

USING ARC VIEW PROGRAM FOR IDENTIFY SENSIBLE AREAS

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Abstract: The knowledge the point and diffuse pollution – the main step to identify the sensible areas in Hydrographical Area Banat.

Keywords: nitrate pollution, sensible areas, GIS elements

DIE BENUTZUNG DES ARC VIEW – PROGRAMMS BEI DER BESTIMMUNG DER EMPFINDLICHEN ZONEN (GEBIETE)

Zusammenfassung: Die Kenntnis der punktförmige und diffuse Verpestungspunkte – die Verfahrensweise für die Bestimmung der empfindlichen Zonen (Gebiete) aus Banat

Schlüsselworte: Nitratesverpestung, empfindliche Zone, GIS-Elemente

The knowledge of the pollution points (punctual pollution and diffuse pollution) was the main step to identify the sensible areas in the area administrated by the Banat Water Branch.

Methodology used for identify the sensible areas was based by a lot of interpolation by different fields, and show all the real problems on the maps.

In this way, using the several layers which must contain one by one, the drillings, the point pollution sources, nutrients pollution areas, we could be informing and monitoring rather, about evolution processes which created the pollutions, about water quality modeling, about transport and transformations of pollutants and on the other hand, in final, decisions and remediation technologies for water resource conservation and protection.

The river basin is clearly recognized as the basin planning scale for water management measures.

The importance of this issues for effective integrated River Basin Management has been demonstrated through real life situations presented in this paper.

The correlation between drillings shape and pollution sources (discharges of water, diffuse pollution) permitted to identify the areas which are sensible in nutrients charge.

The first phase was established the main points pollution (Figure 1).

