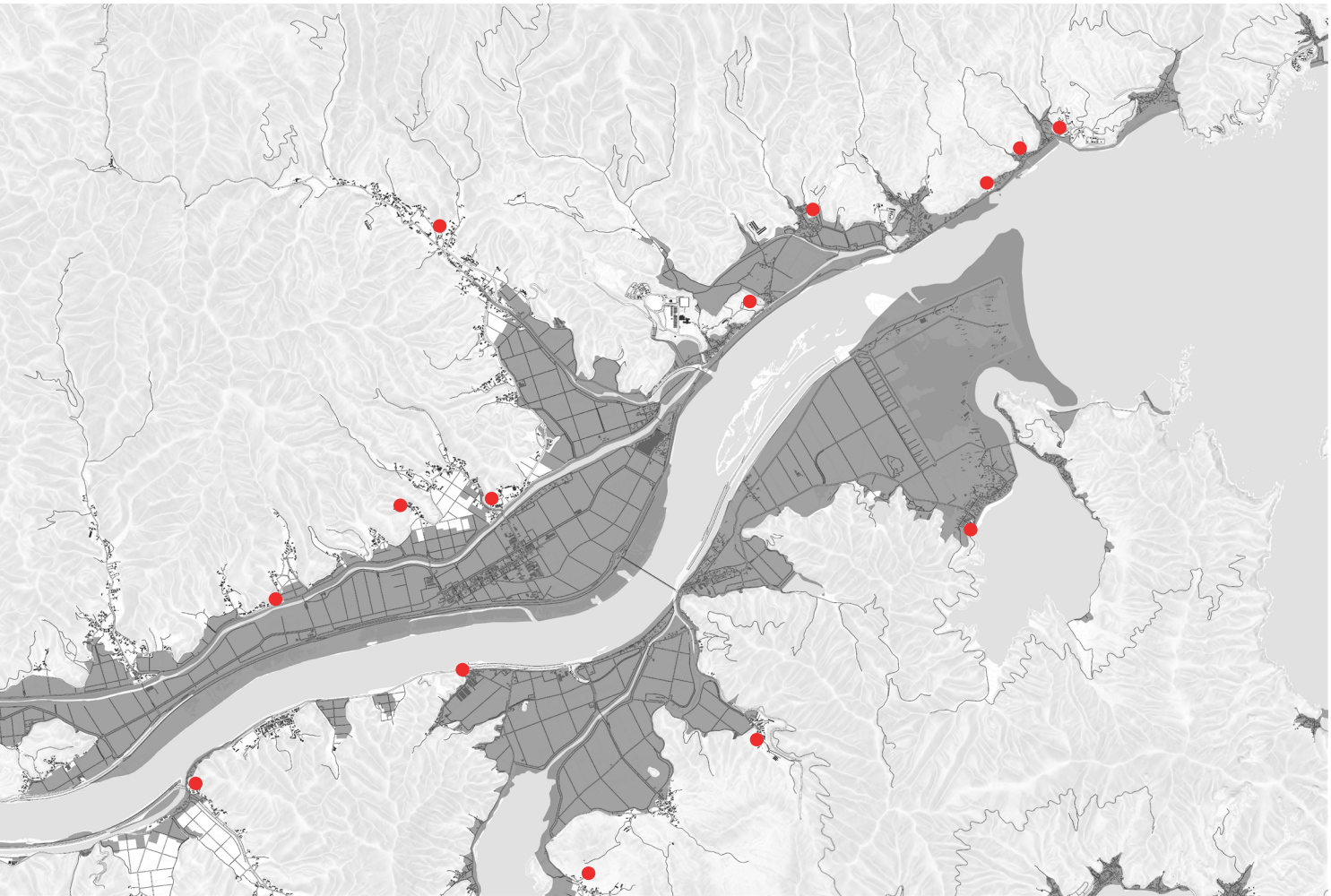


# Ancient emergency network

## Ancient knowledge as an emergency route

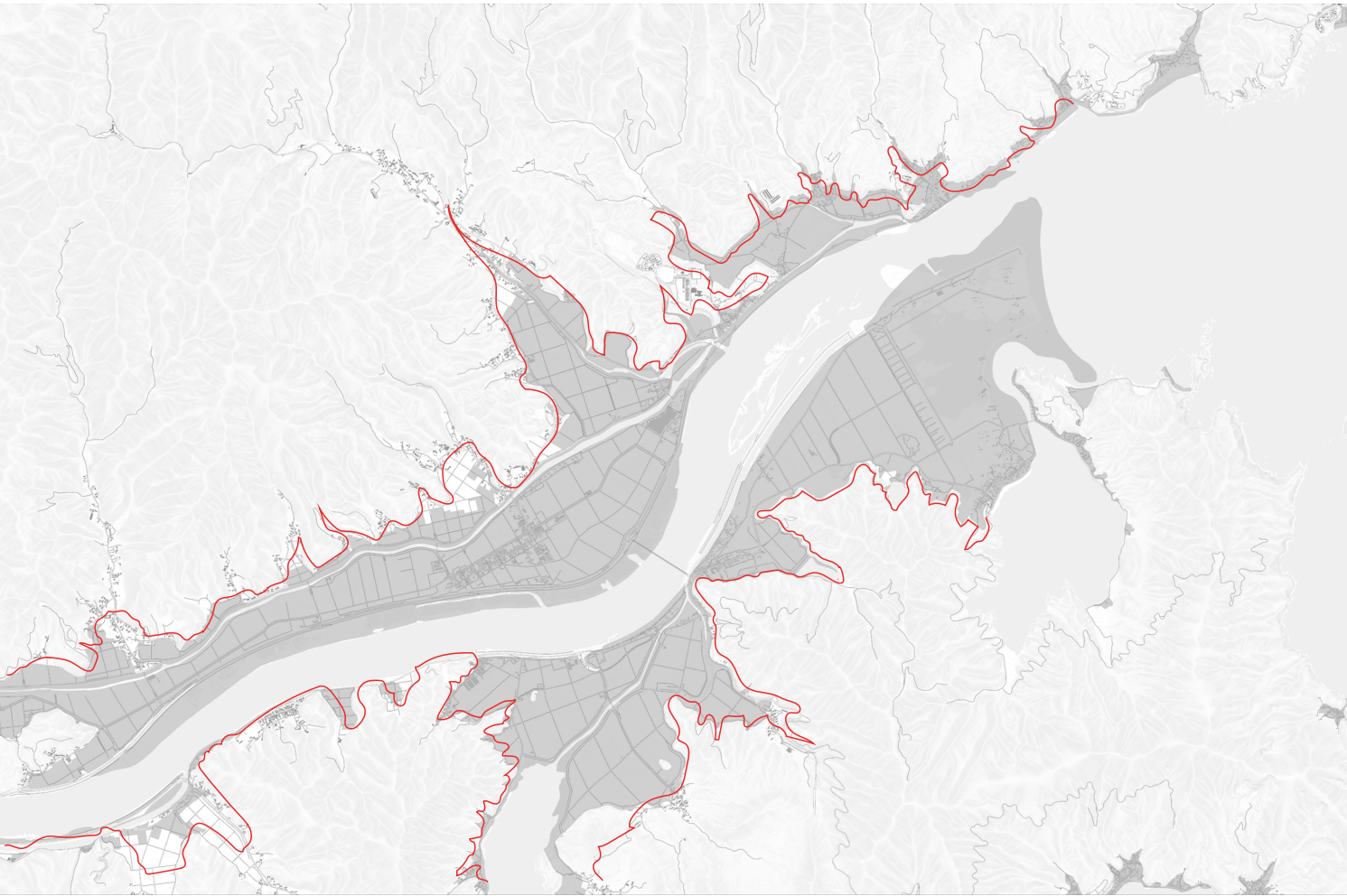
The first strategy is to create an emergency path based on the mapped shrine locations. Today the main road connecting the ria is at the edge of the land with the water, right behind the seawall, in case of tsunami the road would be blocked for several days. I place a new emergency path connecting the shrines of the valley along the 8 meters contour, the “ancestral safe-zone”. It is a small road but wide enough for emergency vehicles to drive through.

