

Flood Risk Management

Region of Skadar lake and Bojana river

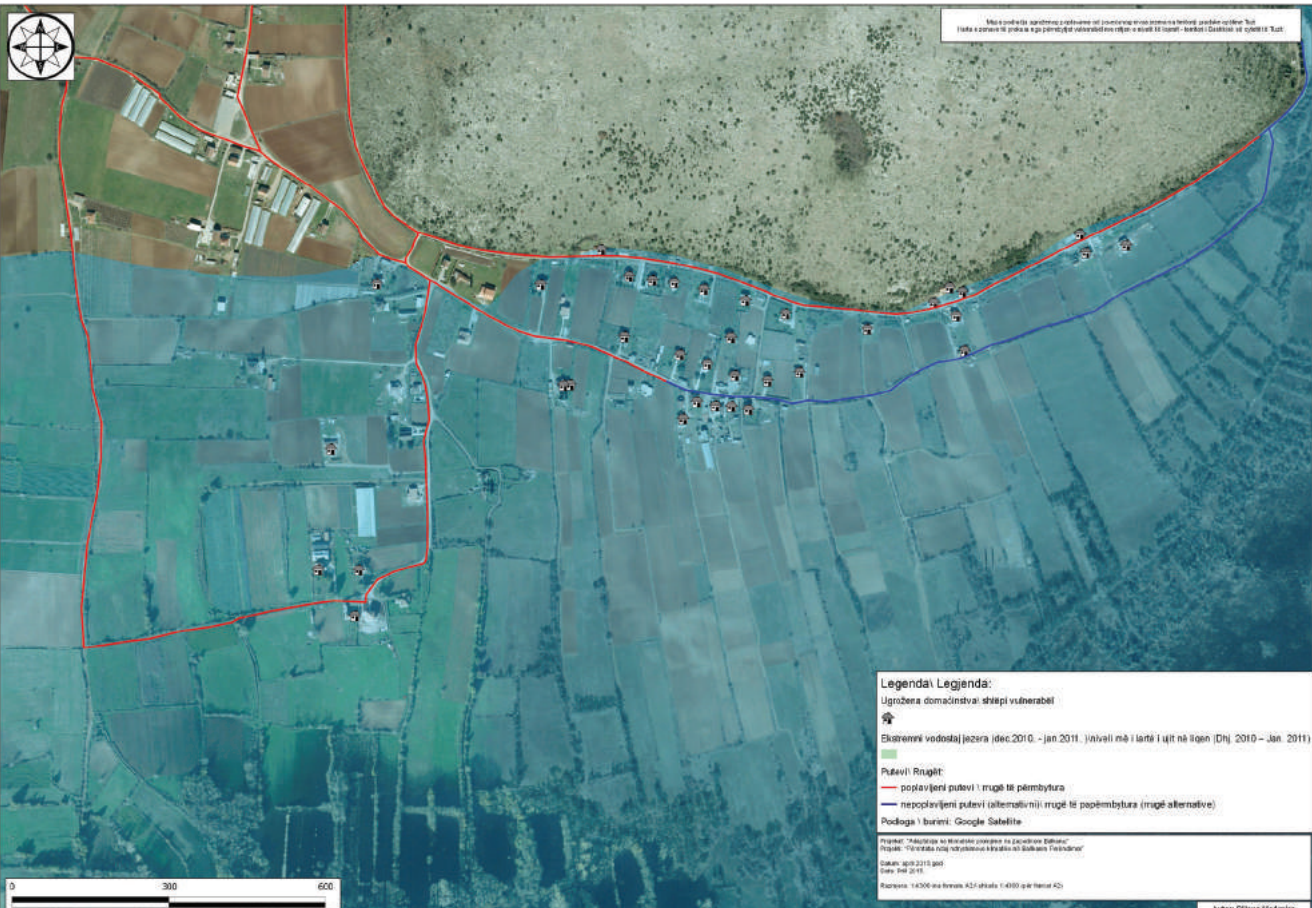
Public information



Golubovci and Tuzi



Mapa područja ugroženog poplavama od povećanja nivoa reke u toku poslednjeg leta. Ista oznaka se koristi za područje ugroženosti od poplava. Oznaka se koristi i za:



Legenda / Legenda:

Ugrožena domaćinstva / štetići / vulnerabilni



Ekstremni vodostaj jezera (dec 2010. - jan 2011. / nivani na lani i ujt na lani (Dij 2010 - Jan 2011)

