

CLIMATE CHANGE INFLUENCE ON AGRICULTURE

PLANINIG AND STRATEGIC DOCUMENTS

IN REPUBLIC OF CROATIA

ADVERSE EFFECTS OF CLIMATE CHANGE TO AGRICULTURAL PRODUCTION

- Negative effects of climate change are evident in agriculture in a two ways:
 - **extreme droughts** -occur every three to five years
 - **frequent flooding**
- It is necessary to undertake measures to mitigate these negative effects

PLANINIG AND STRATEGIC DOCUMENTS

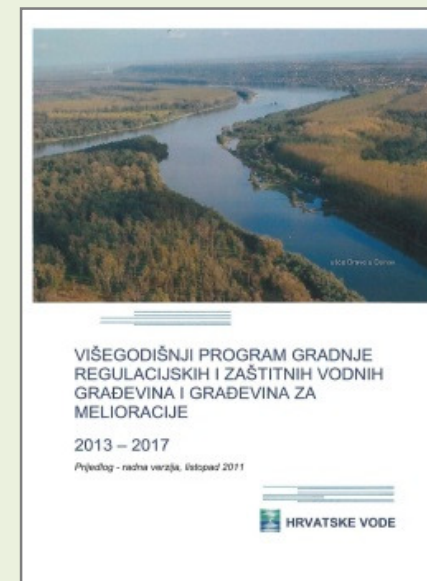
1. National Project of Irrigation and Management of Agricultural Land and Water in the Republic of Croatia (NAPNAV)
2. Long-Term Programme for Construction of Water Regulation and Protection Facilities and Amelioration Facilities

1. NATIONAL PROJECT OF IRRIGATION AND MANAGEMENT OF AGRICULTURAL LAND AND WATER IN THE REPUBLIC OF CROATIA (NAPNAV)

- Strategic document on agricultural development based upon irrigation and optimal use of natural resources (land & water) prepared in 2004. and adopted in 2005.
- It will be implemented in a IV phases:
 - I Preparation of County planes
 - II National pilot projects of irrigation
 - III Preparationion of project documentation
 - IV reparation and reconstruction of existing and construction of new irrigation systems

2. LONG-TERM PROGRAMME FOR CONSTRUCTION OF WATER REGULATION AND PROTECTION FACILITIES AND AMELIORATION FACILITIES

1. Prepared by Croatian Waters
2. It will be adopted by The Government of Republic of Croatia after the Environmental assessment is completed
3. Environmental assessment is in charge of the Ministry of agriculture.



