Research Doc

Madrid is flooded.

Duality

Cities are built on water. An element essential to life that allow to live and survive. According to the United Nations : «Cities cannot be sustainable without ensuring reliable access to safe drinking water». That's actually why Madrid is where it is now, as many other cities in the world. Indeed the moorish made a fortified city on this hill because of a presence of water. The original name of Madrid , Mayrit means «source» and «river».

Ironnically, Madrid is no longer a city of water. In deficit of rain for now three years. The water reserves of the city are as low as ever. When we were in Madrid it was the first time it rained in six months. The river, even if normally there is not a big stream of water, was ridiculously low.

If the situation keeps on evolving in such a way, the sustainability of the city won't be working anymore. Its inhabitants won't be able to survive without water that wil grow more and more expensive and people will move somewhere else until the city will be owned by a few rich people and high peak of criminality will appear. Madrid won't be a safe and healthy city anymore, it will be seen as dying to the rest of the world.

I started to think about the relationship between city and water. How one is so dependant from the other one. How it can't survive without it. It made me think about the extrema of this duality. What if Madrid is completely overwhelmed with water? What would happen to the city itself and his inhabitants?

Madrid being the second heighest capital of Europe (by elevation). It makes the city very unlikely to be victim of floods.
So I found a possible scenario where it could happen. Let's assume that the digue of the water reserve of Madrid, located uphill, breaks down while its reserve is at the fullest (due to technical problem, human error or even terrorist attack). The area where the circle is, located downhill Madrid, will be in that case flooded.

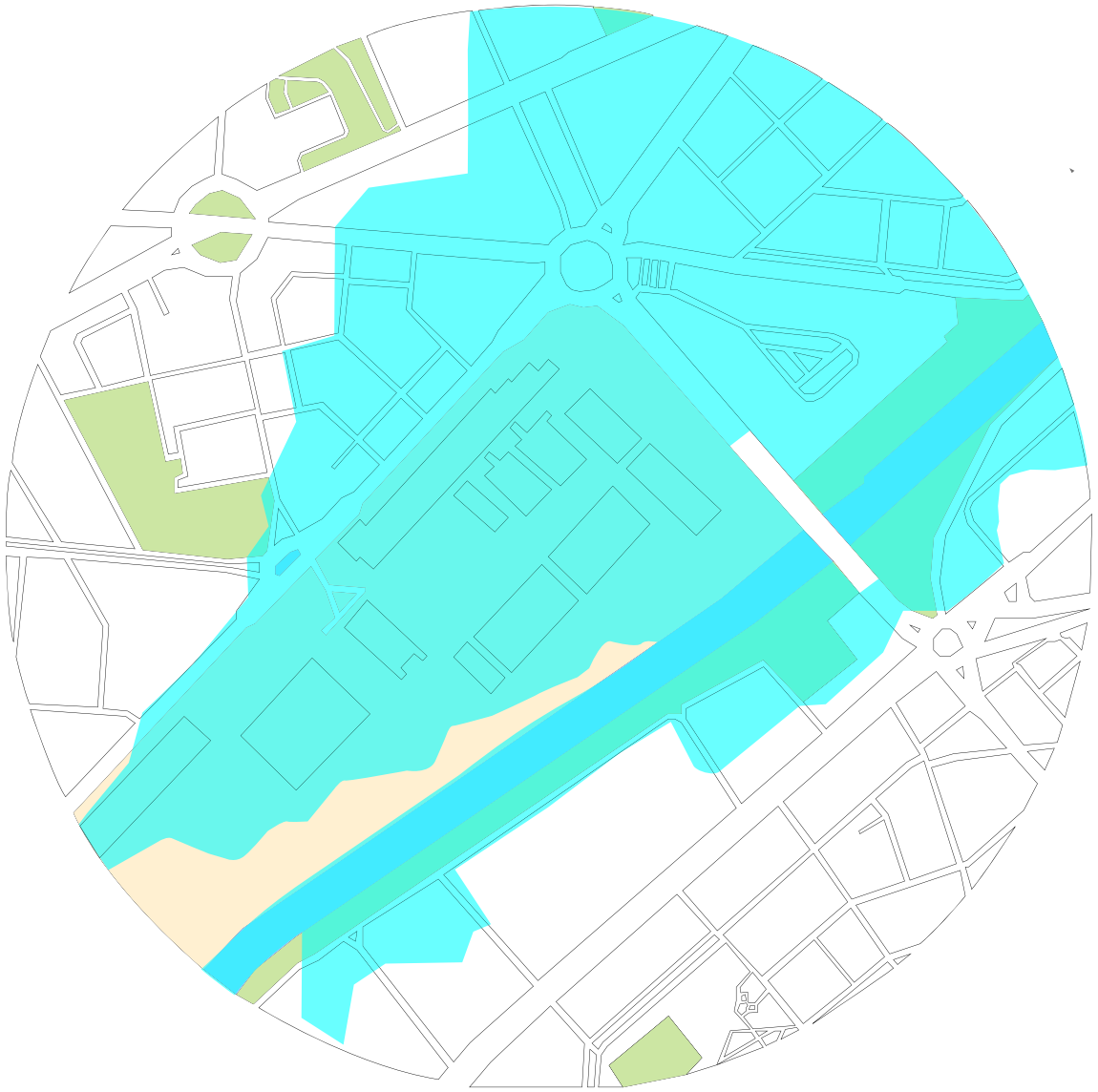
In 1957, Roland Barthes publishes the book “mythologies” where he makes an analysis of some myths of his time using semiotics. In this book, one of my favourite, my attention got caught on a specific chapter. “Paris has not been flooded” : in this essay he comments the major floods that happened in Paris in 1955 but he doesn’t make an analysis of all the bad things that go with floods. He instead focused on the other side of the floods. How people react and live through it.

