Bulgaria floods: At least 12 killed in Varna and Dobrich

At least 12 people have died and several are missing after torrential rain and heavy floods hit eastern Bulgaria, officials say.

Floodwaters in the Black Sea port city of Varna surged up to 1m (3.2ft). Many residents had to be rescued as cars were swept away. Hundreds have been left without electricity or food.

There have been hailstorms and heavy rain in several parts of Bulgaria in recent days. Forecasts say the extreme weather is set to continue.

Ten people died in Varna, including two children. There were also at least another two deaths reported a few miles north in Dobrich, where electricity was down and water was said to be flowing through the streets.

Forecasters said that the equivalent of a month’s rain fell in the regions of Varna and Burgas over the past 24 hours.
Positioning of Asparuhovo at the bottom of the hills

Stormwater catchment area for both gullies
CLIMATE CHANGE

DRYER SUMMERS ↑

BUT

HEAVIER RAIN ↓
Current issues between Roma & Ethnic Bulgarians

Roma

TURKISH GYPSIES
POVERTY
MUSLIM

Ethnic Bulgarians

UNEMPLOYMENT
THEFT

ORTHODOX/ATHEISM

Design goal: establishing first actual contact by seducing Roma out of their ghettos and to create interfaces in the daily lives.
--West gully--

~ Situated in gypsy neighborhood
~ Narrow streets, no space for gully
~ Difficult socially isolated community

Gully intervention would mean:

~ Too handle the rainwater, an underground rainwater system has to be built

or

~ A spatial system can be developed but houses have to be demolished

--East gully--

~ Situated in a regular neighborhood
~ Broad streets, enough space for gully
~ Socially diverse
~ Center of Asparuhovo

Gully intervention would mean:

~ Adapting the watersystem to a sufficient system, but also possibilities for other interventions in combination with the watersystem

Conclusion

~ The two gullies are two totally different systems with different assignments, spatial layouts and social conditions
~ There are no realistic possibilities in creating one united system

>> I will make a design for the east gully, because of the more interesting possibilities
How to develop a *spatial green-blue system* for Asparuhovo, that takes into account the *social-economic conditions* and the *cultural identity*, and simultaneously introduces an *attractive new urban landscape*?
# 1 WATER ASPECT
#2 SOCIAL ASPECT

#3 CONNECTIVITY ASPECT
#4 TOURISM ASPECT
#5 PUBLIC SPACE ASPECT
#6 ARCHITECTURAL ASPECT
Ferry connection
1. Asparuhovo
2. Varna Center
3. Primorski Park
4. St. Konstantin (tourist area)
0. Galata
F. Forest
Introduction: The vision of Varna in 2022

- Varna’s inhabitants benefit fully from its natural richness
- Varna’s hotels are fully booked
- Active public/private cooperation that keeps innovating the public area
- Lively waterfront (playing, jogging, eating, fishing, shopping, boating)
- Varna’s bathing water are clean
- Varna is safe from flooding and much greener
unsustainable tourism
aim on different tourist
a. playgrounds  
b. squares  
c. unused public space  
d. sporting facilities  
e. designated park space  

PUBLIC SPACE IN ASPARUHOVO
#Gray architecture
Pers. 1. Man, 50 yr., unemployed, Roma
Goes to mosque, strolls over Market and goes home again.

Pers. 2. Man, 55 yr., unemployed, ethnic Bulgarian
Goes to the park to walk the dog and relax

Pers. 3. Woman, 30 yr., working, ethnic Bulgarian
two children (6 & 4 years)
Brings the kids to school, takes the bus to her job in Varna.
On the way back, buys some groceries at the market and supermarket

Pers. 4. Boy, 14 yr., does not go to school, Roma
Goes to mosque with parents, sees peers in age, joins them to the skatepark

Pers. 5. Woman, working, 40 yr., ethnic Bulgarian
Goes to the saturday market, and strolls through the park.

Pers. 6. Man, 47 yr., working in new touristic area at end of gully
Goes to mosque, along the gully to his work, on the way back to the market

Pers. 7. Woman, 56 yr., Roma
Goes to mosque, and afterwards sells her merchandise on the market
Expressionist Expansion along gully
The connector

- Periploca
- Cornus (Dogwoods)
- Rhamnus (Buckthorn)
- Gray Forest Soil
CURRENT SITUATION

HEAVY RAIN

DRY PERIOD

FUTURE SITUATION

BUFFER

CONSTANT FLOW OF WATER
Central square
Analysis Center Asparuhovo
New design of square:

- opened up to neighborhood
- organized shops/stalls
- has a 19-6-2014 monument
- is in line with both gully and main street
- creates a place for gathering
- has terraces integrated in gully
- is a concrete interruption in planted gully
- supermarket under the square
Roma safezone
# School + mosque
# Social control
# Determined place of selfexpression
# Neutral on the outside
FACTS & STATS

1959272 m² catchment area
2 l/day average rainfall in Bulgaria

reservoir contains 120,415,000 l

it takes 30 days to fill the reservoir with the average amount of rain (when dam is closed)

24,483 residents in Asparuhovo
average daily use of water in Bulgaria is 341 l per day

40 l/s in gully could stream through gully all year round
or, when needed, and another system is implemented,

the reservoir contains for 14.4 days of water for the whole of Asparuhovo with normal water use
Riparian zone around lake
thanks for listening