



Interreg



EUROPEAN UNION

Danube Transnational Programme

URBforDAN

URBforDAN Mapping of Ecosystem Services

AUSTRIA

Vienna



**Stadt
Wien**

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1. INTRODUCTION

Short description of the strategic (and focus) areas:

The Danube Island in Vienna is an artificial island created in the years 1972 to 1988 for the flood protection of Vienna (length 21 km, average width 210 m). The island lies between the Danube and the flood protection channel which is called “the New Danube”.

The Danube Island can be divided into 3 parts:

- Northern part: from the intake structure at the New Danube island to the Nordbrücke
- Middle part: from the Nordbrücke to Praterbrücke
- Southern part: from Praterbrücke to the end of Island in the south

The northern and the southern regions of the Danube Island are covered with forests that have developed since the construction of the Danube Island in 1970's and 1980's. These forest regions now cover together about 50 % of the Danube Island.

The forest cover is demonstrated in the figure below.



Figure 1: Approximate forest cover

As shown in the figure above, some parts of the Danube Island are densely wooded, some are medium densely wooded and the middle part is mostly low densely wooded.

According to the generalized land use plan for Vienna, the types of use on the Danube Island (strategic area) and its river banks are distributed into the following:

- Recreation areas (parks, sports grounds, playgrounds,) approx. **12 %**
- Protected areas (protected areas/natural monuments): approx. **50 %**
- Transport corridors (incl. Danube): approx. **26%**
- Special areas (flood protection channel): approx. **12%**

The strategic area of Vienna, the Danube Island, belonged for 2/3 to the city of Vienna, for 1/3 to the Republic of Austria. These ownership conditions have been maintained. However, there are two small sections which belong to the city of Vienna for 100 %. The Danube Island is legally a private area, but is open to the public.

The strategic area is about 370 hectares (145 ha forest areas), the focus areas of Vienna for the project URBforDAN are all together 23,3 hectares.

Forest / other	Type of ES	ha
Forest	Danube Island	143,6
Other	Danube Island	230,7
	Total	374,3

Figure 2: Total area of Danube Island (forested, non-forested)

For the project of URBforDAN the City of Vienna defined 3 focus areas at the Danube Island as parts of urban forests:

- Zinkabachl
- Bay Reichsbrücke
- Toter Grund

2. METHODOLOGY

The Municipality of Vienna organised 2 workshops at the “infocenter danube island”, where the most important stakeholders were able to express their own opinion about the existing problems and to identify possible solutions relating to the 3 project focus areas. Solutions for the main issues of the Danube Island (the homeless people, the drug addicts and homosexuals) were discussed and determined.

Additionally to the workshops, an online survey was conducted. More of 100 people were reached. The results revealed many users and their conflicts with other citizens. The results were a good basis for ecosystem services mapping (identification of importance of areas).

The aims of special areas (e.g. to improve the natural and touristic possibilities) were identified and the analysis of the ecosystem services for the strategic and focus areas were mapped and ranked by a group of experts (ecologists, landscape designers, Danube Island specialists, GIS experts).

For mapping, ESRI ArcGIS software (editor) was used. Data input: (MA 41 Stadtvermessung, BEV - Bundesamt f. Eich- u. Vermessungswesen, Stadt Wien - Wiener Gewässer).

3. RESULTS

Summary of mapped ES

The relevant and main ecosystem services for the Danube Island are identified as:

- Provision of drinking water
- Local climate mitigation
- Nature protection/ habitats for species
- Recreation and tourism
- Scientific / educational

Forest / other	Type of ES	ha	% of total area	rank
Forest	13_Provision of drinking water	30,2	21%	1
Forest	31_Nature protection	20,1	14%	1
Other	31_Nature protection	7,9	3%	2
Forest	21_Local climate mitigation	90,9	63%	2
Other	21_Local climate mitigation	180,7	78%	2
Forest	41_Recreation tourism	16,0	11%	3
Other	41_Recreation tourism	44,5	19%	1
Forest	42_Scientific/educational	0,3	0%	1
Other	42_Scientific/educational	1,2	1%	1

