

# The City of Helsinki Instructions on Prevention and Control of Floods

Protection of residents and property in flood hazard areas in Helsinki



During the past ten years, floods causing great damage have occurred clearly more frequently than before in Central Europe. We in Finland have escaped that so far. However, we cannot rule out the possibility of a major flood occurring here, too. A general estimate has it that the climate change would increase floods also in Finland. This general guide gives advice of how to prepare for different floods.

### Who is responsible?

# The responsibility and action of the owner and the occupant

The owner, the occupant (e.g. a tenant) and an operator of a property/ building are responsible for the protection of a property/building and the preparation for a flood for their part. These parties shall prevent the occurrence of hazardous situations resulting from a flood as well as prepare for protecting persons, belongings and the environment.

The tenants' responsibility is to protect themselves and their possessions through their own action. Everybody is obligated to warn about a flood or a threat thereof those in danger, raise alarm and start rescue operations according to their own capabilities.

# The responsibility and actions of rescue authorities

The Rescue Department is responsible for carrying out the duties related to rescue operations when a disaster or a threat thereof requires urgent action to protect and save human lives, health, possessions or the environment.

### The responsibilities and actions of the ELY centres

It is the responsibility of Uusimaa Province Centre for Economic Development, Transport and the Environment (ELY centre) to monitor the development of a flood situation as well as to inform e.g. rescue authorities and other city organizations and citizens about a flood risk. In addition to that, the ELY centre gives expert advice in preventing floods.

### The responsibilities and actions of the City

The City of Helsinki shall ensure that in a flood situation, the City's own functions continue and e.g. health stations, day care centres, schools and hospitals operate normally. The City also sees to water management and the protection of the streets, public spaces and the City's property.

# SEA WATER FLOOD AND MAJOR WATER SYSTEM FLOODS

### Precautions

A rescue plan shall be prepared for residential of at least three apartments and for public spaces and workplace premises. The rescue plan is the responsibility of the possessor of the building in question, together with the operators concerned when necessary. The rescue plan shall contain an account of the instructions given to residents or other persons concerned for the prevention of accidents as well as for action to be taken in danger situations. This directive can be attached to the rescue plan of a building.

### Contemplate in advance

- how to protect buildings and other property
- what are the most critical spots where water can enter the building
- can a flood be prevented by means of a local flood embankment
- the availability of a pump to remove water
- · where can valuable property be relocated for safekeeping
- where to park your car so that it will not obstruct rescue operations
- what electric equipment are exposed to floods and how to protect them
- the route leading away from the flood area

### Find out

- what the insurance coverage in flood situations is
- in housing companies, the person responsible for the property in a flood situation (e.g. the person responsible for civil defence)
- the spaces below the backwater height of the sewer connection and their protection

### Secure and acquire

- secure the condition of the sewers and install a non-return valve in the sewers, to prevent rising waters from entering the building
- ensure that the water discharge paths (ditches, sewers, gutter inlets) are in working condition and cleanse them regularly

- prepare for power cuts with e.g. battery-driven torches and a radio, and take other possible action to obtain heat, food, water etc.
- make sure that you are able to follow the instructions given in the media
- have some plastic ready at hand for covering the floor drains as well as enough weights on top of them
- get some sandbags, for instance, and some plastic or movable flood walls and flood barriers and sealant suitable for windows and doors

### Compensation practices

• It is possible to obtain flood compensation from an insurance company provided that the building in question is insured against floods. Further information: insurance companies.

### **Immediate preparation**

- Install flood protection structures, secure doors and windows and other low-situated openings, and where necessary, insulate the whole building.
- Secure sewers and the functionality of the rain water system.
- Relocate your valuables for safekeeping.
- Move chemicals, oils and other hazardous substances from under the flood.
- Place plastic weights on top of floor drains.
- If needed, get a pump to remove water and possibly also an aggregate.
- Remove or protect electric appliances against water (e.g. an oil burner).
- Cut off domestic water supply.
- If needed, cut off electricity.
- If needed, be prepared to relocate people with reduced mobility, children, elderly etc. from the flood area.
- Ensure the safety of domestic animals and pets.
- Observe the media for flood information.

