

# **Involvement of the network of public health institutions in managing consequences of floods in Serbia**

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# Organizational structure of Public Health in Serbia



PH network consists of 23 institutes of PH, with the National Institute of Public Health at the top

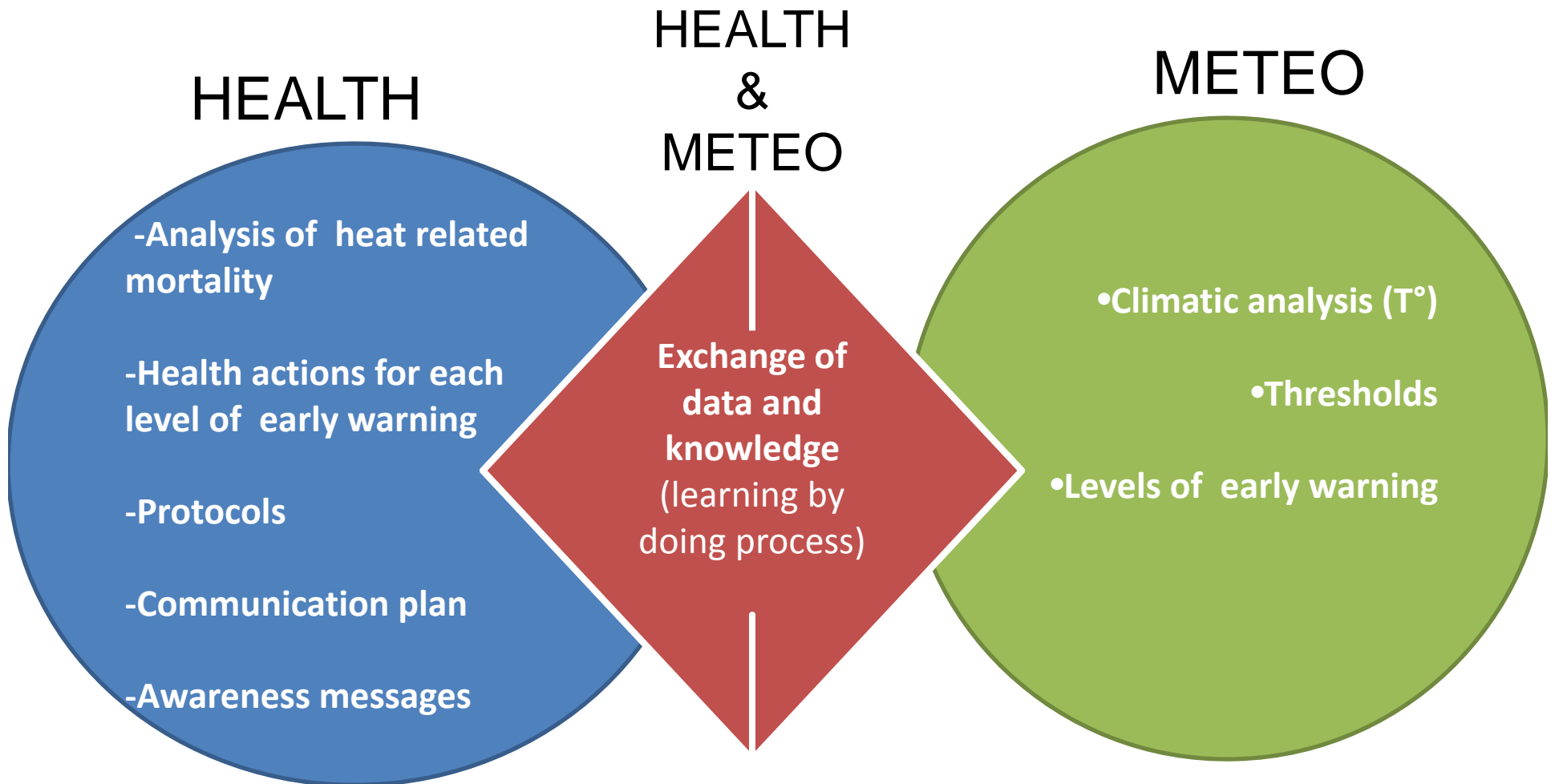
Key activities of the PH Network:

- Programmes for the MoH in epidemiology, hygiene and environmental health, microbiology, social medicine;
- Providing services for other legal entities

