SALINIZATION

Salinization is a worldwide problem Almost 1.5 billions hectare of ground worldwide is threatened by salt In 2050 more people than on earth now are going to live in the cities. Fresh water and food will be the most challenging problems of the future citizens.That is why innovation is necessary!We have to focus on solutions to spill less fresh water. Only 3% of the water supply is sweet water.Half of it is engaged in making.It drink is available for farming less half of this amount is threatened by salt.

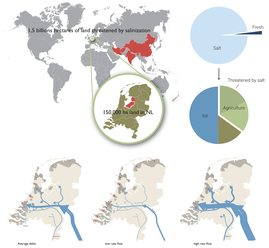
The Dutch water management strategy is based on sweet water.People have the association of saline landscape as if it is going into fertile agricultural land back to the sea.This is because the agriculture sector became unknown to salinisation of saline crops. Contrary to what many might think, salinisation offers new possibilities for new types of agriculture and recreation.

THE NETHERLANDS

Due to rising sea level and the subsidence of the soil,The Netherlands is also confronted with salinisation.Each year a big amount of agricultural land is becoming saline.The situation is a threat not only at the coast,but also at the inner land.This process is unstoppable.

The Dutch way of water problem solving is to defend the land against the sea water.

To be able to preserve the drink water sources and the existing agriculture,we are flushing the ground with sweet water but each year water supply is less consistent.We see each year more and more water peaks during the winter and the summer.That's why the policy is difficult to continue in the long term. Besides it also doesn't have to.

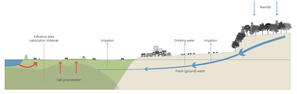


THE WATERPOORT AREA

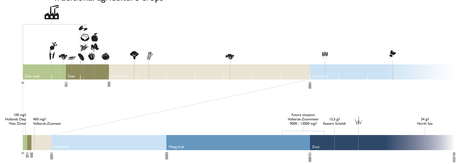
The Waterpoort area near Brakel,in Brabant has been a dynamic landscape for a long time.The sea and the rivers shaped the landscape over and over.These dynamic circumstances have difficult to leave relic and people took control over it. People were the bands with water by the construction of the Delta Works after the flood in 1953.The Waterpoort area has payed a big price for safety!Ketelmat - Zoommeer is transformed from brackish to sweet water after the interventions.Water quality is decreased and ecological balance is ruined. The fishermen lost their jobs and the villages lost their connection with the sea.The nature cannot heal itself in more than 30 years and now another intervention is needed.The government and the local parties has decided together to transform the Ketelmat-Zoommeer to a safty ecology again.

When the sea had access to the area, a great amount of salt is stored in the ground.During the dry periods,captured salt reaches the surface of the ground.In order to avoid this,the land is flushed with fresh water.After a while flushing the land is not affordable anymore.This means existing farms can no longer be used for traditional agriculture.This would have major consequences for the farmers.Besides the situation would cure a lot to the dutch economy.However this is not necessary.Here it is time to see the potentials of saline landscape.

When not enough fresh water can be supplied, the water pressure downwards decreases and salt ground water comes up.



Traditional agriculture crops


Year zero
Zuiver
Future disaster
Hollandse Sluiz Kering
100 mg/l
400 mg/l
Volkerak-Zoommeer
Rhine
Meuse
Scheldt
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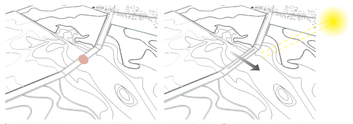
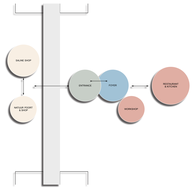
CONCEPT



Down, embedded in the saline island, visitor center is designed to get rid of all information screens but just to look and smell everything around.Three main locations are located at the edges and the areas in between can be used according to the needs.



BUILDING PLANS

The visitor center design has a direct and strong relationship with saline ecosystem.Identity It is located below the dike, in the landscape so that it crosses the relations connection and visibility in the cohesion of nature and agriculture. Under the deck a new architecture follows the organic lines of the landscape and melts into its place.The new visitor center inscribes itself as a typology between building and landscape machine with a volume that invites the visitors to experience and explore and learn saline nature and agriculture. By connecting the story of the new landscape and the organic shapes of the building something very special occurs.The ambition is to work openly so that the new visitor center is experienced as a development of something also then the building itself.This project is staging the obvious qualities and the perspectives of the landscape. From the moment of parking walking on the deck and the visitor center forms a total topographic experience.

PROGRAM

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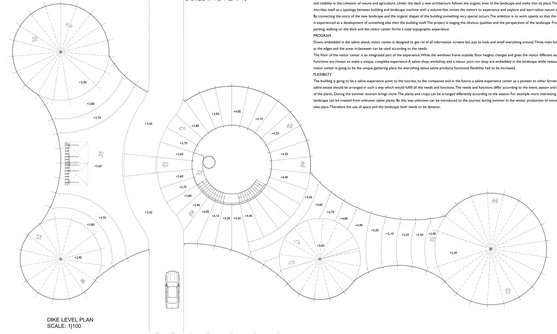
The floor of the visitor center is an integrated part of the experience.While the exhibition floors outside floor heights changes and gives the visitor different experiences, the floor of the restaurant is flat and gives a different experience.The workshop and a nature park, are the places where the landscape while restaurant is raised. If visitor center is going to be the unique gathering place for everything about saline produces horizontal flexibility had to be included.

FLEXIBILITY

The building is going to be a saline experience point to the tourists, to the companies and in the future, a saline experience center as a pioneer to other farmers.That is why the saline estate should be arranged in such a way which would fulfill all the needs and functions.The needs and functions differ according to the meets, season and harvesting periods of the plants. During the summer tourism brings more.The plants and crops can be arranged differently according to the season. For example more monoculture and dynamic landscape can be created from unknown saline plants. By this way unknown can be introduced to the tourists during summer. In the winter production of more known plants can take place.Therefore the use of space and the landscape both needs to be dynamic.