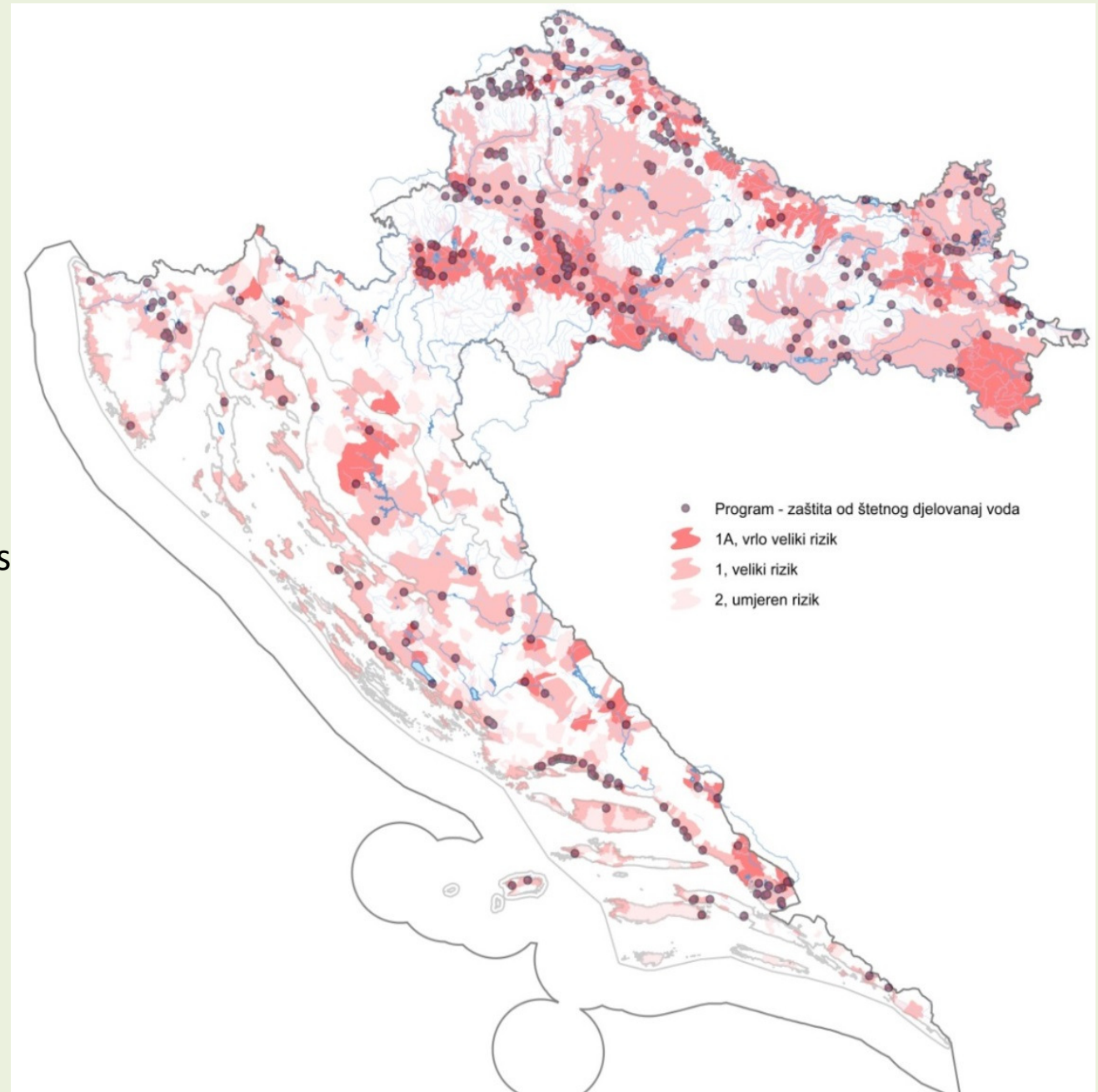
MAIN GOALS OF THE PROGRAME

1. Project for construction of Water Regulation and Protection Facilities against the adverse effects of water
2. Projects for construction Amelioration Facilities for the irrigation purposes

The projects are harmonized with preliminary flood risk assessment

Areas estimated by the flood risk criteria:

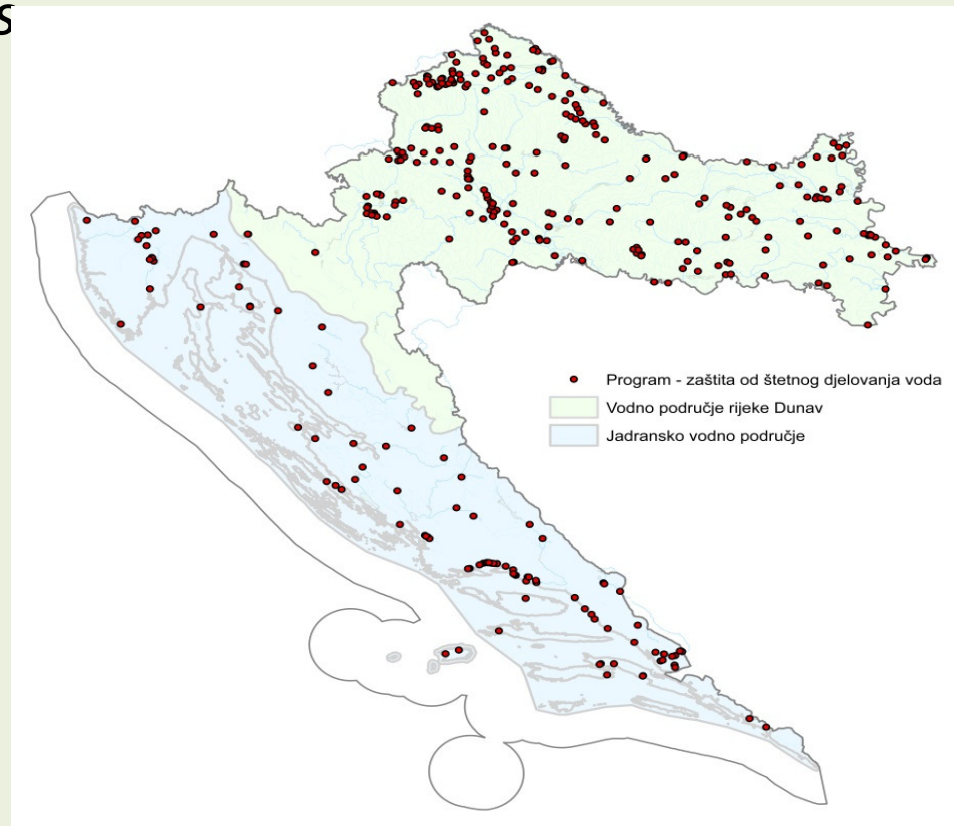
- ✓ Frequent flooding areas
- ✓ Potential flooding areas,
- ✓ Areas influenced by destruction of flood defense objects,
- ✓ Historically known flooding areas
- ✓ Flooding areas caused by torrents