Exsisting shrines remained intact after the Tsunami



According to the research of the location of Shrines in Miyagi prefecture, 139 shrines did not damage from the Tsunami within 215 shrines. Most shrines dedicated to the god Susano-o - it is especially said that controls water and flood.

The new emergency network based on the shrines locations



The new path network can be developed based on the shrine locations, connecting other shrines each, highlighting the ancient safe shoreline in case of emergency.

The new emergency road in the site



Image1: ストーンサークル、瀧田郡岡崎町「磐石の神」と石神社の祭神:『宮城県石巻市』:Accessed 17 May 2022. <https://stone-c.net/blog/1073>.  
Image2: ネット集花選「兄島11人の命を救った神社」南三陸ホテル観光: 11 November 2018. <https://www.mkanryo.jp/tokimiki/pchitpchi-day-sei/2018/11/08/news-saved-91shimas.htm>.

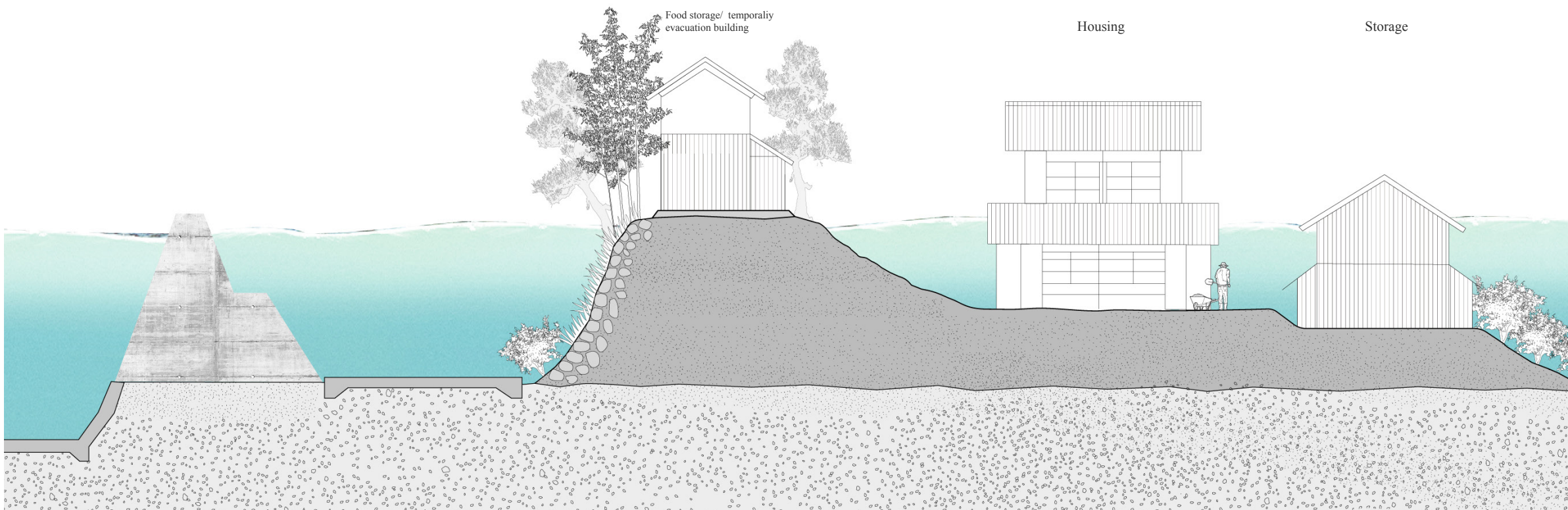
The religion of Japanese shrines, called Shinto (The way of God), based closely attached to nature, like animism, and people worship natural objects themselves instead of human-shaped symbols. It is said that most of the shrine locations are historically decided by highly political reasons between Shinto-priest and people who support the shrines. However, the definite cause is unclear. Usually, such supporters gathered and lived just around and lower space of the shrine areas, forming a village or town. It is also said that repeated natural disasters decided the ideal location too. Isuzu shrine (Image 2, in Minamisanriku city in the same prefecture) saved about 190 people’s lives evacuated from the area when 2011’s Tsunami.



