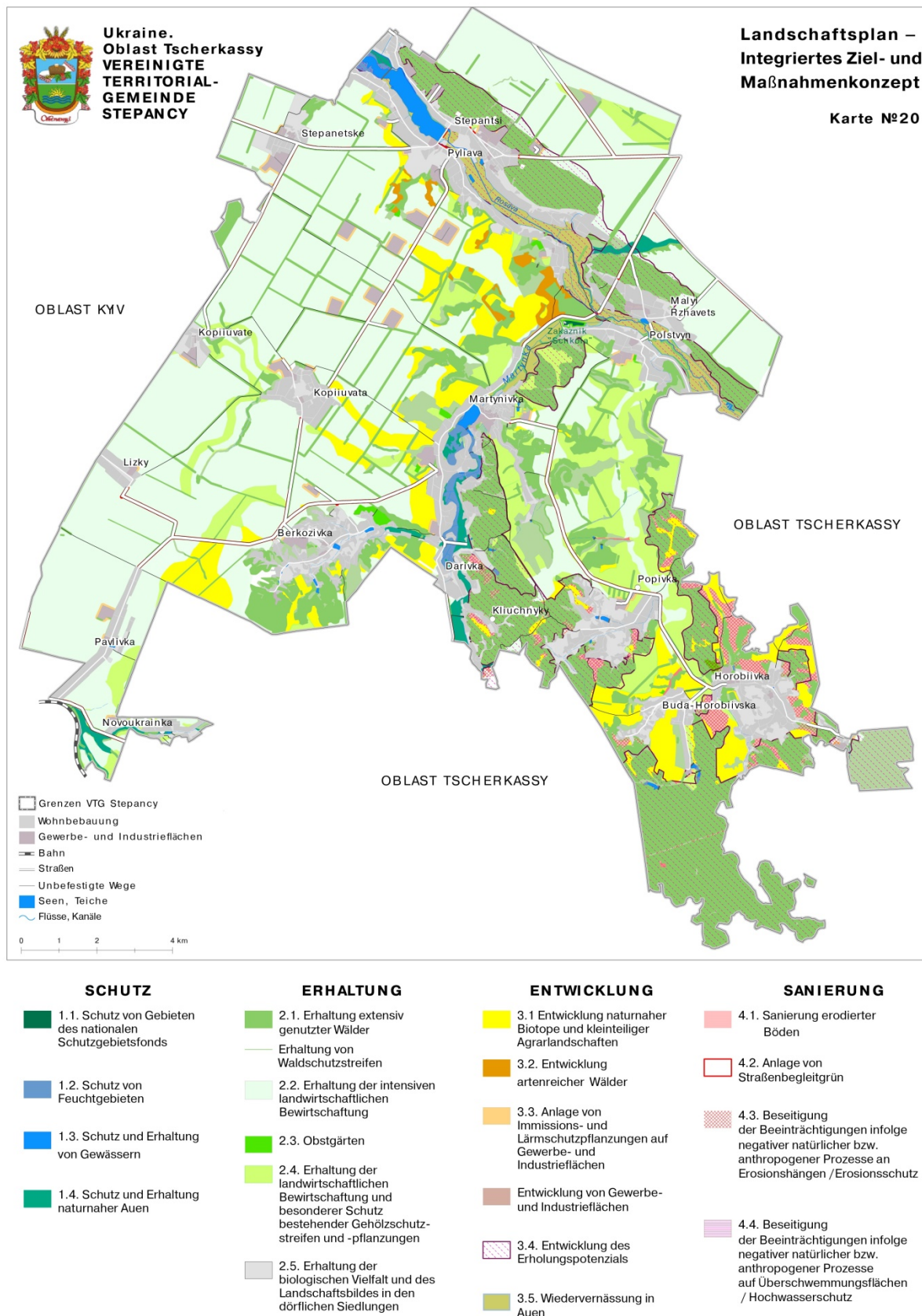


Fig. 2: Landscape plan United Territorial Municipality of Stepancy. Integrated concept of nature conservation objectives and measures.



(In den Klammern - Indexes des Landschaftsplans)

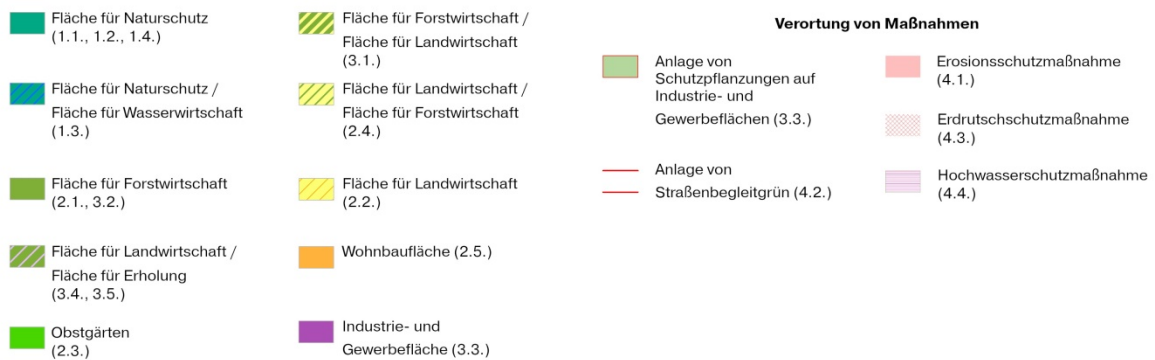


Fig. 3: Landscape plan United Territorial Municipality of Stepancy. Proposals for the representation of future land use in the territorial plan.

Tab. 2: Territorial plan for a part of Kaniv rayon under the jurisdiction of the United Territorial Municipality of Stepancy. Volume 2: Landscape plan. Table of contents.

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