## **Catching up with the WHO activities in the field of climate change and health (before floods)**

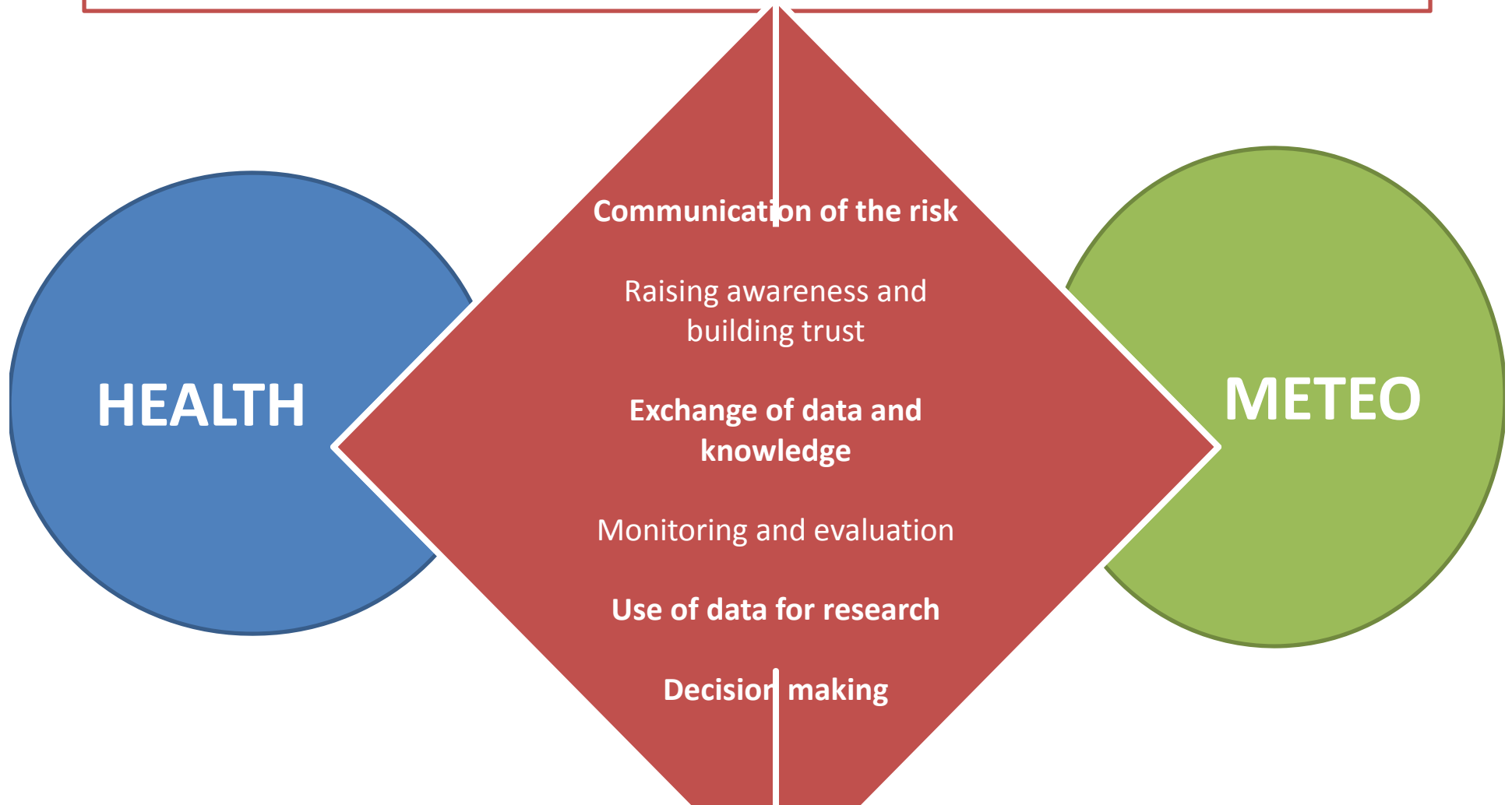
- As suggested by the WHO experts, IPHS has founded a WG with an assignment to formulate a draft of the Heat Health Action Plan, together with the experts from the National HM Service.
- WG has fulfilled this task, now waiting for the Ministry of Health to approve it.
- WG has formed a template for the input of health statistics data that are to be followed during the heat wave.
- A meteo-alarm has been established among 2 key national institutions: RHM Service and the IPHS, since May 1<sup>st</sup> 2014, 2 weeks before the floods.