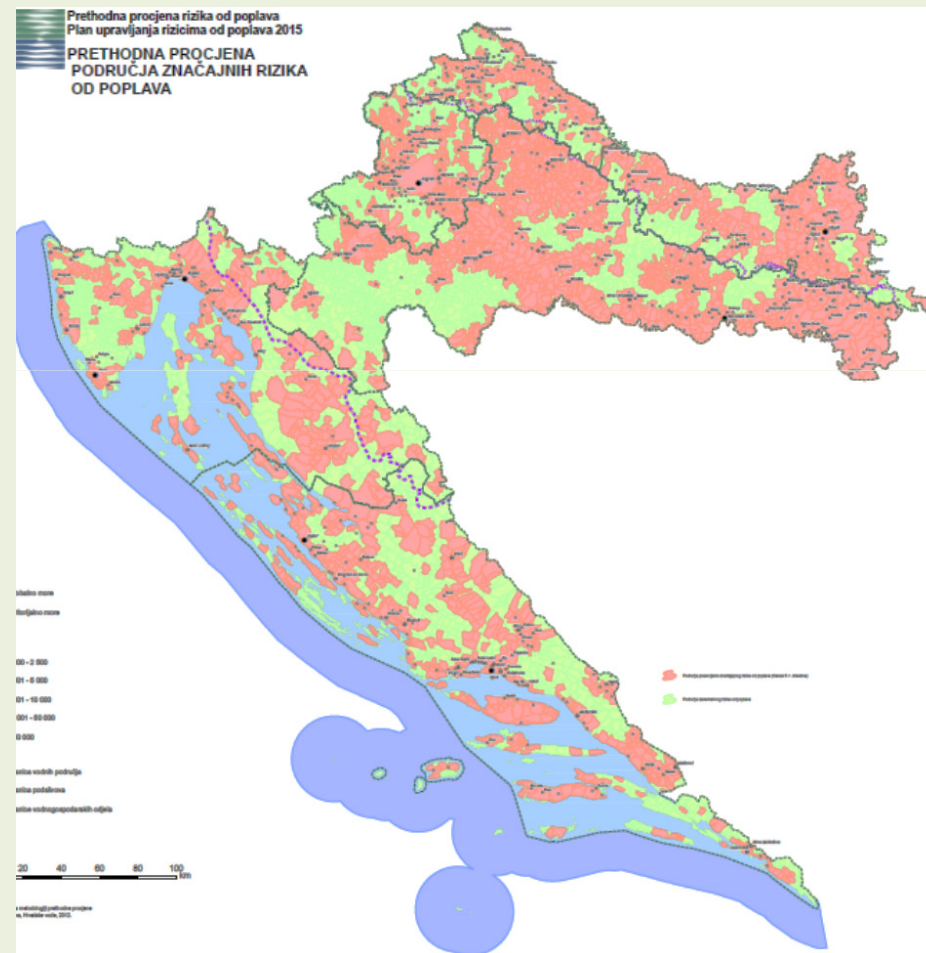
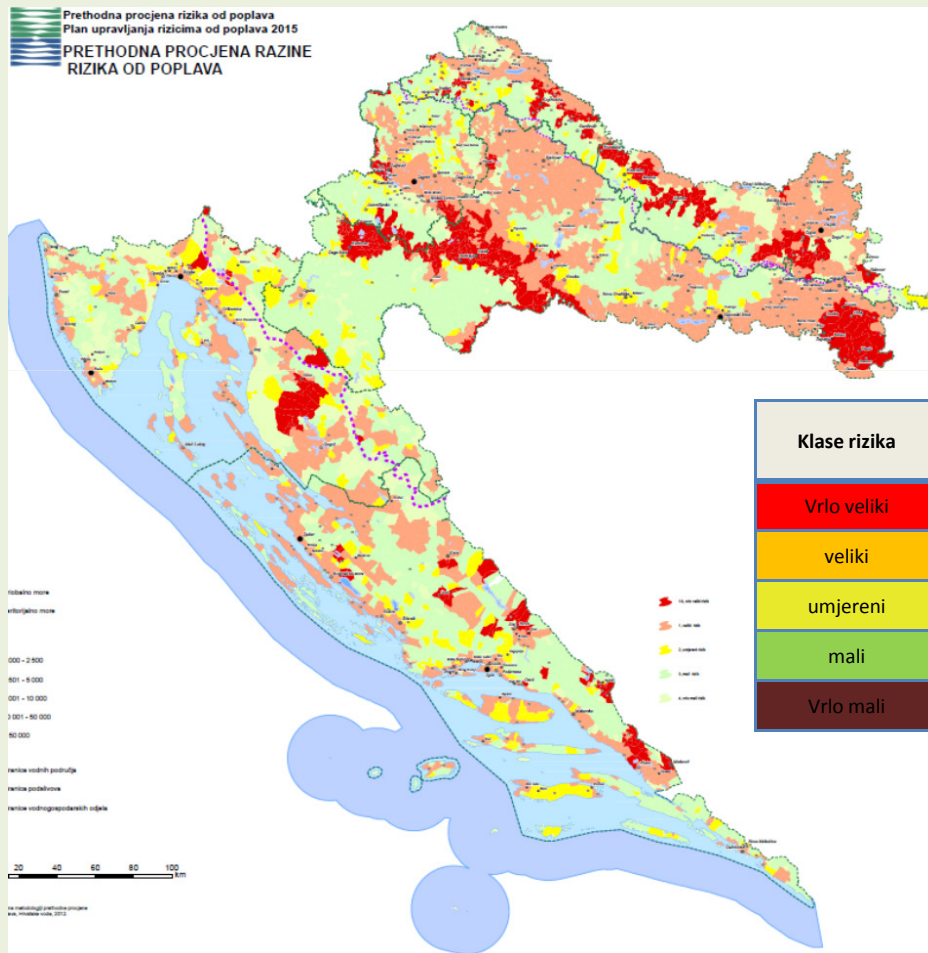
Adverse effects of water (1)

373 projects against adverse effects of water grouped in 114 project units .