Pukavi / Ruajt

poplavljeni putevi / ruajt te pempbytura

nepoplavljeni putevi / alternativni / ruajt te popembytura (ruajt alternativne)

Podloga / barim: Google Satellite

Projekt: "Analiza i kartiranje poplava na području Golubovci"

Podloga: "Google Satellite"

Datum: apr 2015 god

Skala: 1:4000

Ekstremni vodostaj jezera (dec 2010. - jan 2011. / nivani na lani i ujt na lani (Dij 2010 - Jan 2011)

Autor: Biljana Ploščica





Evakuacioni centar
(Kasarna u Golubovcima)

MAP and legend:

Ugrožena domaćinstva



Ekstremni vodostaj jezera (decembar 2010.god. - januar 2011. god)



Putevi:

— poplavljeni putevi

— nepoplavljeni putevi (alternativni)

Saobracajni objekti:

■ most

■ benzinska pumpa

Škola



Privredni, vanprivredni i kulturni objekti:

■ crkva

■ dom omladine

■ prodavnica

■ poslovno-stambeni objekat

■ turistički kompleks

Zdravstveni objekti



Telekomunikacioni repetitori



Trafostanice



Željeznička pruga



Podloga: Google Satellite

Projekat: "Adaptacija na klimatske promjene na zapadnom Balkanu"

Datum: april 2015.god.

Razmjera: 1:13 000

Everyone can reduce flood risk

Floods are one of the most common natural disasters in the region, causing considerable material damage, endangering safety and health of people and animals, environment and cultural and historical heritage. Floods can be at a local scale, but very often affect a number of municipalities and the entire regions. They usually cannot be prevented, but there are certain activities that a person can take that will prevent or reduce the effects caused by this natural disaster.

In the previous period (December 2010 and January 2011) there have been major floods in the area of Skadar Lake. Many infrastructural facilities have been damaged, a certain amount of livestock had perished and the overall damage was quite huge. We cannot any longer ask "others" to protect us, we have to act ourselves: and we can!

All citizens, all businesses, all farmers, all communes, all other institutions that act in the region have to contribute to FLOOD RISK MANAGEMENT (FRM). Here you find how.

Flood Risk in Golubovci (see Flood Risk Map)

The Flood risk map shows which areas and objects are potentially affected by different flood events. In Golubovci and Tuzi especially the following objects are at risk, if an extreme flood event occurs:

Affected areas, objects etc.	Golubovci	Tuzi
Number of persons affected by flood	2309	181
Number of children	487	63
Number of housing units	743	34
Number of stalls	402	28
Number of cows	471	
Number of sheep	295	
Number of schools	1 in the settlement Bijelo Polje	
Number of auxiliary facilities	457	

The flood risk maps of Golubovci and Tuzi were developed together with representatives of the Urban Municipality. You may find the detailed map and information how it was developed in the premises of the Urban Municipality Golubovci.

Flood Risk Management (FRM)

Good Flood Risk Management means:

- We know WHERE the water could flood the land.
- We know WHICH objects (houses, infrastructure, farms, animals ...) are at risk if a flood comes.
- We do not BUILD into areas at risk, or we take preventive measures.
- We get early INFORMATION about floods, and we can inform all our citizens, neighbours, children, old people, businesses ...
- We KNOW WHAT TO DO and where to go in a flood.
- We know what to protect, where to bring our valuables, where to bring our cattle etc.

The process follows the European Flood Directive (2007/60/EC). It shall reduce the flood risk for human health, the environment, cultural heritage and economic activity. FRM tackles all stages of floods (before, during, after floods) as well as the improvement of existing situations and prevention of new negative impacts.

FRM in the region of Skadar lake

Every municipality in the region of Skadar Lake has the Flood protection and rescue plan. The Plan informs about the risks of flooding and jointly identified measures for protection and prevention. The entire document for the Capital City of Podgorica is on the website:

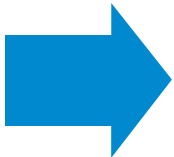
<http://www.podgorica.me/sadrzaj/plan-za-zastitu-i-spasavanje-od-poplava-za-teritoriju-glavnog-grada-podgorice>. For the municipalities of Bar and Ulcinj, as well as the Old Royal Capital of Cetinje, the plans can be found in municipal protection and rescue services.

In the process of creating plans for the affected municipalities, as well as maps of flooded areas, representatives of local self-governments, local protection and rescue services, as well as representatives of the Ministry of Internal Affairs - Directorate of Emergency Situations were all included. Digital maps of flooded areas include information on household members in the affected area, their housing units, livestock of the affected households, road and telecommunication infrastructure, health and other facilities, centers for evacuation, economic and non-economic entities that may be involved and so on. Any change in the number of members of your household or in livestock, should be reported to local self-government, in order to match the data in the plans with the real situation on the ground.

