# Maps showing flood cadaster, flood-prone areas and related spatial information developed

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| **Work Package Title** | Creating Flood Knowledge Documents |
| **Activity Number** | 3.1. |
| **Activity Title** | Flood cadastre |
| **Partner in Charge** | University of Zadar |
| **Partners involved** | LP, PP1, PP2, PP3, PP5, PP6, PP7, PP8, PP9, PP10, PP11, PP12, PP13, PP14, PP15 |
| **Status** | Final |
| **Distribution** | Public |

# Summary

# Introduction

An intelligent approach is imperative when it comes to the establishment of a flood cadastre. It is of utmost importance to delineate the datasets and outline the precise process that will be employed to generate the maps. In terms of planning, flood cadastre maps can be perceived as "tailored" flood hazard maps. These maps exhibit existing hazards and often classify them into categories of low, medium, or high risks. Additionally, they provide valuable information about land usage within specific areas. Planners are particularly interested in identifying locations with minimal exposure to risks for various applications, including infrastructure development, agriculture, and human settlements. The implementation of flood cadastre within the program area will serve multiple purposes, one of which is flood forecasting. By adopting a methodical approach to flood cadastre, stakeholders can make well-informed decisions and effectively manage flood-related risks, contributing to the overall safety and sustainability of the region.

# 1. Flood cadastre results

The created flood cadastre contains a total of 895 critical points and 233 pluvial flood zones that have the problem of frequent flooding. Critical points refer to facilities (houses, buildings, cafes, hospitals, schools, etc.) that had fire-fighters intervention one or more times. Pluvial flood zones are areas (eg. agricultural areas, streets, squares, playgrounds, etc.) that are frequently flooded. The settlement of Metković has the largest frequently flooded area in relation to other cities, and the city of Zadar has the largest number of critical points (Table 1). The flooded locations for each of the cities are shown on maps (Figure 1,2,3,4,5,6).

**Table 1.** Flood cadastre

| Settlement | Critical points | Pluvial flood zones | Flood area (km²) |
|---|---|---|---|
| Biograd | 16 | 16 | 0,01 |
| Gospić | 54 | 27 | 0,14 |
| Poreč | 91 | 79 | 0,65 |
| Split | 77 | 29 | 0,93 |
| Zadar | 657 | 37 | 2,49 |
| Metković | / | 45 | 45,82 |
| **Total** | **895** | **233** | **50,05** |