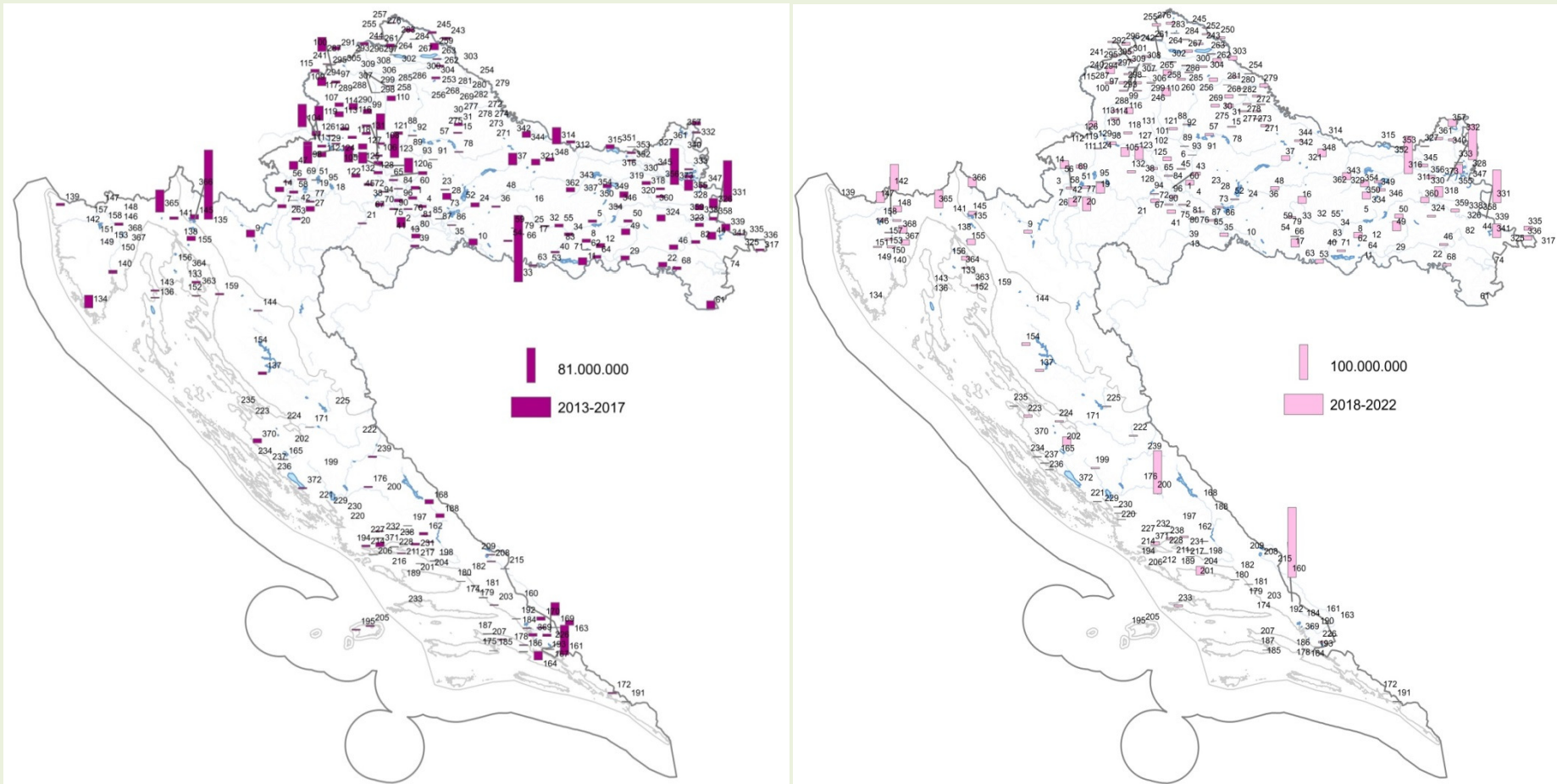
For the construction of all projects environmental impact assessment is required according to the National legal requirements



Preliminary flood risks assessment Hrvatske vode (2012)