I found that thinking very strange and as always the writer surprised me the more I was reading this essay.

MYTHOLOGIES

BARTHES

SEUIL



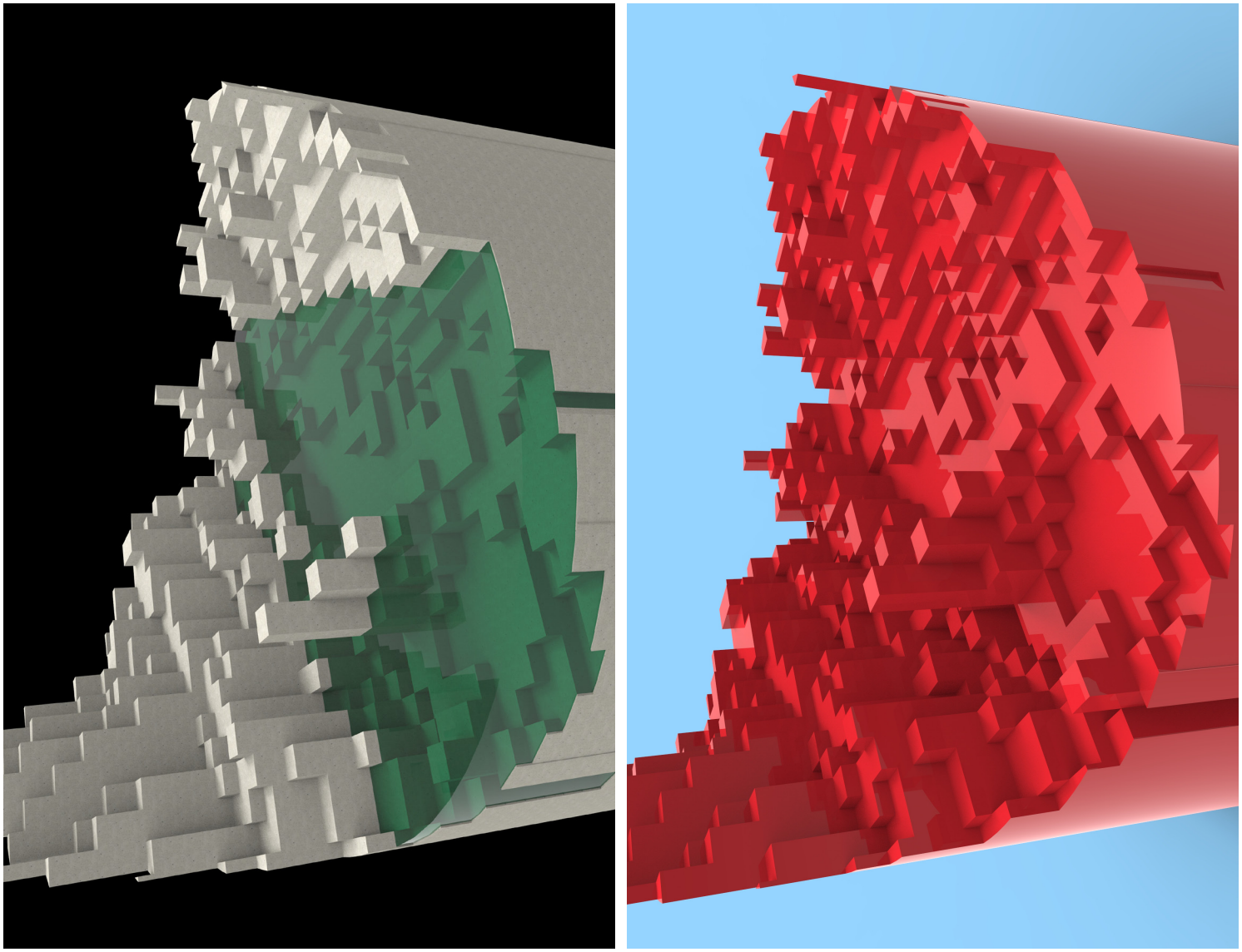
Flood map

The circle located between Arganzuela and Usera is in one of the lowest part of the city. Acording to my calculation if the 45hm3 of