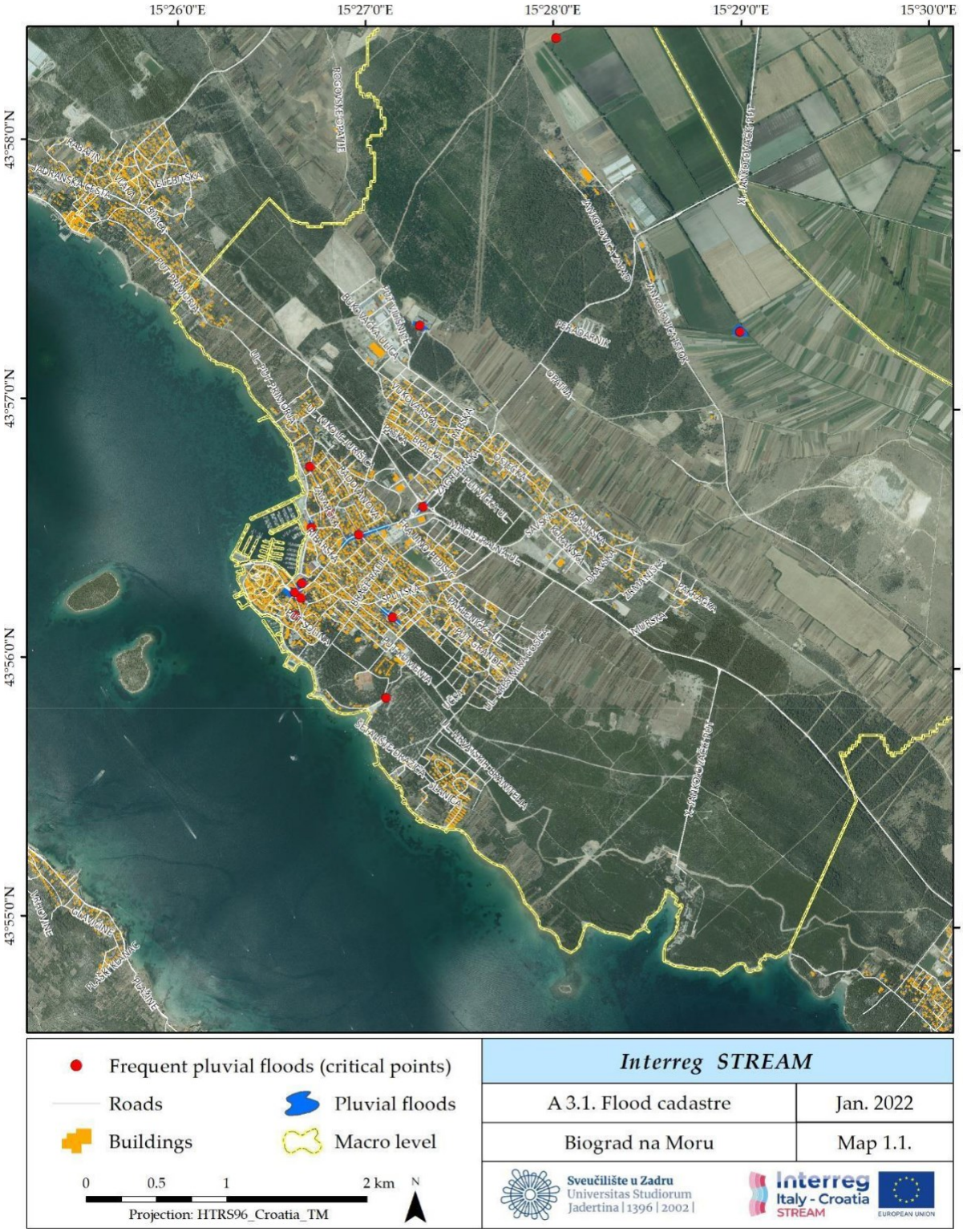


**Figure 1.** Flood cadastre - Biograd na Moru

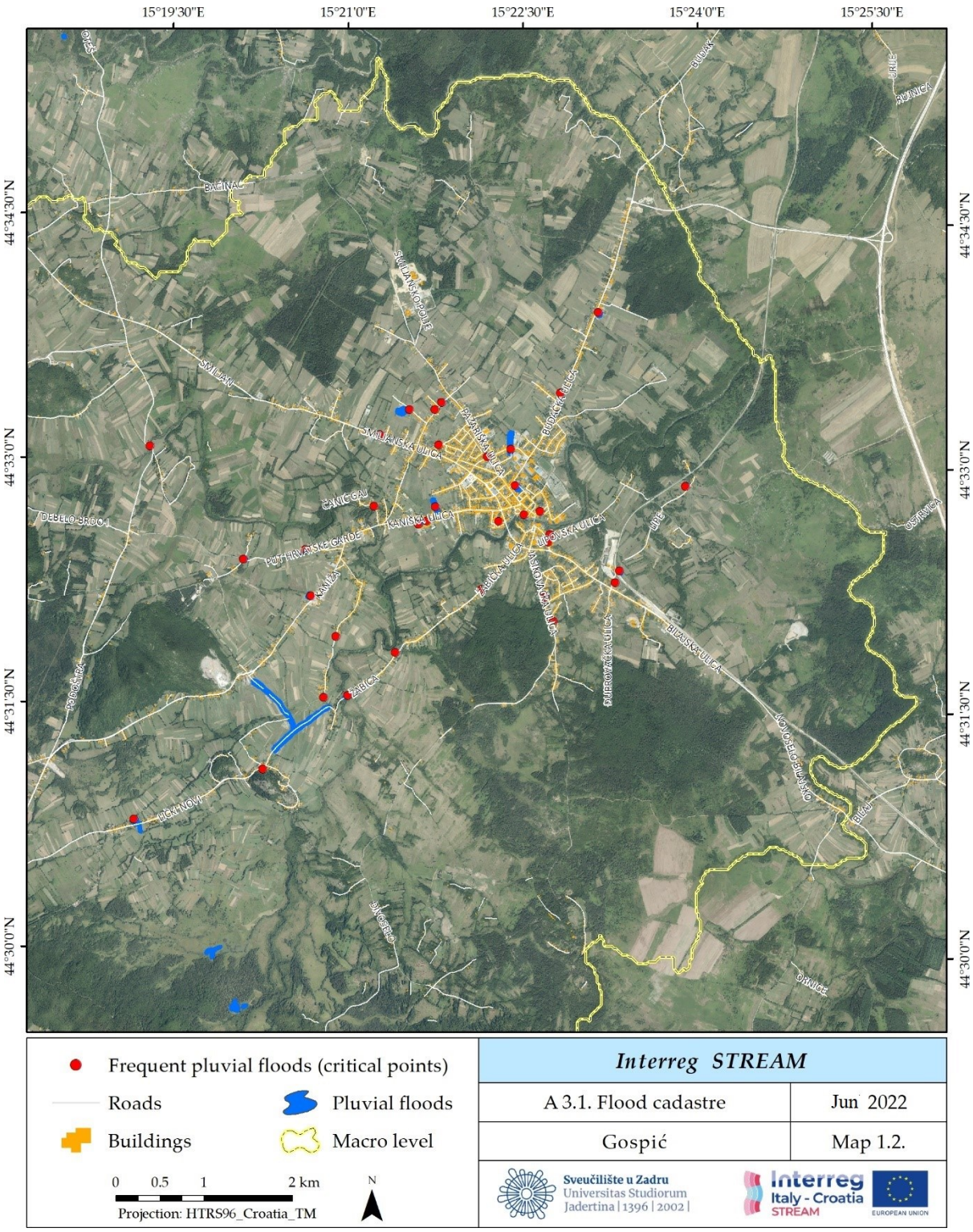


**Figure 2.** Flood cadastre - Gospić

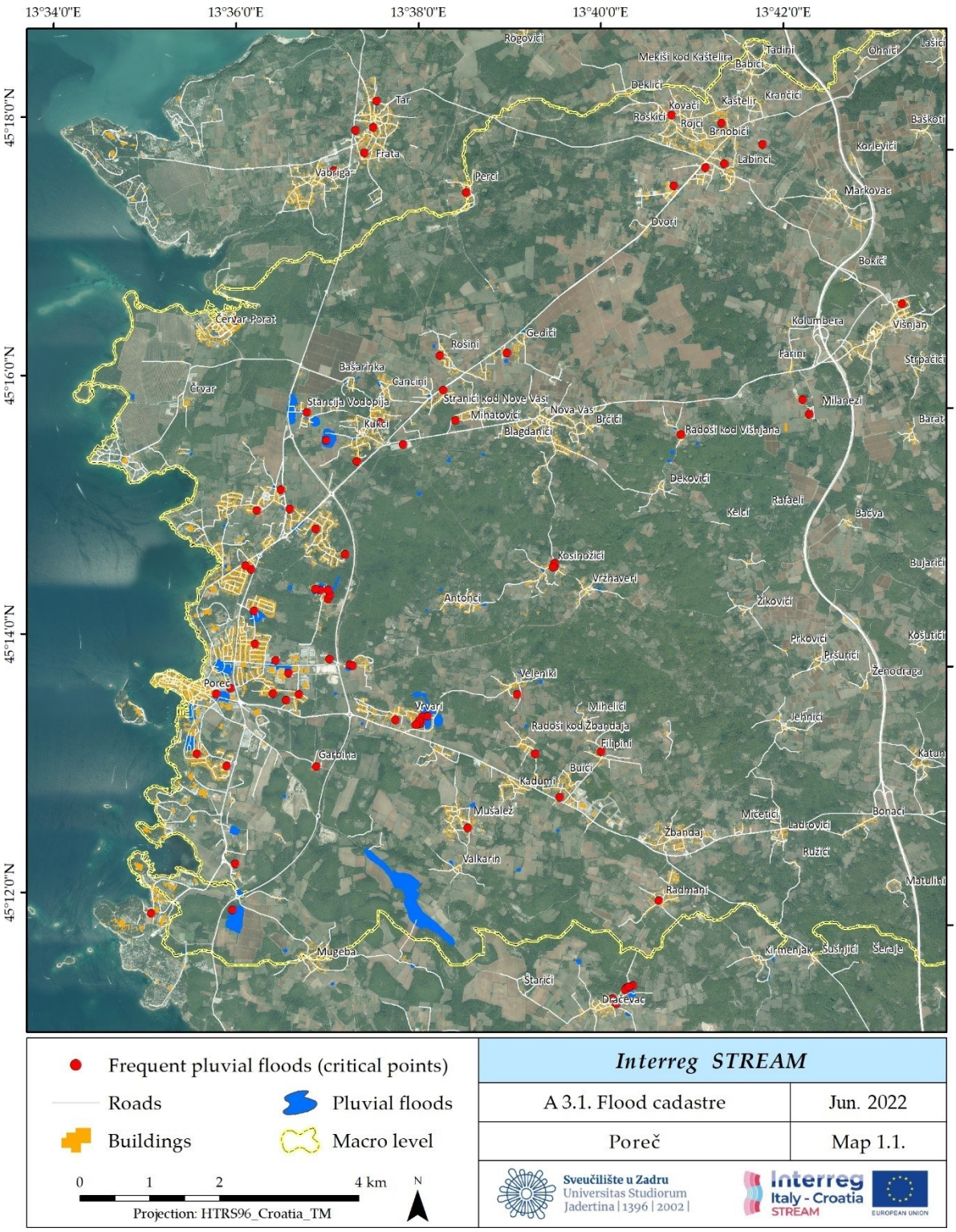