What can YOU do to reduce flood risk?

Government, businesses, communities and individual persons:

all have a role to play in preparing for and responding to a flood. By knowing what to do before, during and after a flood you can help reduce the effects on you, your family, home and business. The following list includes measures which are considered the most important before, during and after the flood. They give you ideas on how to prepare and how to react.



Please check what YOU can do. And prepare for it. Inform your family. Talk to your neighbors.

To prepare for a flood you should:

- make your evacuation plan and a list of things you need in order to protect yourself in case of flood event;
- get familiar with the history of floods in your area and their characteristics;
- find out escape routes and safe places for evacuation;
- not throw waste into rivers, streams and canals. If you notice waste, report it to the relevant waste disposal service;
- not block waterways due to accumulations in the summer period;
- not cover manholes for drainage of atmospheric water;
- insure your property against floods;
- if you keep animals, find out where are the safe places for their evacuation, i.e. prepare such places yourselves;
- provide a reserve of fodder for domestic animals and store them at higher elevations so that water would not endanger them.



In the immediate danger of flood:

- track forecasts and warnings of the Institute of Hydrometeorology and Seismology;
- do everything indicated in the evacuation plan;
- make sure that vehicles and agricultural machinery is parked in a way the road - access to your apartment or house is always free for rescue vehicles;
- meet the neighbors with imminent danger and offer help if possible;
- hold open doors of ancillary facilities, so that farm animals could go out themselves in case of emergency, and not stay stuck;
- do not forget your pets and include them into your evacuation plan.

How to behave during a flood?

If you are at home:

- call emergency numbers, depending on the situation and needs;
- get information about all events via radio, television and internet;
- if you need to leave your home, turn off / close the water / electricity at main switch. These installations may be damaged during the floods. Even if there is no electricity in your home, turn off the electricity at the main switch;
- do not touch electrical equipment if you are wet or standing in water;
- secure your home. If you have time, move essential items to the upper floor;
- do not forget to bring your personal documents and necessary medication packed in waterproof case. They can be of crucial importance, since it is possible that you will be away from your home for a longer period of time;
- wear clothes and shoes that protect from water that may be contaminated;
- take the prepared necessary things and if possible put them away in a safe place;
- if you are unable to leave your home go to the top floor of the house / building and wait for the rescue teams to come;
- cooperate with rescue teams during the evacuation and rescue;
- do not use the telephone unless it is really necessary. This way you will avoid the overload of telephone networks and lines which are necessary for organization of rescue and evacuation;

- drinking water may be polluted in flooded areas, and that is why you should not drink the tap water until you make sure that it is safe for use. Until then you should drink boiled, disinfected or bottled water.
- If you live in the countryside and keep domestic animals, evacuate them to safer, predetermined locations and provide them with food and water;
- If it happens that a large water torrent carries the animals away, do not try to save them, because your lives may be at stake;

If you are away from home

- do not, for any reason, cross the bridge or go near the rivers, torrents, slopes, etc. Carefully follow the sign posts and all other information published by the competent institutions.
- Do not go through flooded streets, underpasses or underground passages. The water may be deeper and faster than it looks, and the water could destroy your car;
- if you drive do not block the streets and roads. They are essential for the smooth functioning of rescue teams;
- if you are stranded while driving a car, stay in it;
- pay attention to the instructions adopted by the relevant institutions. In case of flood events they are in charge of management and coordination of work of the rescue teams.



How to proceed after the flood?

- be sure before entering your property that it is safe to enter, as well as that the water fell below the level of the facility;
- do not use tap water until the competent institution confirms the water potability and do not take food that has been exposed to flood. Water and food may contain pathogenic microorganisms or may be polluted;
- avoid springs, since water may be contaminated by oil, gasoline or untreated wastewater;
- do not use electrical appliances until they are verified by an electrician;
- do not allow children to play in or near flood zones;
- perform disinfection, disinsection and deration of all surfaces that were exposed to flood. Insects, harmful substances, pathogens, etc., may be present therein;
- be aware of dangers in the area where the flood wave decreased. The roads may be damaged and could collapse under the weight of the car. Avoid areas that are assessed to be at risk for landslides and mudslides;
- stay away from downed power lines and report their location to the electrical distribution service;
- stay away from buildings that are surrounded by flood waters. If you must go, be careful, there may be some hidden damages, particularly in foundations;
- return home only when authorities indicate that it is safe do so;
- If you live in the countryside and keep farm animals, check the status of your livestock, search the expected locations where animals may be and take them back home;
- If you find dead animals, collect them to one location and be sure to notify the competent authorities.