# Development of early warning heat health system



Involvement of crisis management, social and educational sectors, municipalities, NGOs, etc. to develop of set of actions for the levels of early warning

# Advantages of the joint cooperation



The meteorological data is more useful if analyzed and interpreted jointly with the public health professionals

# **Public Health Response to floods in Serbia - undertaken steps -**

- National IPH – key role in organizing preventive and operational measures in those local IPHs that were most affected by the floods;
- Staff from the IPHs at non-affected areas were ordered to provide professional and physical help to IPHs caught by the disaster.
- An on-line monitoring-reporting communication line was established in between local IPHs and the NIPH, with a final report sent to the MoH, on daily basis.

## IPHS Guidelines for the public (WHO supported):

- safe handling of food and drinking water, for the displaced persons
- personal hygiene
- precaution measures to be undertaken upon the return to devastated homes
- anti-mosquito measures (WNV)
- Guidelines were distributed in the form of leaflets and through electronic media
- They were constantly repeated
- Red Cross of Serbia volunteers network

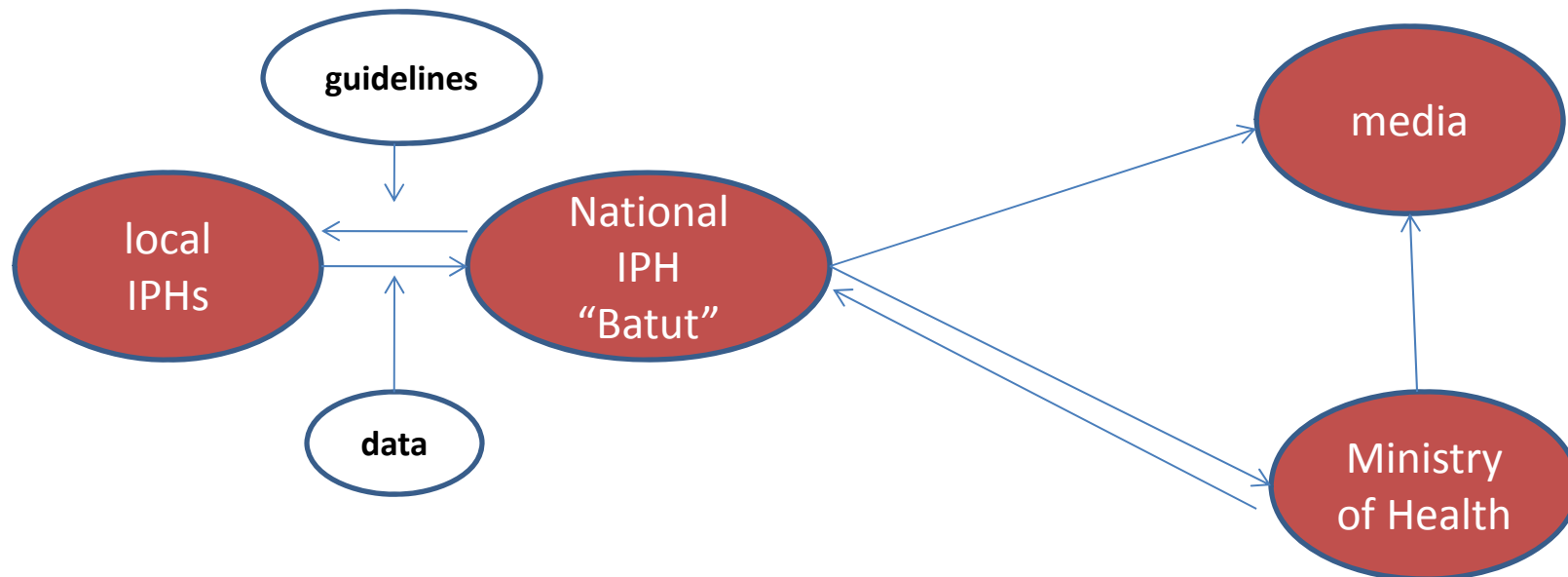
## **Issues followed-up in flood affected districts**

- Drinking water quality (local IPHs labs)
- Water supply disruptions
- ALERT system – cases of communicable diseases
- Epidemiological situation in the temporary shelters
- Vector-borne diseases
- Desinfection, desinsection, deratization (local IPHs), support to the affected areas