**Figure 3.** Flood cadastre - Poreč

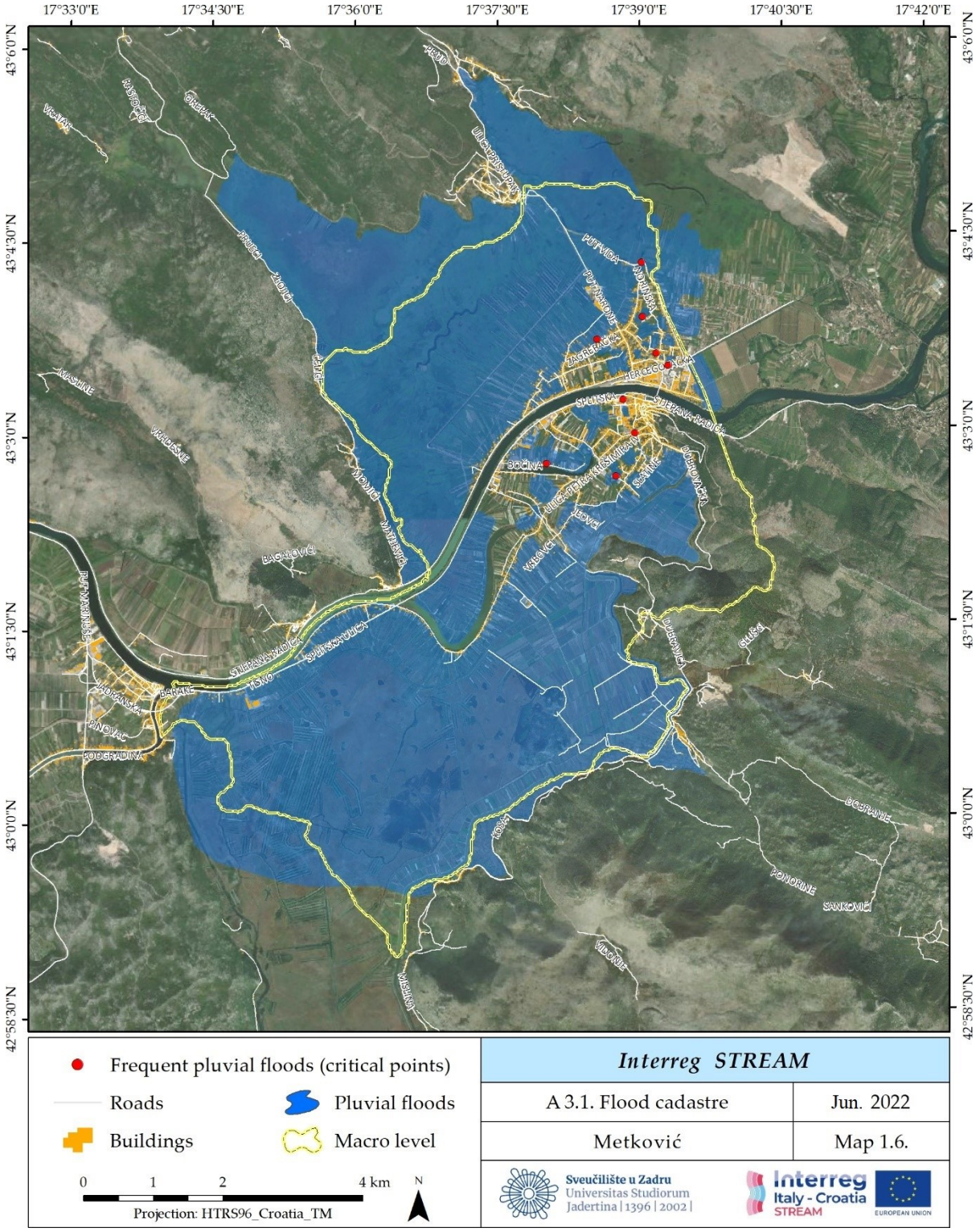


**Figure 4.** Flood cadastre - Metković

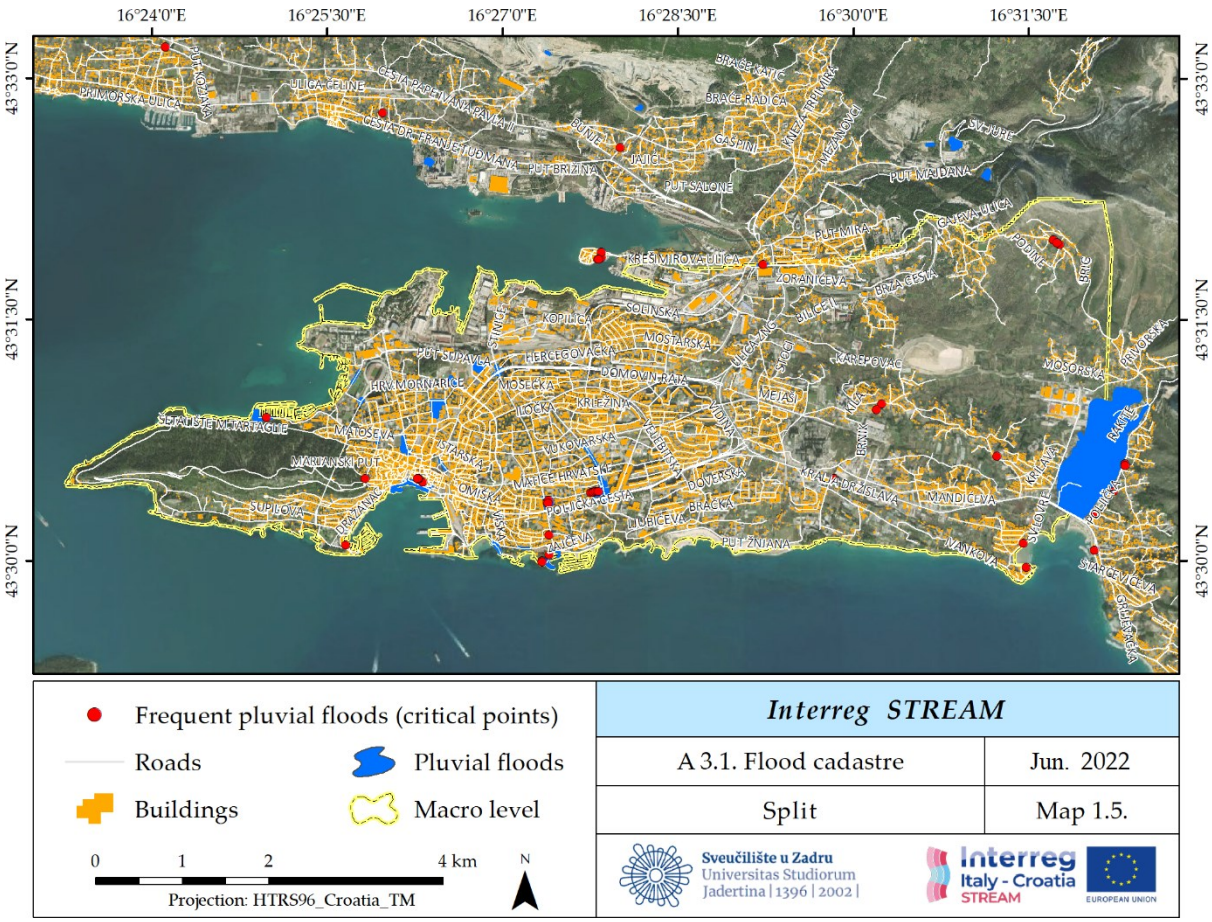