water are spread over the city, the circle will be overwhelmed by 5,14m of water (more or less). Which set the limit of the flooding to an altitude of 572,34m.

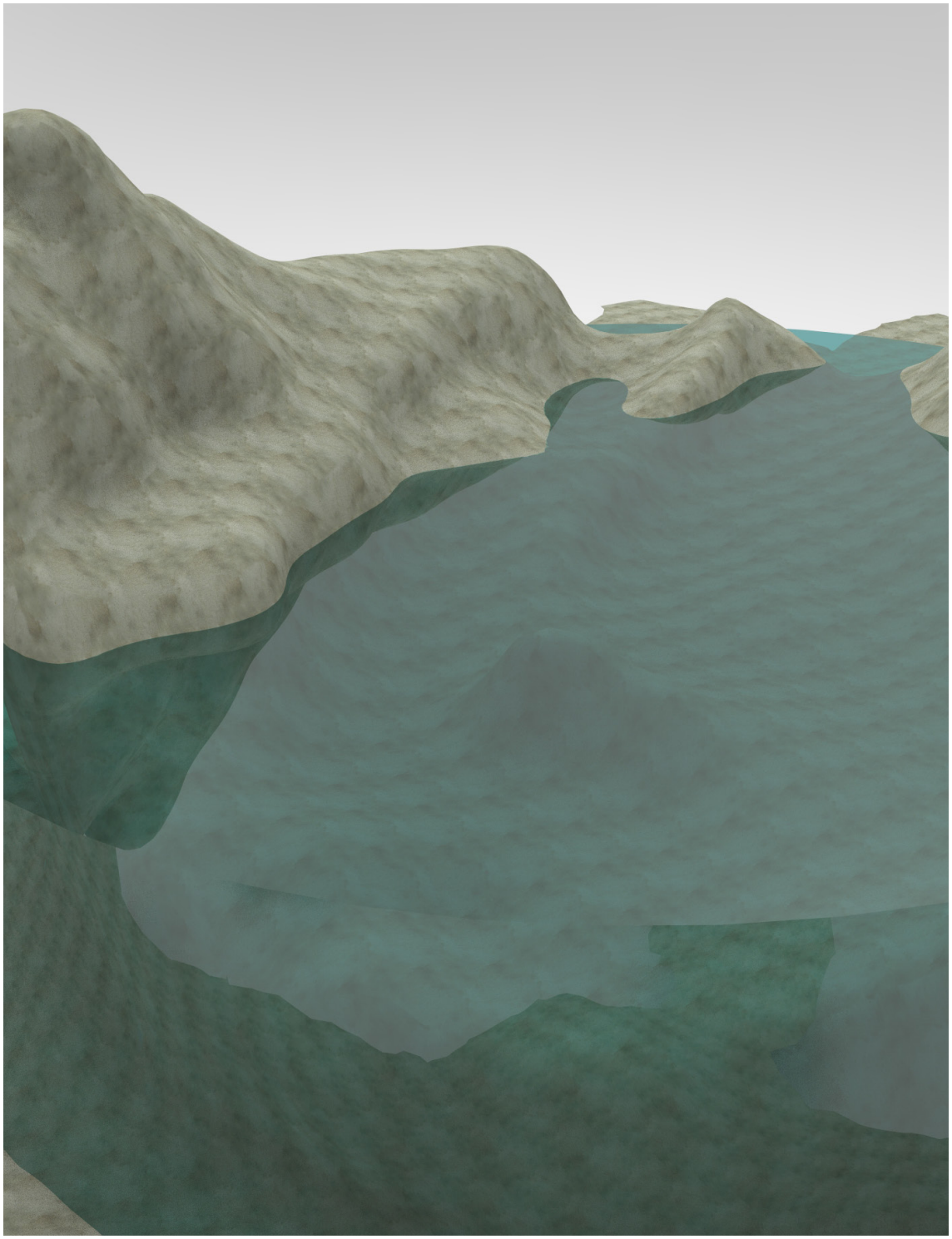
Hereby is the map of the flooded area acording to those calculation and a topologic study of the altitude in the cercle.