## Agriculture

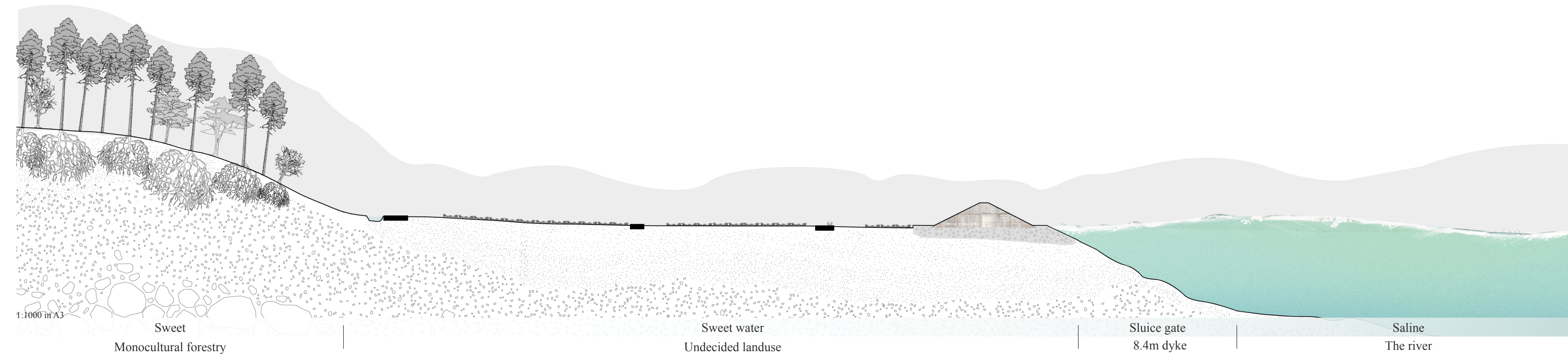
## From fighting nature to absorbing and caring

This strategy is inspired in the Japanese traditional technique of Mizutsuka, developed by people in an area that suffers extreme seasonal floods. They terraced the land creating different flood-levels where constructions and plantations were adapted to the natural fluxes. I propose to adapt the topography of Kitakami into different micro-terraces according to their exposure to Tsunami saline waters. The first or lower level would be the brackish-water reed habitat, historically utilized by locals as roof material. The second level will be used as a recreational garden to test crops resistant to temporary saline-flood, the residents would join in creating the garden. The third terrace, above the 8 meters contour, would be the rice field and orchard. Keeping rice-production above the safe-height allows to continue current food production practices while cultivating other species that can also be used for economic turn-out. Above the fertile plain, a new forest edge is created by planting deciduous trees like Oak and Maple. Clearing up and planting new species is a strategy to renew the monoculture of cedar and cypress, as it has deteriorated the water quality in the area. All the species re-introduced have been traditionally used for production, I aim to inspire a possible circular, diversified and resilient economy to counter the current fragile rice-monoculture in the valley.