## Ctd.

- reports were sent twice a day from the local IPHs to the National IPH “Batut”
- data analysis and GIS mapping
- final version – for the MoH

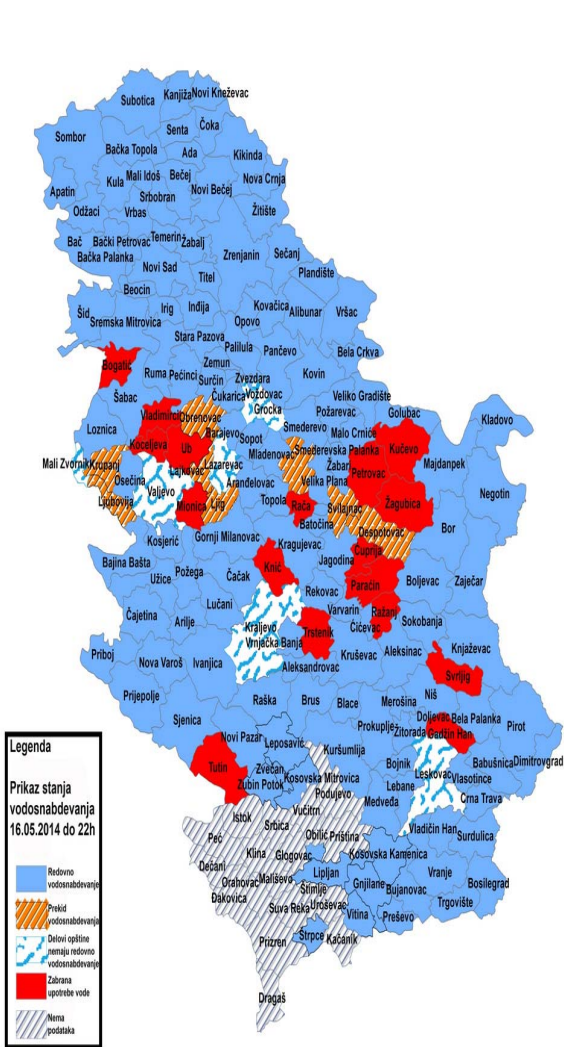


## Mapping water supply system status as:

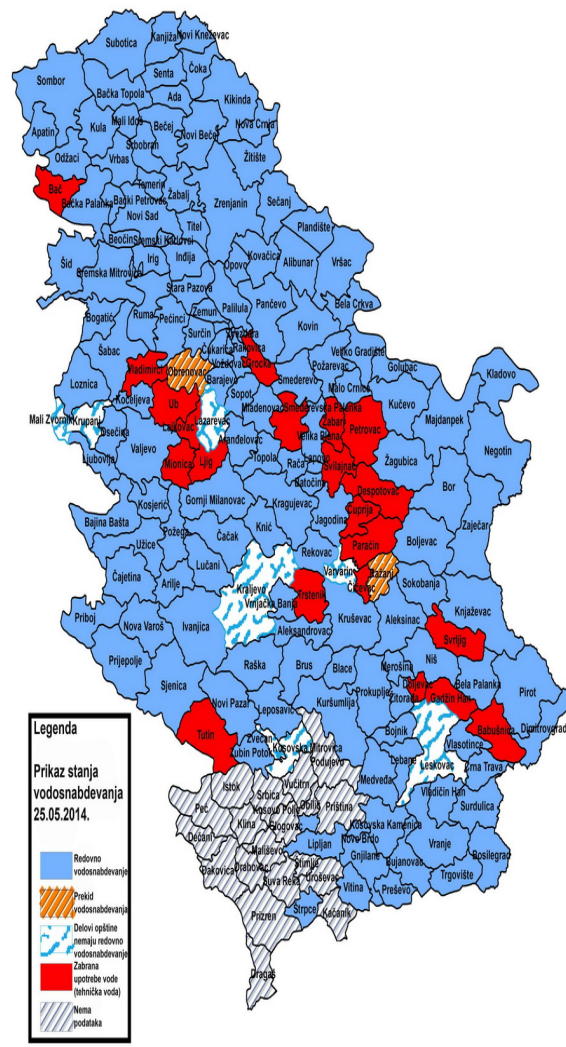
- regular
- disruption due to physical damage
- irregularities in watersupply dynamics
- public ban for the water use