**Figure 5.** Flood cadastre - Split

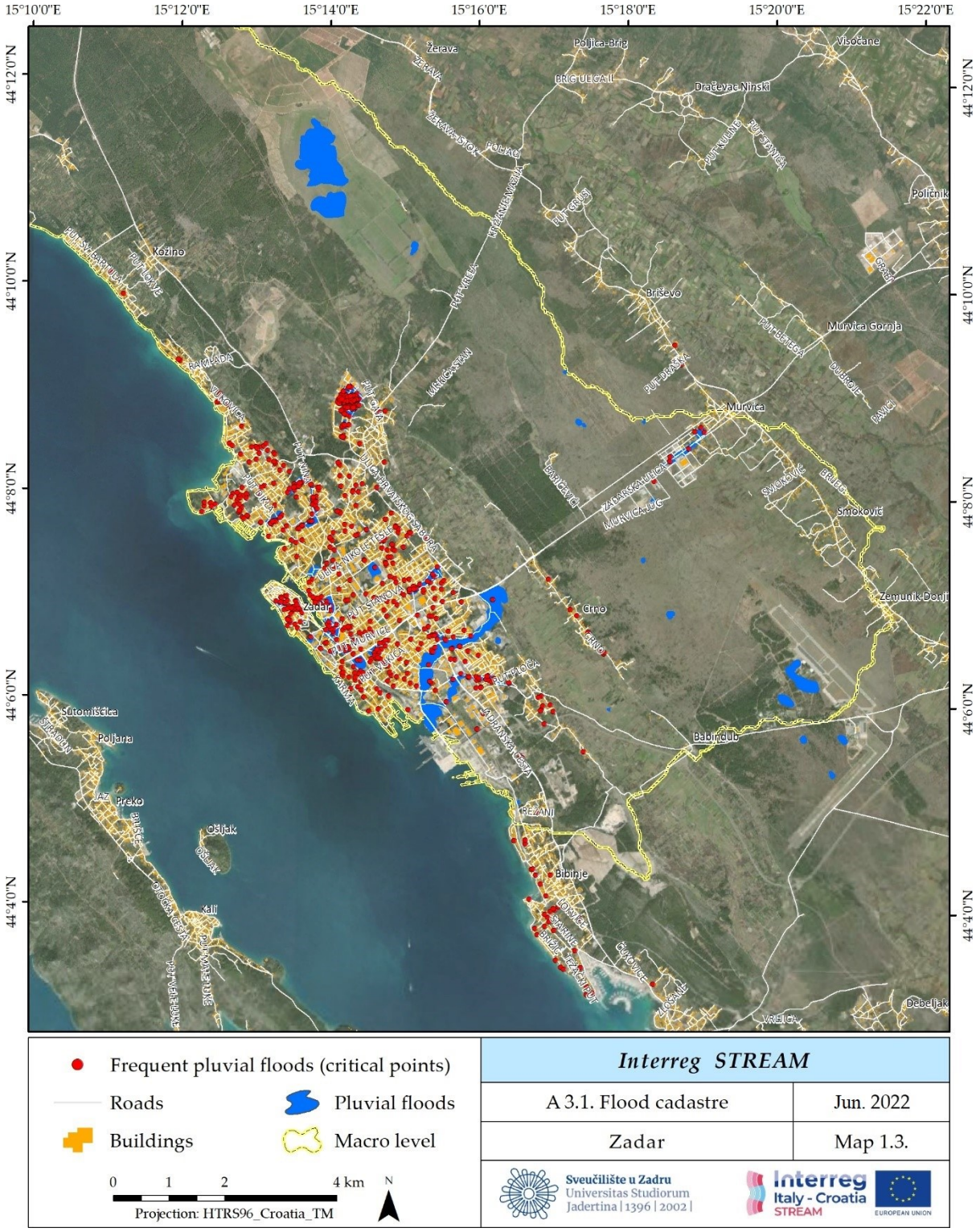


**Figure 6.** Flood cadastre - Zadar

# Conclusion

The implementation of a flood cadastre within the program area serves multiple objectives, with one crucial aspect being flood forecasting. By adopting a systematic approach to flood cadastre, stakeholders can make informed decisions and effectively manage flood-related risks. This proactive approach enhances the overall safety and sustainability of the region, as it enables planners to identify suitable areas for development while minimizing exposure to potential hazards.