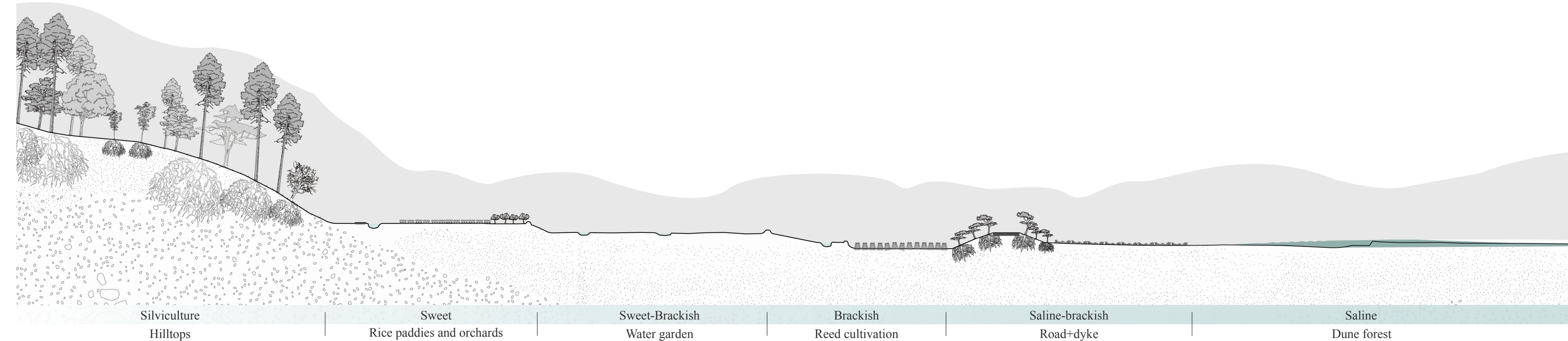


Mizutsuka is the remains of buildings from the long fighting flood history in Itakura city, Gunma prefecture in Japan. Residents have lived on the land just next to the troublesome river, which often makes the land exposed to the water. The residents came up with raising the inland height of the property to an evacuee while protecting the food. Raised soil had been dug from the deeper layer of the land, called Black soil. The side wall is often reinforced by *Acorus gramineus* (Japanese sweet grass), which grows well between the stone fence.

Original section diagram with 8,4m dyke



New section diagram with 8,4m dyke



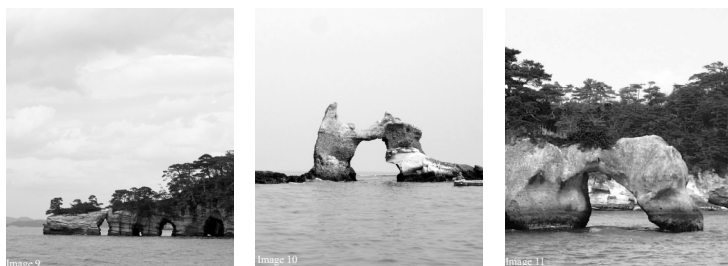


# Animism

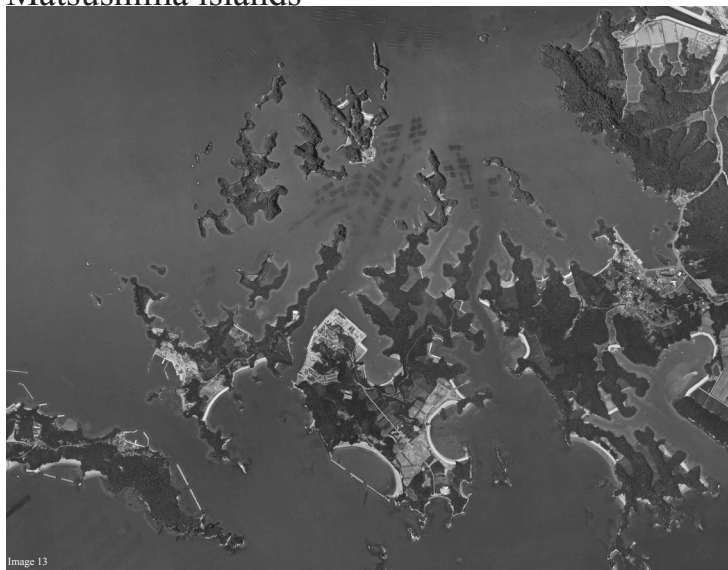
Animistic celebration of natural cycles.

Japanese animism is all about natural cycles, interacting, and living with them. In ancient Japan, people worshiped natural elements such as forests, rivers, mountains, rocks, waterfalls, and trees. The religion called Shinto is practiced in the area and is still today the substrate of mainstream Japanese beliefs. This understanding of the world is embedded in traditional design practices that take inspiration in observations of landscape scenery such as the traditional dry gardens. As an homage of this creative practice, the new topography of the gardens is carefully shaped through the figure of the Matsushima archipelago, a worshiped landscape in the same prefecture as Kitakami. Different water level scenarios are considered, and the garden will change its appearance through water from time to time. Spaces designed for people to meet natural phenomenology are created; such as two spots to observe the solstice sunlight and sunset, the traditional “hour of the gods”. The observation points will disappear when the first levels of flood happen, manifesting the fluid nature of the landscape.