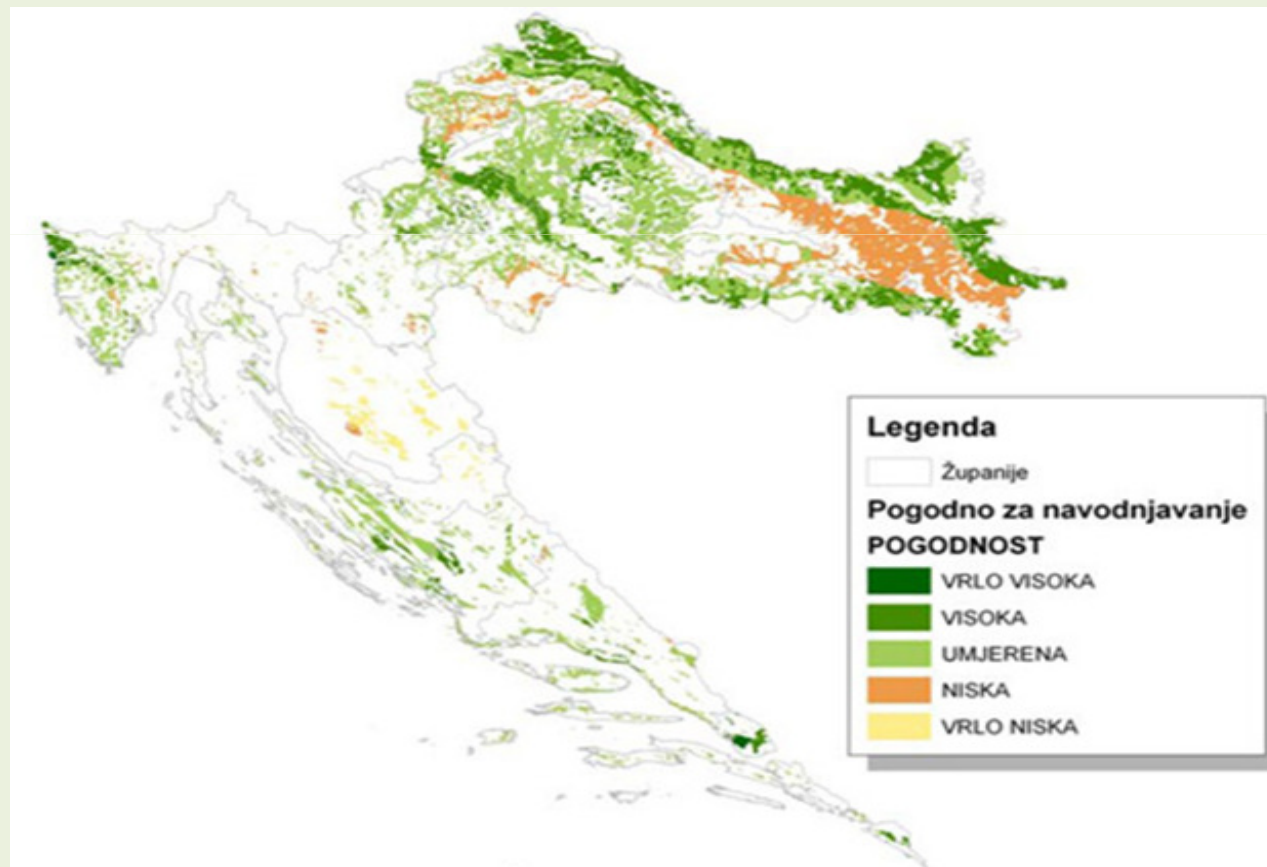
Financial distribution of investments in protection from adverse effects of waters in period 2013-2023



NAPNAV

Priority areas for irrigation identified (natural potentials and water deficiency).

