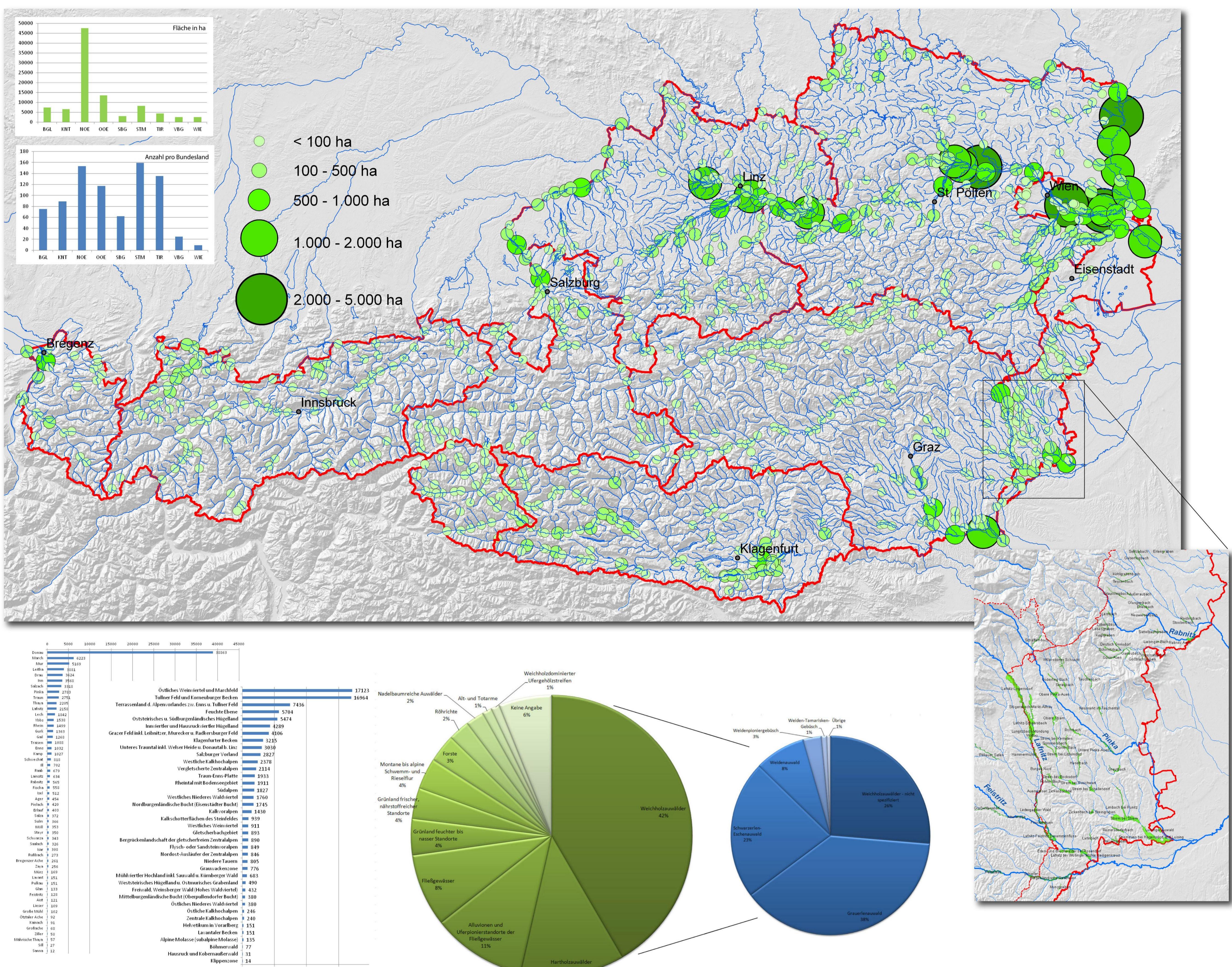


Austrian Floodplain Inventory

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Floodplains are central landscape elements used and altered by numerous human activities. Due to geographical preconditions in Austria and specific geomorphological entities as well as by sharing several biogeographical regions, a tremendous differentiation of floodplain habitats can be found. Classifications of natural river landscapes and the typology of riparian habitats in Austria are defined on the altitude, the floodplain width, some hydromorphological types and the discharge regime. In context with the overall ecological differentiation, vegetation entities, riverine and backwater biocoenoses as well as biogeographical aspects are also relevant for floodplain habitats. All these factors should be considered and assessed by regarding human interventions on those systems and over time.



Share sorted by size (ha) for the main rivers > 500 km² (left) and proportion of physical running water regions in ha (right)

Proportion of the main habitat types of all floodplain objects in Austria (left) and differentiated share of the softwood habitats (right)
 Translation (clock-wise): Left green diagram: Softwood forests (42%), Hardwood forests, Alluvion and pioneer communities, running water habitats, Wet grassland, Mesophilic grassland, High alpine floodplain, Forest plantation, Reeds, Coniferous alluvial forests, Oxbows and backwater, Softwood skirts, No specific information.
 Right blue diagram: Softwood forests - not specified (26%), Grey alder forests, Black Alder-ash-forest, Willow softwood, Pioneer shrubs, Willow-tamarisk-shrubs, Others.



Morava floodplain (Heribert Weissenbacher)

For the Austrian floodplain inventory 823 floodplain habitats with a total area of 95,541 ha have been identified. The distribution of alluvial zones is highly differentiated; the focus is expected to spread in large basins (e.g. Danube), the alpine forelands and the large inner alpine valleys. By taking into account essential high alpine alluvial habitats and glacier forelands, the floodplain inventory is now nationwide and representative.

Softwood habitats account for 42% of all floodplain objects, followed by hardwood riparian forests (12%), pioneer communities (11%) and wet grassland (8%). Inner alpine and high alpine floodplains often show rich biotope patterns, especially with specific coniferous forests and braided alluvial fans, the latter sometimes also with dynamic meanders. Considering the softwood habitats separately, low proportions of pioneer shrubs (3%) and willow-tamarisk-shrubs (1%), alongside dominant grey alder forests, can be observed. About 60% of the floodplain objects are already protected (mostly as Natura 2000 sites).

Based on the concept of 45 physical running water regions in Austria, our analysis allows a referential ordering of the 823 floodplain habitats. Broader typological considerations of wetlands and floodplains are now possible, for example combinations of habitat-parameters, natural running water areas, floodplain configurations, and combinations of hydromorphological parameters. This would be an important step to improve management measures at the intersection of the Habitats Directive and the Water Framework Directive. Therefore an Austrian floodplain strategy could provide valuable incentives.

Reference: Lazowski, W., Schwarz, U., Essl F., Götzl M., Petersel J. & Egger G. (2011): Aueninventar Österreich. Bericht zur bundesweiten Übersicht der Auenobjekte (Austrian floodplain inventory). 52 pp. Lebensministerium, Vienna



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