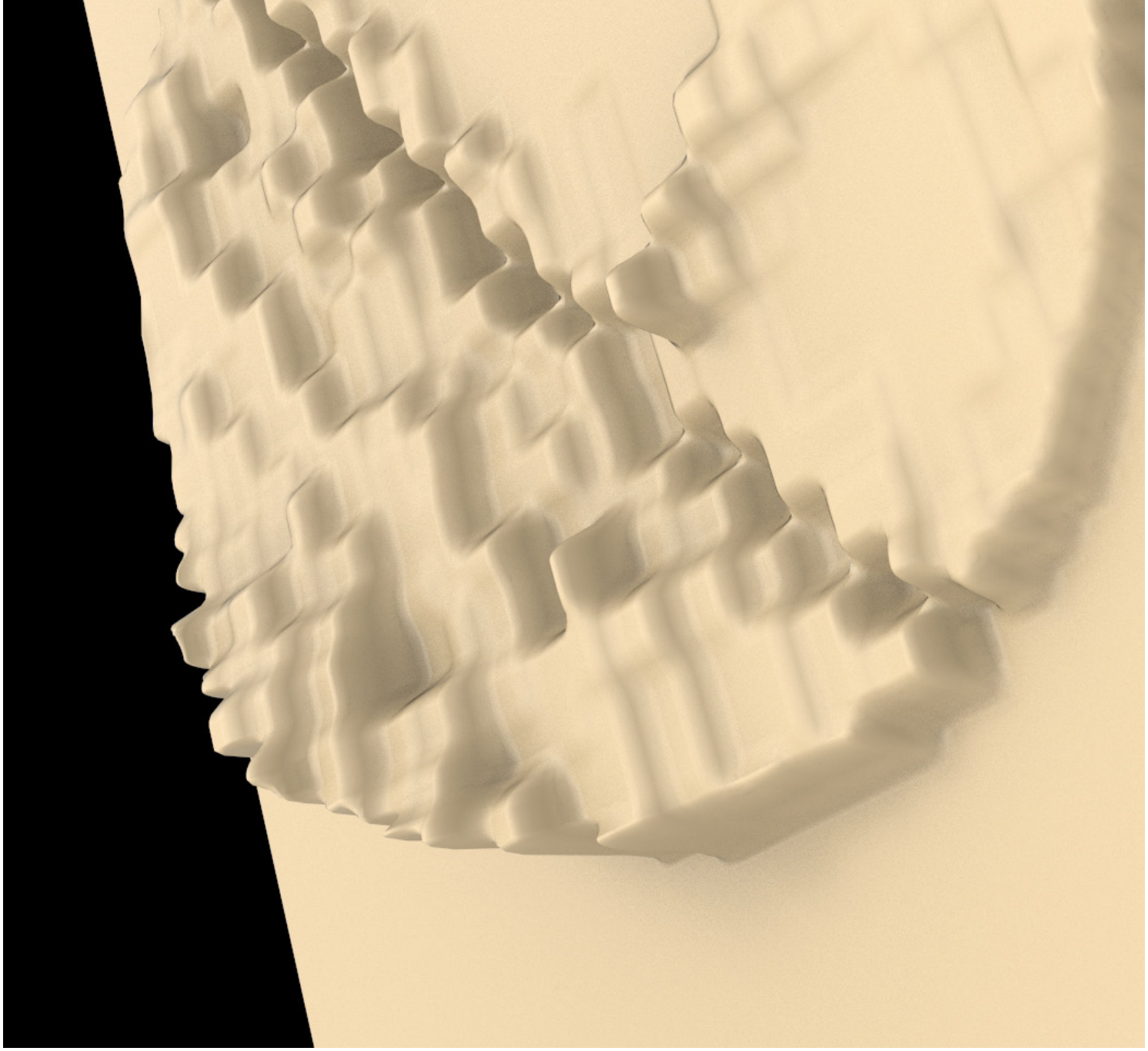
Most of the area of Matadero itself is flooded, a part of the streets in Arganzuela are also. The most hit area is the south of the circle that is actually the lowest point since it follows the river. The river itself almost disappears, replaced by a lake where so islands will pop out. The highest points are located in the Usera district, on the other side of the river. It's logically the less hit area of the circle then.