Data were analyzed for the whole country  
and for the city of Belgrade

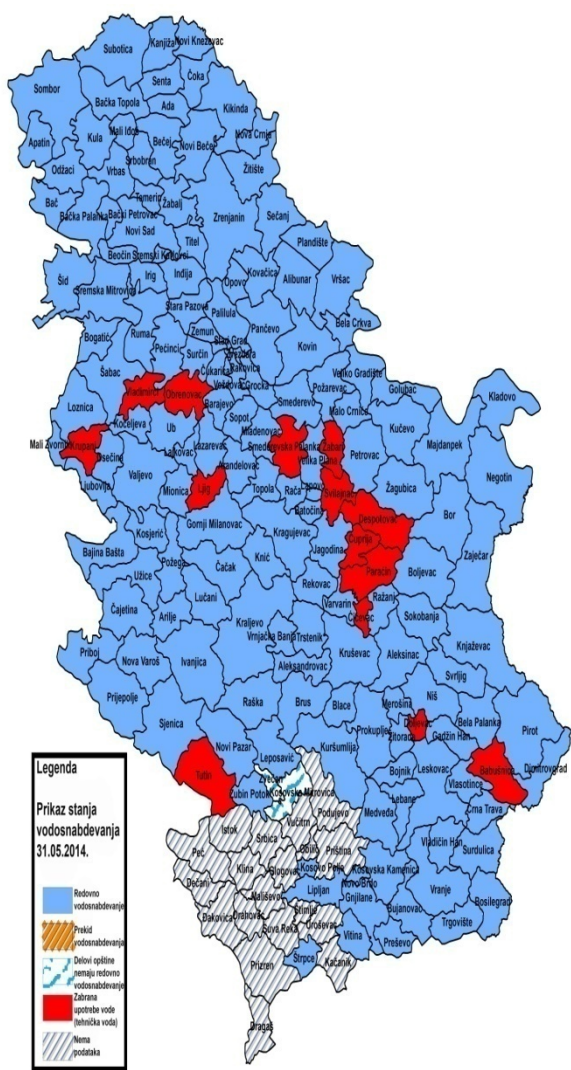
**Obrenovac** – Belgrade municipality



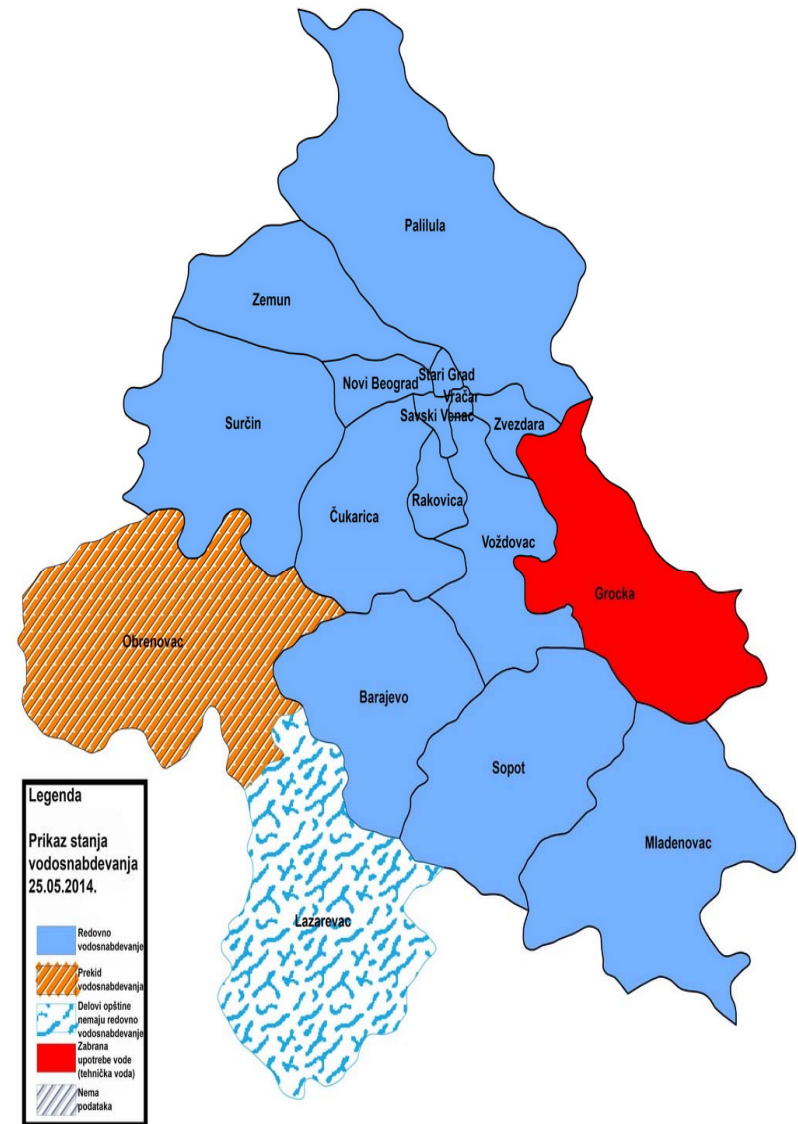
**16.05.2014.**



**25.05.2014.**

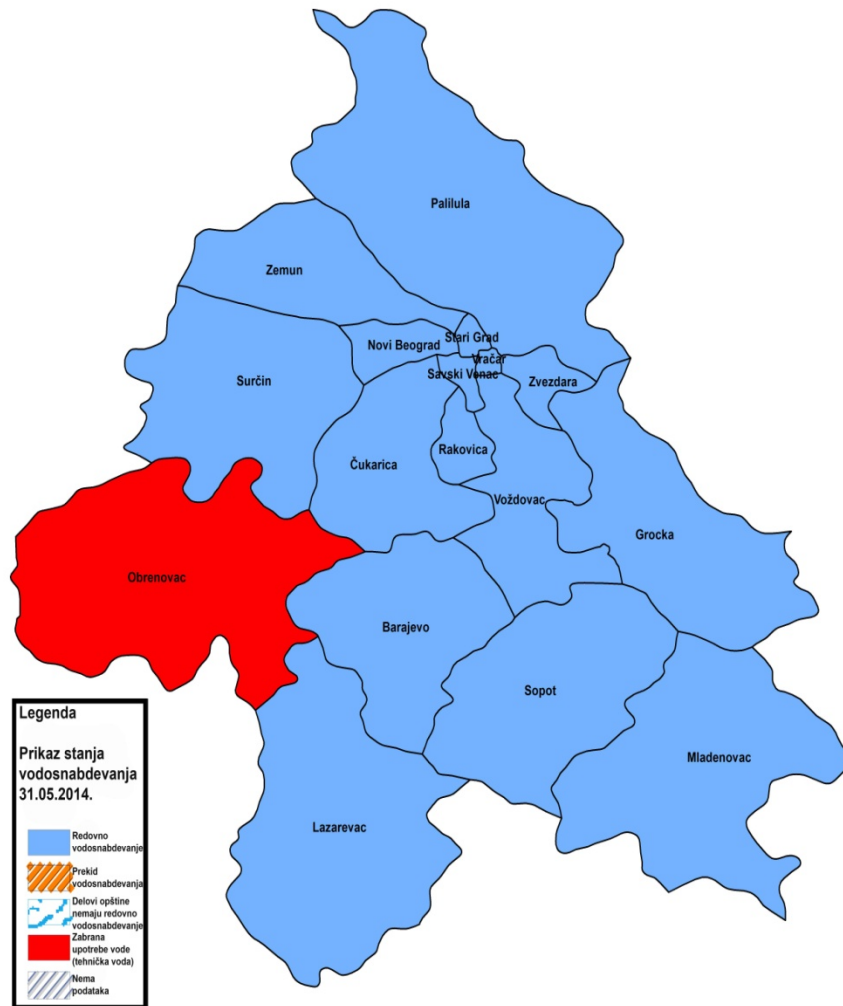


**31.05.2014.**



**Most affected municipalities of Belgrade City**

# Obrenovac – a dead town



- strict police control at the borders of the municipality
- total clean-up of the devastated property
- people left homeless
- only technical water in some parts
- others – no water supply
- total disruption of the disposal of sanitary waste water
- contents of pit latrines mixed with dug wells drinking water
- water still on the land
- risk of vector borne diseases

# Lessons learned

- Network of public health institutions demonstrated capability to cope with the emergency situation;
- Actions undertaken by the PH institutions, particularly NIPH, showed that their role has been, regrettably, excluded from the Law on Disaster Management (2009, 2011)
- Post-flooding period: key role of IPHs in preventing outbreaks of communicable diseases and vector-borne diseases

***Thanks for your attention!***