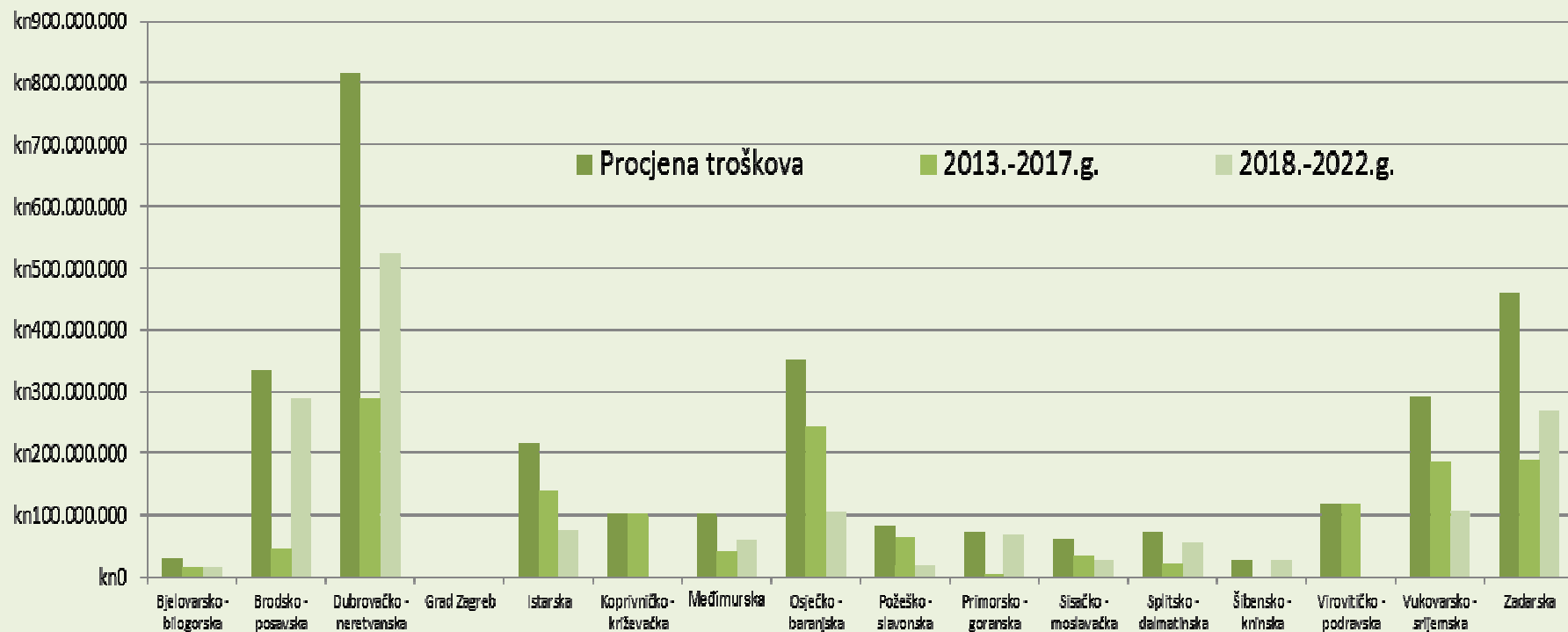
Irrigation Priority Area Map



Irrigation

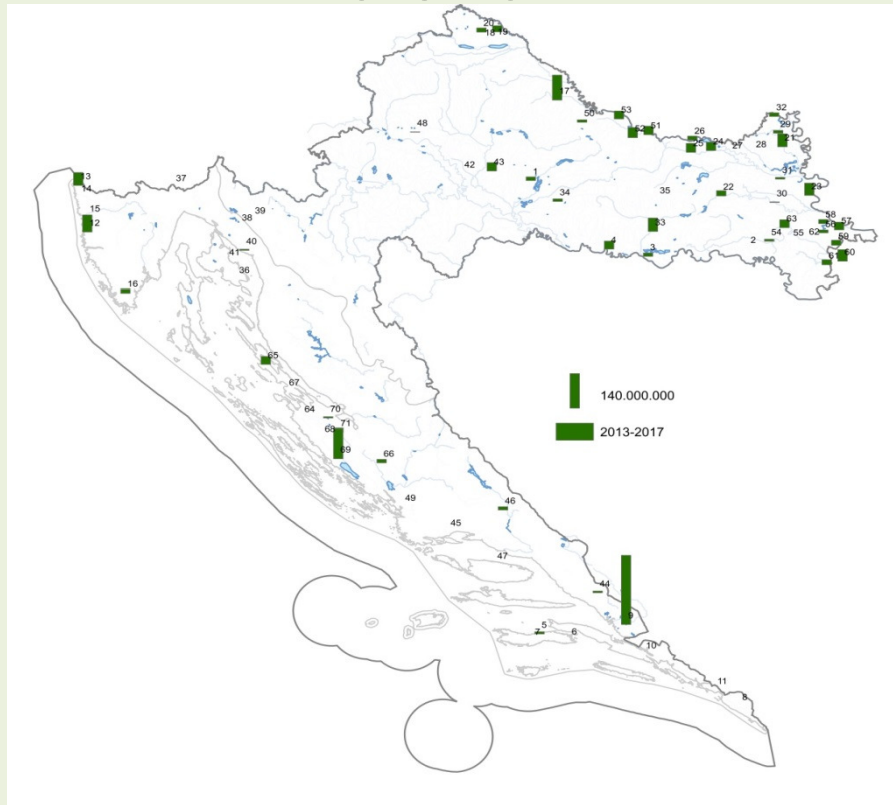
Two programme periods:

- ✓ 2013.- 2017.
- ✓ 2018.- 2022.

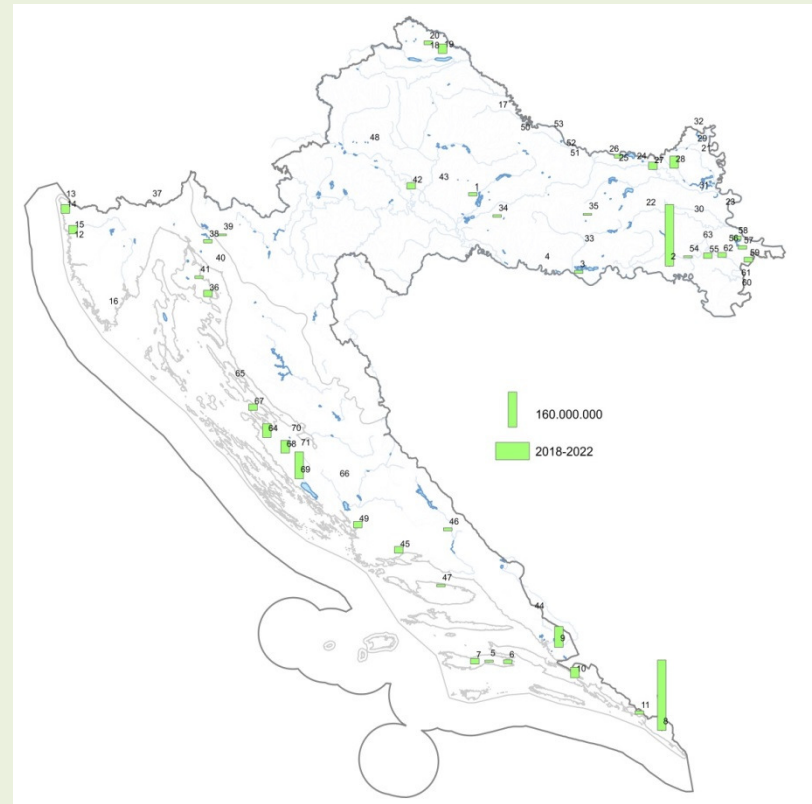


Project proposition - irrigation

2013-2022



2018-2022



- Analyses have shown that 484.026 ha are suitable for irrigation
- The goal is to irrigate 65.000 ha until the end of 2020.
- Funds required for the implementation of the NAPNAV will be provided from different sources:
 - National budget
 - ERDF
 - EAFRD

Thank you for your attention!

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