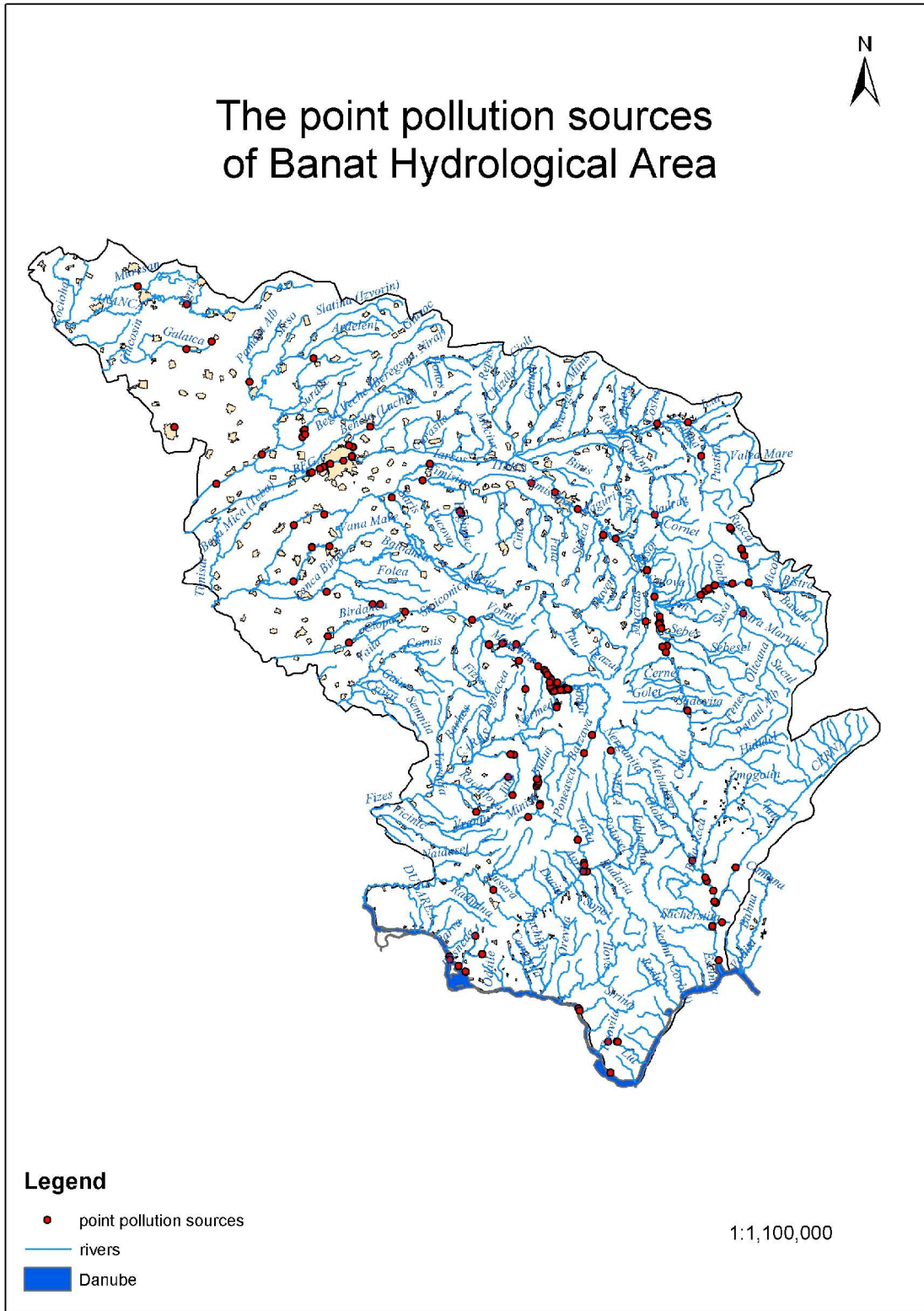


Figure 1. The point pollution sources of Banat Hydrological Area

The second phase was identify the drillings with exceeded of nutrients indicators in groundwater.(Figure 2).

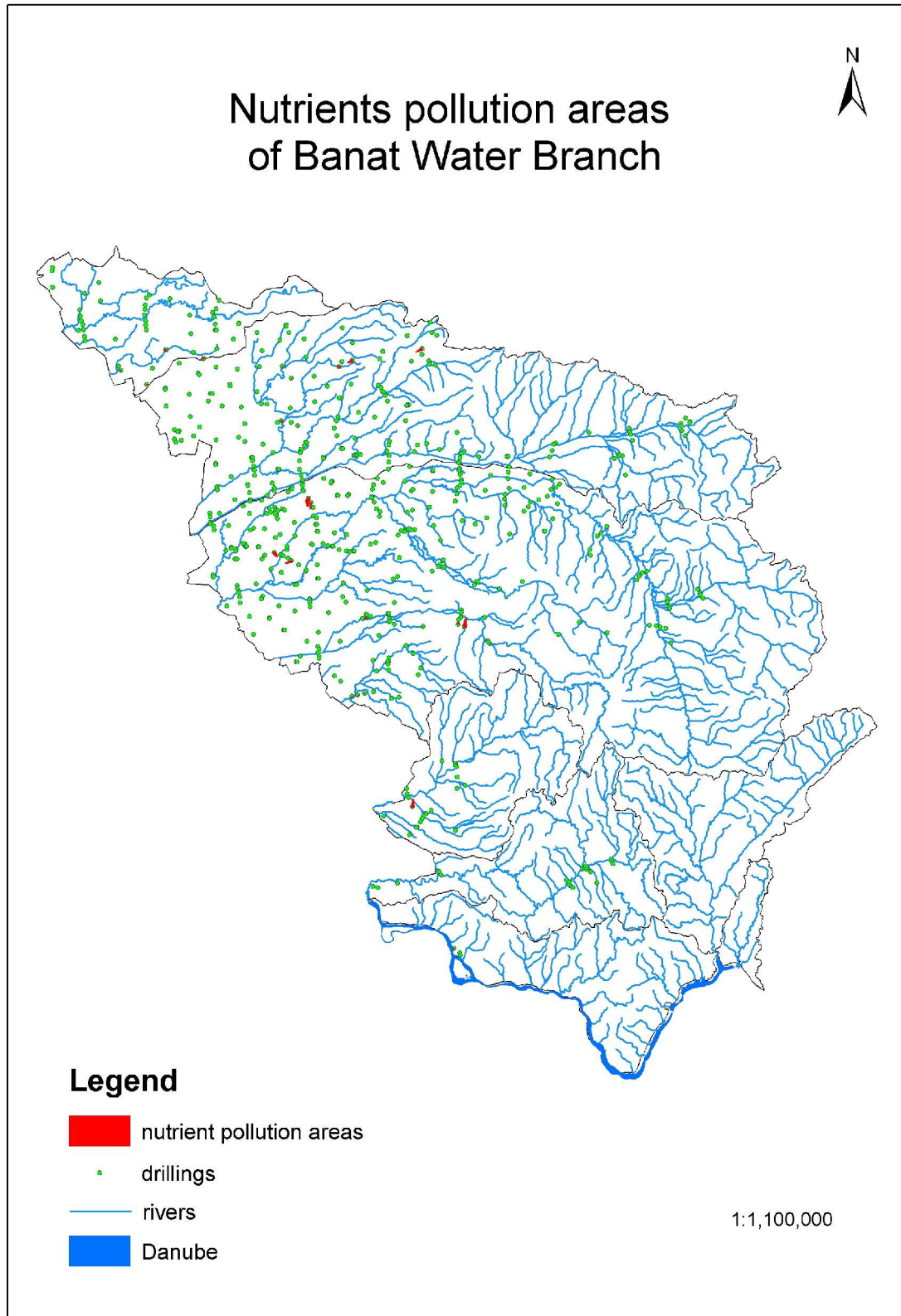


Figure 2. Nutrients pollution areas of Banat Water Branch

The analyzed of this layers permitted to determinate the sensible areas.
 This is a preliminary phase for identify the sensible areas, because they are dynamic elements, and they are changing function by evolution of the pollutions sources (Figure 3).