### Action in a flood situation

- Follow all advice, alarms and instructions.
- See to the safety of people, domestic animals and pets, help others like people with reduced mobility, children, elderly people.
- Flood water may contain waste water or other harmful substances, so staying in flood water must be avoided.
- Do not use elevators.
- Do not use electric appliances.
- Do not drive on a water covered road or via underpasses.
- Do not walk in flood water in an area unknown to you.
- In immediate danger, call 112, tell your exact location and ask for help. The Emergency Response Centre will give further instructions.

# 

## Eollow all advice alarms and

### The backwash of a flood

- Check the damage to the building and other property and contact your insurance company where necessary.
- Dispose of spoiled foodstuffs in an appropriate manner.
- Do not use electric appliances before they have been inspected, also clean up the premises, remove sodden and waterlogged articles (e.g. textiles) from the living area and start to dry premises and structures.

# RAIN WATER FLOODS CAUSED BY HEAVY RAINS AND MELTING SNOW

- Act as in sea water flood situations where applicable or in a major water system flood, to protect persons and property.
- Find out in advance where the rain waters and melting snow waters accumulate on your property and whether such waters may cause a threat under heavy rains.
- Ensure the functionality of gutter inlets and sewers and install nonreturn valves in the sewers where necessary.
- Check the functionality of the drain system.
- Find out how waters accumulating on your property and in the building can be removed.
- Join forces with your neighbours to fix up the ditches between your properties to allow water to flow off along the ditches in case the street inlets fill up and do not work.
- Do not block or pipe the bordering ditches, for they are important water ways in a flood situation.
- Block access of rain waters from the street to your property. Consult the Public Works Department.
- Do not direct rain waters from your property to the neighbour's without an authorization and a plan.
- Find out in advance the party responsible for the maintenance of the property.
- Do not place snow on sewers.

Flooded Market Square in 2005.

### Urban Survey Map on the Altitude Zones on the shores in Helsinki

The map presents the estimated flood areas for floods recurring 1/50 years (bright blue areas) and 1/250 years (bright green areas in addition to those aforementioned) in the average. To date, the biggest measured flood height in Helsinki is 170 cm (in the N2000 altitude system, January 2005). The City has used the N2000 altitude system since December 2012. The difference between the height according to the NN system and the height according to the N2000 system is +30.5 cm in Helsinki.



Further information and the instructions on prevention and control of floods are to be found at www.hel.fi/tulvaohje

### Ta kontakt

Räddningsverket	112 (nödnummer) (09) 310 30150	livsfara, akut nödläge, akut pumpningsbehov, skydd för stort område, evakueringsbehov, flyttbara skyddskonstruktioner
Byggnadskontoret	(09) 310 1661	översvämningar på gator, ras, broar, tunnlar, översvämmade bäckar, översvämningsskydd i allmänna områden
HRM/vattenförsörjning	(09) 1561 3000 (felanmälan)	översvämmade avlopp, överloppsvatten
Byggnadstillsynsverket	(09) 310 2611	beredskap för översvämningar på tomter och i bygglov, ledning av dag- vatten på tomter
Miljöcentralen	(09) 310 1635	kemikalier, avloppsvatten och andra skadliga ämnen i översvämnings- vatten, miljörisker, provtagning
Stadsplaneringskontoret	(09) 310 1673	översvämningsskydd vid planläggning
Fastighetskontoret, lokalcentralen Fastighetskontoret, tomtavdelningen	(09) 310 40301 (09) 310 36443	byggnader i stadens ägo tomter i stadens ägo
Fastighetskontoret, växeln	(09) 310 1671	
ldrottsverket	(09) 310 8771	småbåtshamnar, idrottsplatser, badstränder, holmar
Närings-, trafik- och miljö- centralen i Nyland	0295 021 000	allmän beredskap för översvämningar, information om hotande över- svämningar

All SIS

Utgivare: Helsingfors stad 2013 Foto på framsidan: Pekka Kansanen • Layout: Marjo Kosonen • Tryckeri: Star-Offset 7/2013