Flooded view

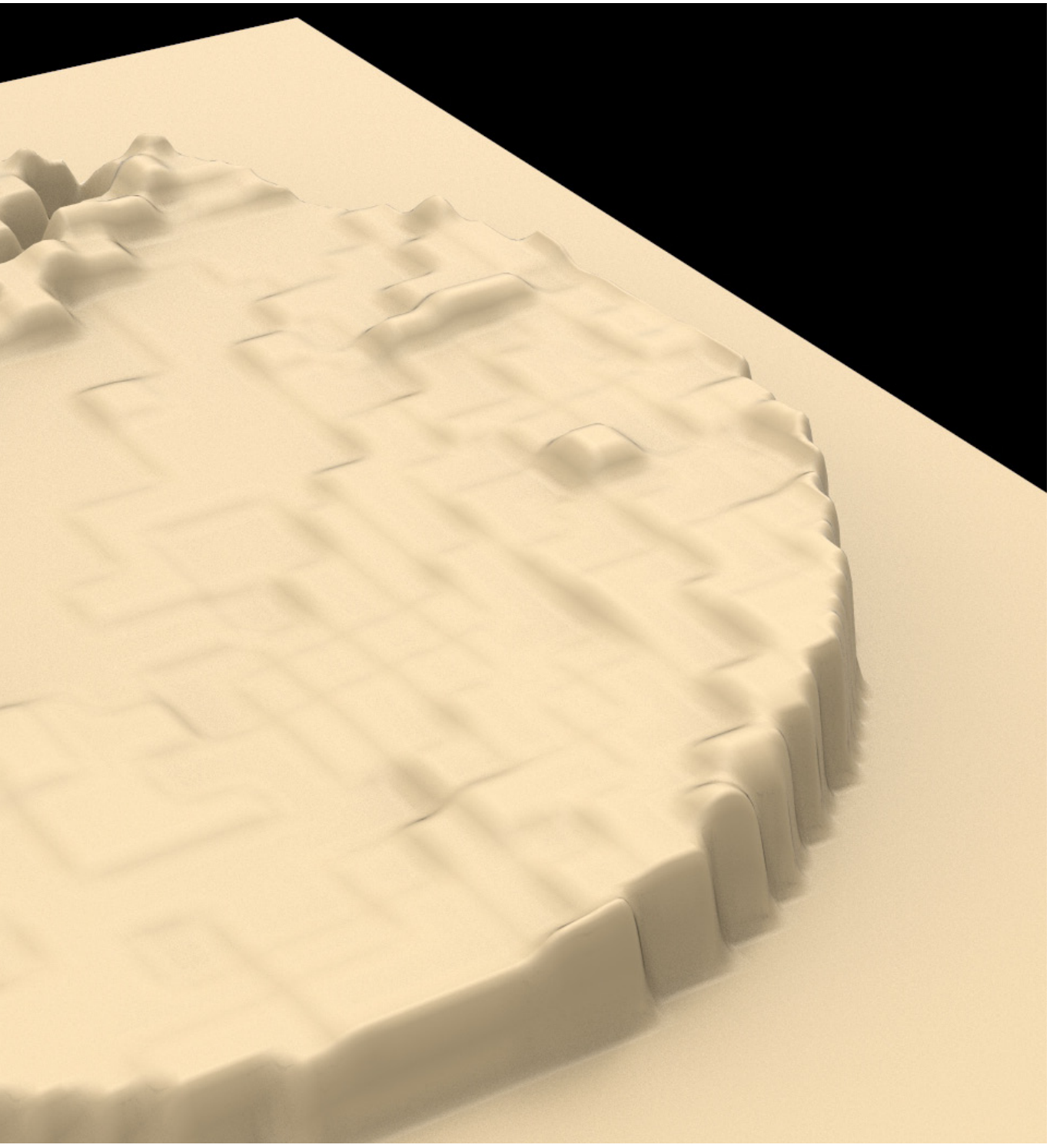


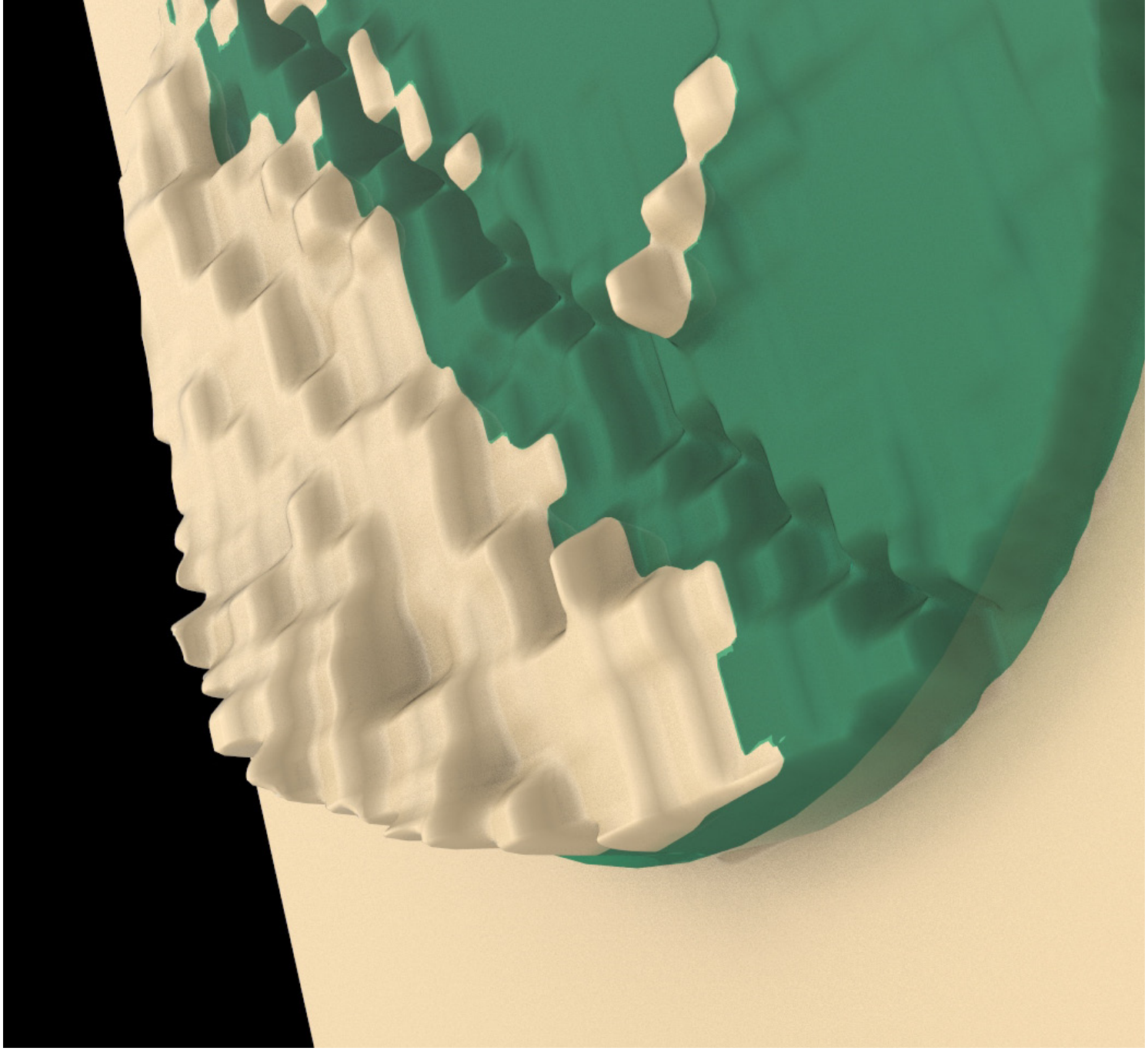
Topographic study



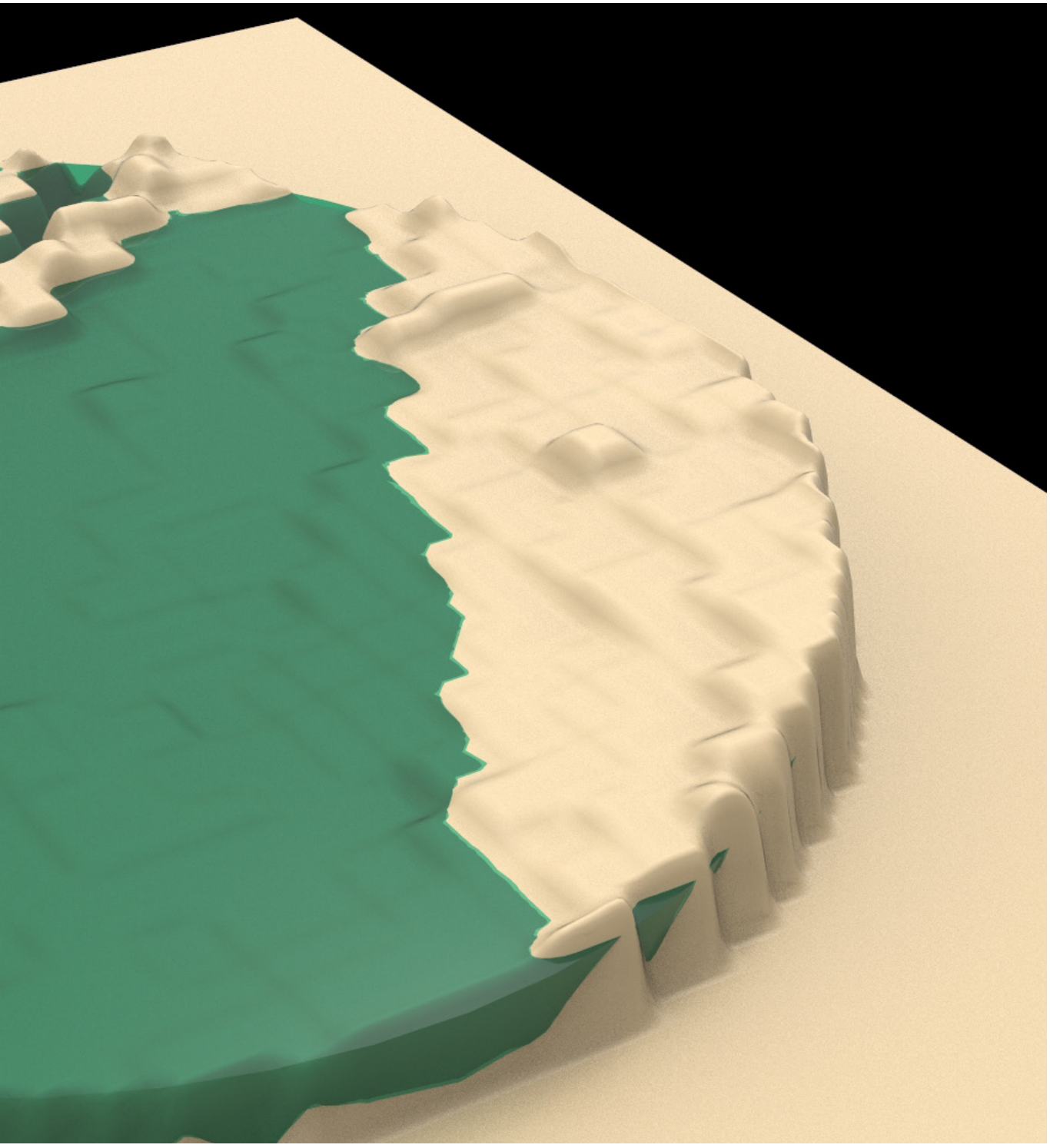


Topographic view





Topographic floods



Flood timeline

Drinkable water emergency protocol
The circle becomes the new water reserve
Locals start to be aclimated to the change
New infrastructures built
Hour : 48
Week : 12
Month : 15

Hotspots

This particular restaurant will become also a hotspot. Why this one? Simply because it will be the only restaurant able to stay open since its kitchen is located on the first floor. They wil just need to adapt their delivery system.

When every groundfloor appartment will be impossible to be used. The other appartment will have a highly increase value. For tourism for example.

The infamous chinese bazar shops will become the main new hotspot of the flooded area. People will seek cheap way to build defenses and reconstruct lost properties. Those shops are the most qualified to acomplish that task.