**Be aware of the situation that may befall us - there is no place for fear and panic, it is necessary to properly react!
Flood protection is not just a concern of the state and competent services, but also us individuals!**

Emergency Flood Plan

It is important to be prepared in the event of a flood. Therefore Emergency flood plans are developed for your household and business. It is important to get to know your local area, particularly if there is a history of flooding and you should also be aware of the specific flood risk to your property. Regardless of whether you're planning for home or business the following things should be considered.

Evacuation route and emergency relief centre	Record details given to you from the Municipal protection and rescue team about local flood plans, problem areas and evacuation routes and Emergency Relief centres. To find more details visit the website of the local self-government or call duty service.
Locate the closest safe (high) ground	Locate an area of safe (high) ground where it would be safe to move your vehicles and equipment to.
Furniture	Plan which items to raise if water threatens your home - furniture, clothing, valuables.
Hazardous substances	Make a list of dangerous items such as chemicals and poisons that you have which will need to be elevated or waterproofed.
Power, water, gas	Record where your main switches for water, gas and electricity are so that they can be switched off if necessary.
Insurance	Check if there is an insurance that can cover your flood damage.
Emergency Kit	Prepare an Emergency Flood Kit.
Communication	Make each member of your family aware of your emergency plan and emergency kit, and where they are located. Arrange where you would meet or how to contact each other if you were separated in an emergency.



Emergency Kit ¹



Children's essentials	Make a list of the vital items you will need. For example, milk, baby food, sterilized bottles and spoons, nappies and wipes, spare clothing, comforter, favourite toy.
Pets	Make a list of the vital items you will need for your pet. Identify where the closest animal shelters are in case you can't take your pet into an emergency relief centre.
General items	<ul style="list-style-type: none"> • Waterproof bags • List of key personal documents you will need including insurance details and personal identification • Battery operated torch and radio, spare batteries • Mobile phone • First aid kit and blankets • Canned food, can opener, fresh water and utensils • Waterproof clothing (including rubber gloves, rubber boots)
Medication	Any family medication you may need, a list of the medication names and the contact details of your local GP.
Sandbags and Sand	Have a few unfilled sandbags ready to prepare to block doorways, drains and toilets. (Sandbags need to be filled with dry sand or soil). Find out who supplies you with empty sandbags.



¹ Emergency kit translated into Montenegrin: List of necessary things in case of flood event



Flood emergency information

Emergency numbers:

Mol – Directorate for emergency situations	112
Police administration	122
Protection and rescue service	123
Institute for Emergency Medical Services	124

Your local contact persons:

Bar

- Municipal protection and rescue team Tel.: **030 301 403**, opstinabar@bar.me
- Chief of the Protection and rescue service Velizar Čadenović Tel.: **067 247 287**
- Hot line **067 9215202, 123** - E-mail: szb@t-com.me

Cetinje

- Municipal protection and rescue team Tel: **041 231 755**
- Chief of the Protection and rescue service Rajko Janković Tel.: **067 688 188**
- Hot line 123 - E-mail: sluzba.zastite@cetinje.me

Podgorica

- Municipal protection and rescue team Tel.: **020 658 151; 658 155**
- Chief of the Protection and rescue service
- Hot lines Tel.: **020-651-151 i 658-152** - E-mail: sluzba.zastite@podgorica.me

Ulcinj

- Municipal protection and rescue team Tel.: **030 412 117**, kabinet@ul-gov.me
- Chief of the Protection and rescue service Fljamur Selović Tel.: **069 541 444**
- Hot lines Tel.: **030 412 490, 123** - E-mail: sluzbazastite.ul@hotmail.com

Project partners:

Protection and rescue service
Podgorica



www.podgorica.me

Protection and rescue service
Bar



Ministry of Interior
Directorate for emergency situations



www.mup.gov.me

Protection and rescue service
Ulcinj



Protection and rescue service
Cetinje

Implementirali:

Deutsche Gesellschaft für Internationale Zusammenarbeit – GIZ
Menadžment projekta Adaptacije na klimatske promjene na Zapadnom
Balkanu (Climate Change Adaptation in Western Balkans):
www.giz.de



INFRASTRUKTUR & UMWELT
Međunarodni konsultant; www.iu-info.de



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