Figure 3: mapped ES areas with ranking of their importance (strategic area)

13_Provision of drinking water

This zone is a legal water protection area (code 13, ranking 1)

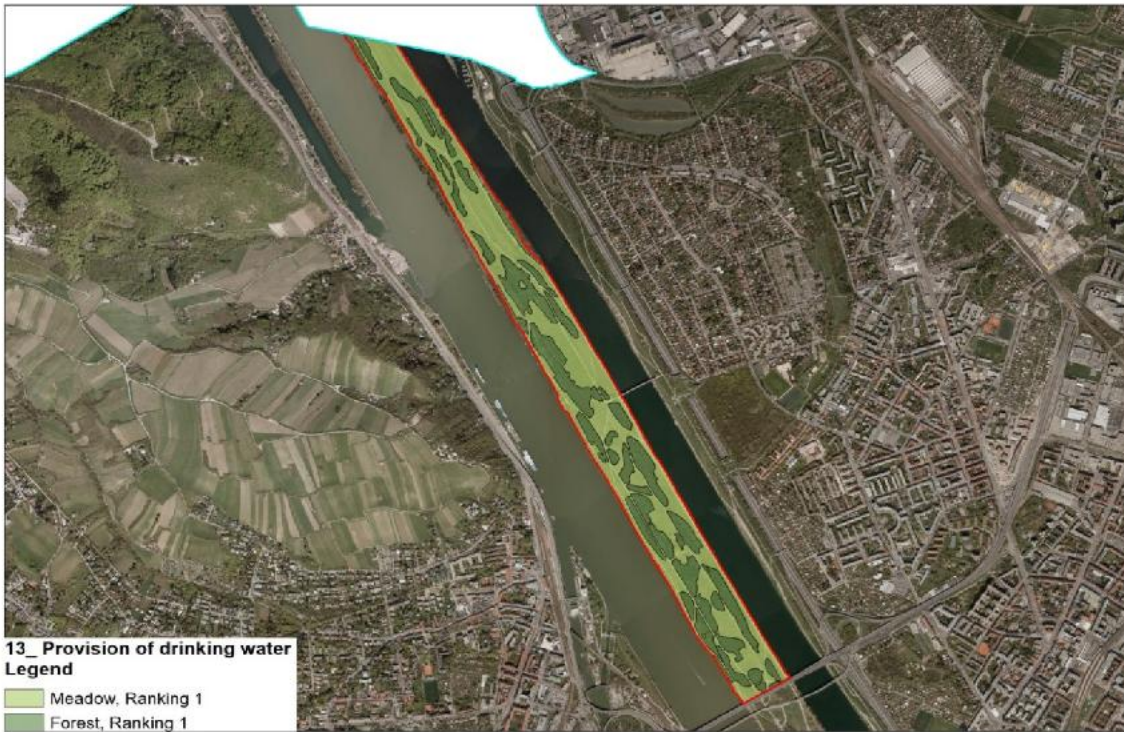


Figure 4: ES zones for code 13 (ranking 1)

31_Nature protection / habitats for species

These zones are legal nature protection areas.



Figure 5: ES zones for code 31 (ranking 2) – Toter Grund



Figure 6: ES zones for code 31 (ranking 3) – Ostbahnbrücke



Figure 7: ES zones for code 31 (ranking 1) – Zinkabachl

41_ Recreation and tourism

This area in the middle of the Danube Island is a recreation zone, because many people use this area on a daily basis.



Figure 8: ES zones for code 41 (ranking 1)

This area is a recreational and tourism zone. Many people are using this area on a daily basis.



Figure 9: ES zones for code 41 (ranking 3)

42_Scientific / educational

Due to the proximity to the underground railway this area can be reached easily. Therefore, it makes sense to establish an educational path near the "Reichsbrücke".



Figure 10: ES zones for code 42 (ranking 1)

21_Local climate mitigation

The rest of the forests at the Danube Island are dedicated to local climate mitigation.

4. DISCUSSION

The challenge is to find adequate ways of coordinating the various users interests with each other and with nature protection goals.

In addition, the communication actions must be improved.