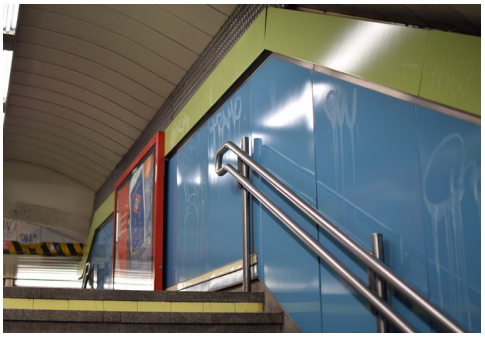
Any DIY shops will have an increase value. The flood will be seen as something new and unexpected. People will have to create themselve new way to live throught this experience.

Coldspots

Unfortunately, any fruit shop will have a highly decreased value since they won't be able to have a continuation of their activity with the water.

Any kind of car-related shop will be affected badly. They will have to change occupation or run out of business since no car will be able to be used in the area.

Except the sushi restaurant, every restaurant of the flooded area have their kitchen on the groundfloor. They won't be able to keep on their activity for sanitary reasons.



For obvious reasons, subway and buses won't be running anymore throught the area.

The Utopia of the flood

Uncommon and surprising city

New habitation unit

Car free city

Freedom of movement

New collaboration

City of boat

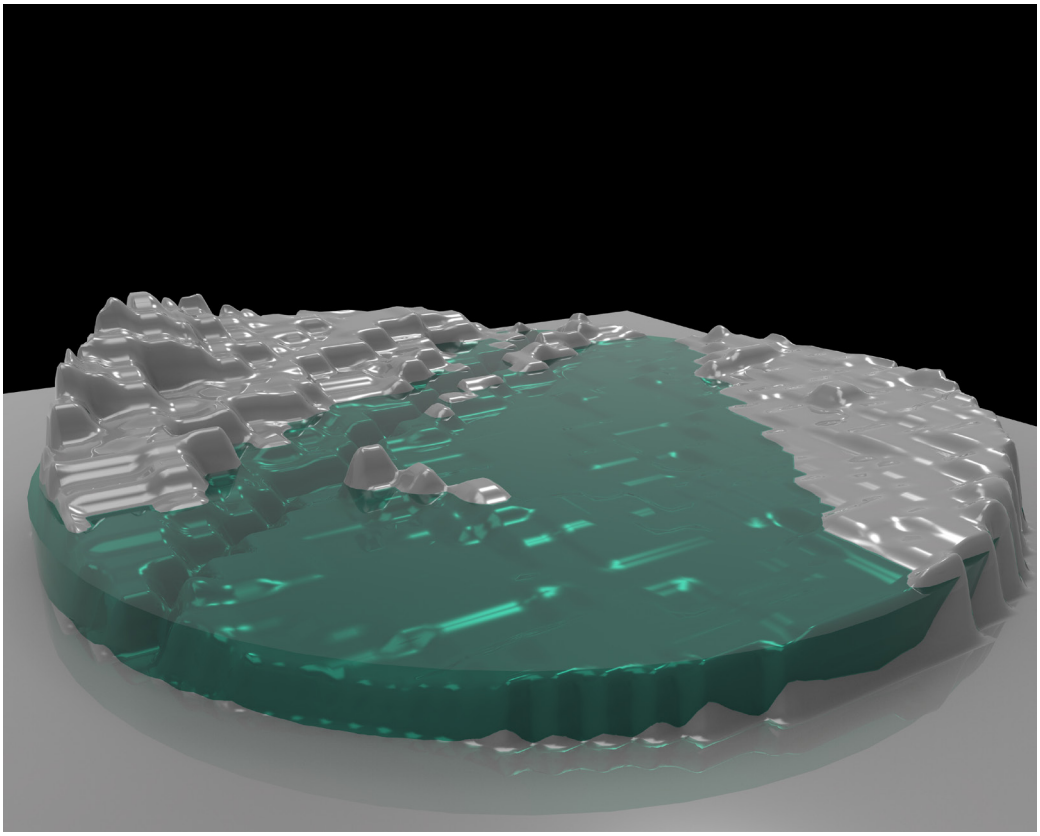
City less rigid

Merge of ecosystems

New activities

River and city become one

Disappearance of the cadastre

Reduction fo noise and pollution

New attraction center