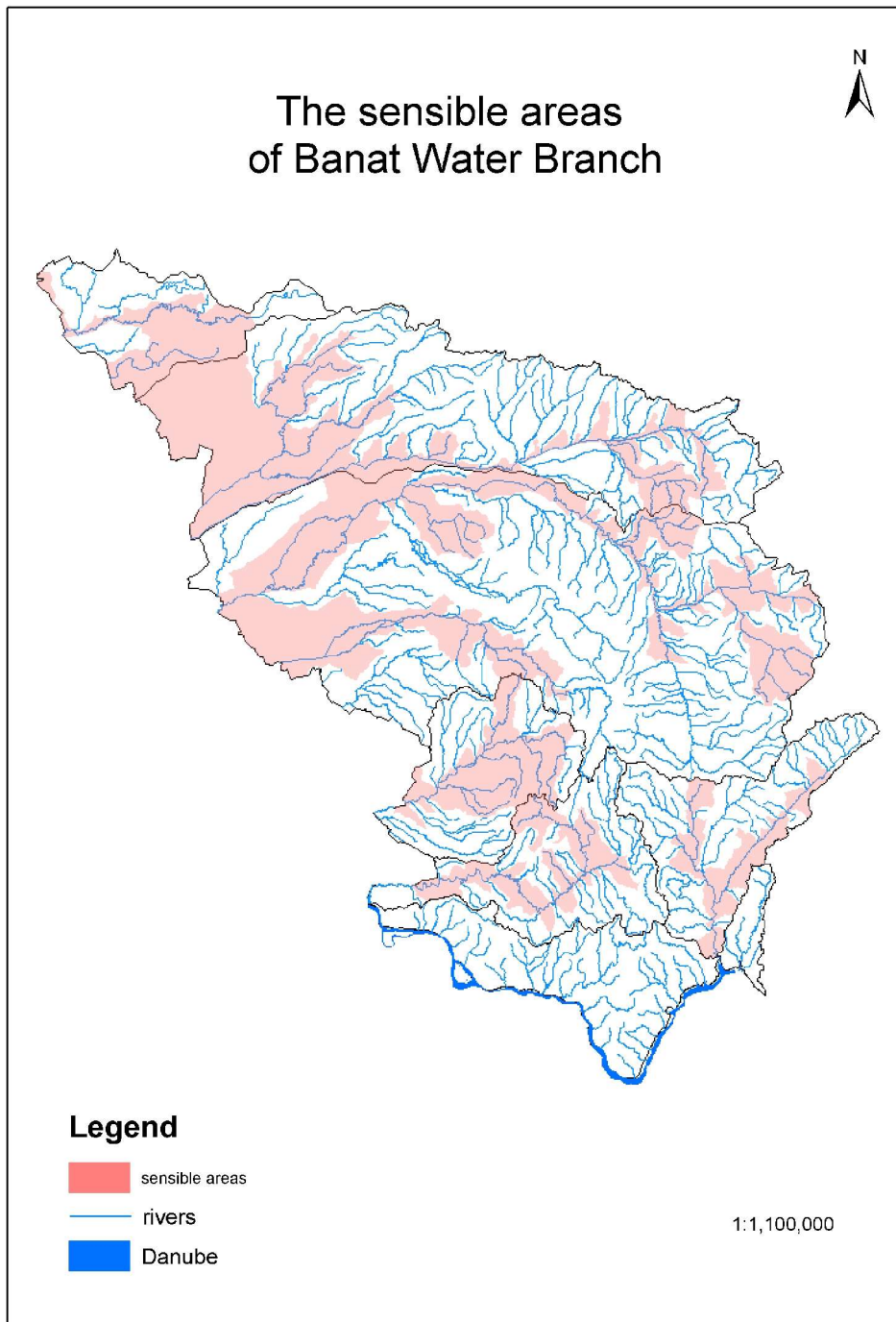


Figure 2. The sensible areas of Banat Water Branch

Conclusions:

The information about the knowledge of the sensible areas are very important for emissions regulation of point pollution sources, because we have to consider this areas very weak and we have to protect and restoration them.

References:

- Methodology for identify the sensible areas.
- Water Framework Directive (WFD) – (2000/60/EC), 22 December 2000
- Methodology of River Basin Management Plan – 2003.