

PP6 Bavarian Environment Agency - WP 5 - Monitoring stations

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Monitoring Station IV – “Steinbock”

a) General Catchment Characteristics

- Geology: Limestone Alps with different lithology, Pleistocene deposits
- Land-use: meadows and alluvial forest

b) Hydrology

Hydrology strongly controlled by operation of the Sylvenstein reservoir, especially in case of high flood events.

c) General Description

Monitoring station IV is called “Steinbock” because of its location near the hill “Steinbock”. At this point, coarse sediment was artificially introduced into the river Isar once or twice during the last years. It is planned to insert sediment again in the course of the project.

d) Listing of applied Measurement Methods

- Transverse profiles (existing data from the government and own mappings via tachymeter and/or differential GPS)
- Discharge/deposit measurement (data from governmental climate stations)
- Terrestrial laser scanning (Riegl)
- Aerial photos (UAV Falcon 8)
- Multitemporal analysis of aerial photos

e) Listing of measured Parameters

- Transverse profiles (changes in sediment storage and water depth)
- Digital terrain models to quantify the changes in larger areas of the river bed
- Aerial photos for multitemporal information

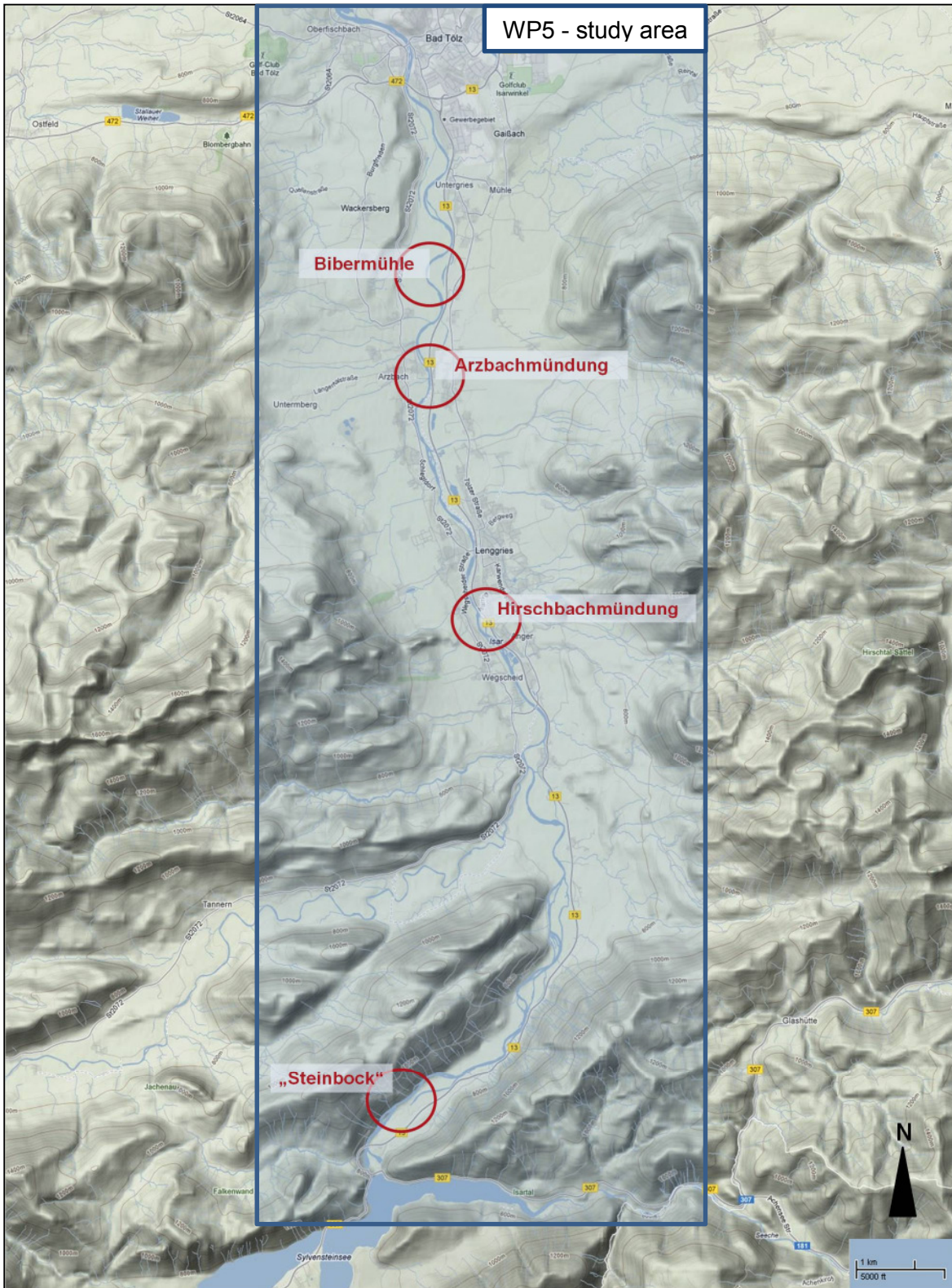


Figure 1: WP5-study area and monitoring stations along the river Isar (map based on Google Maps)