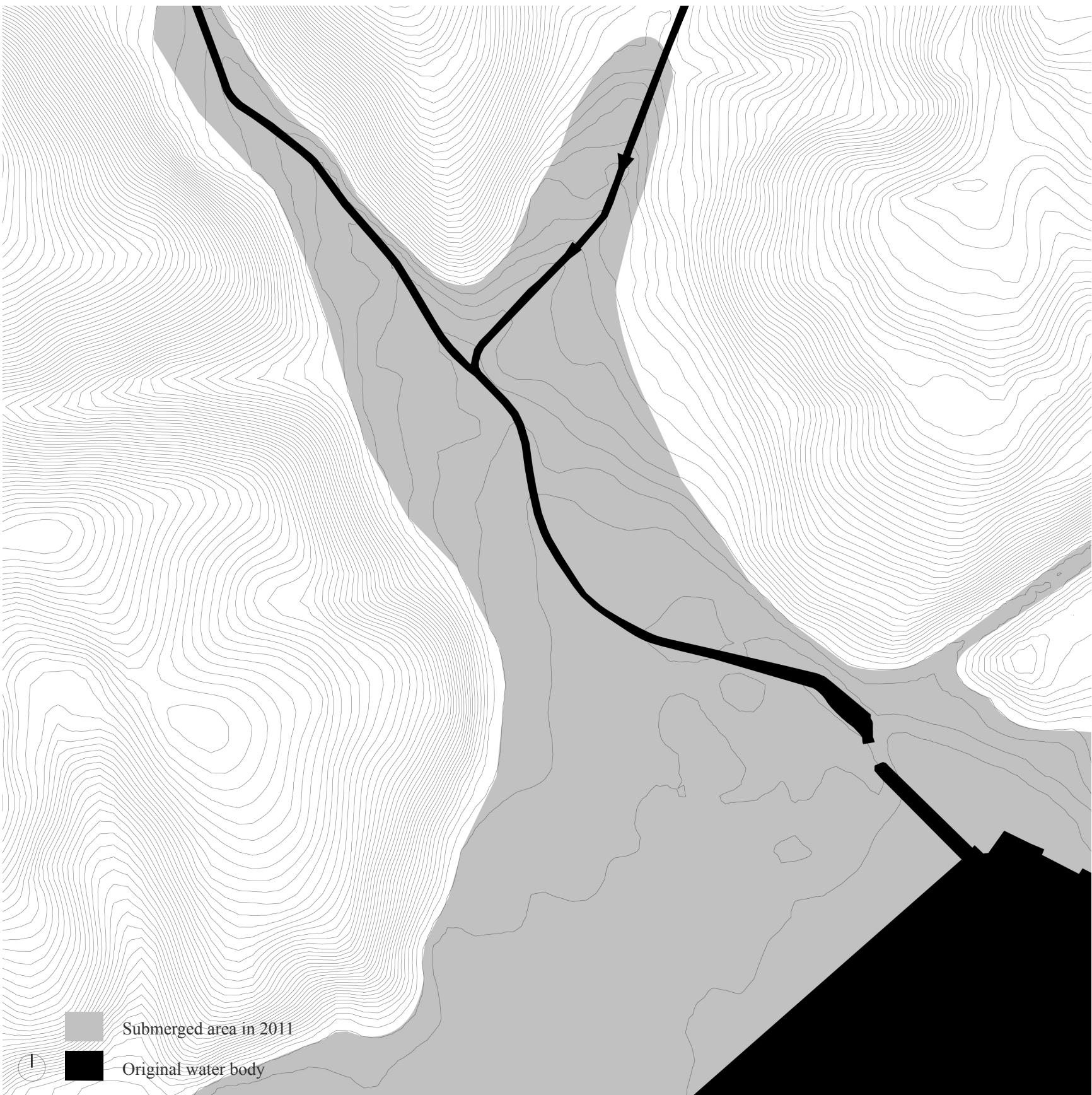
Mitate - Japanese garden technique -



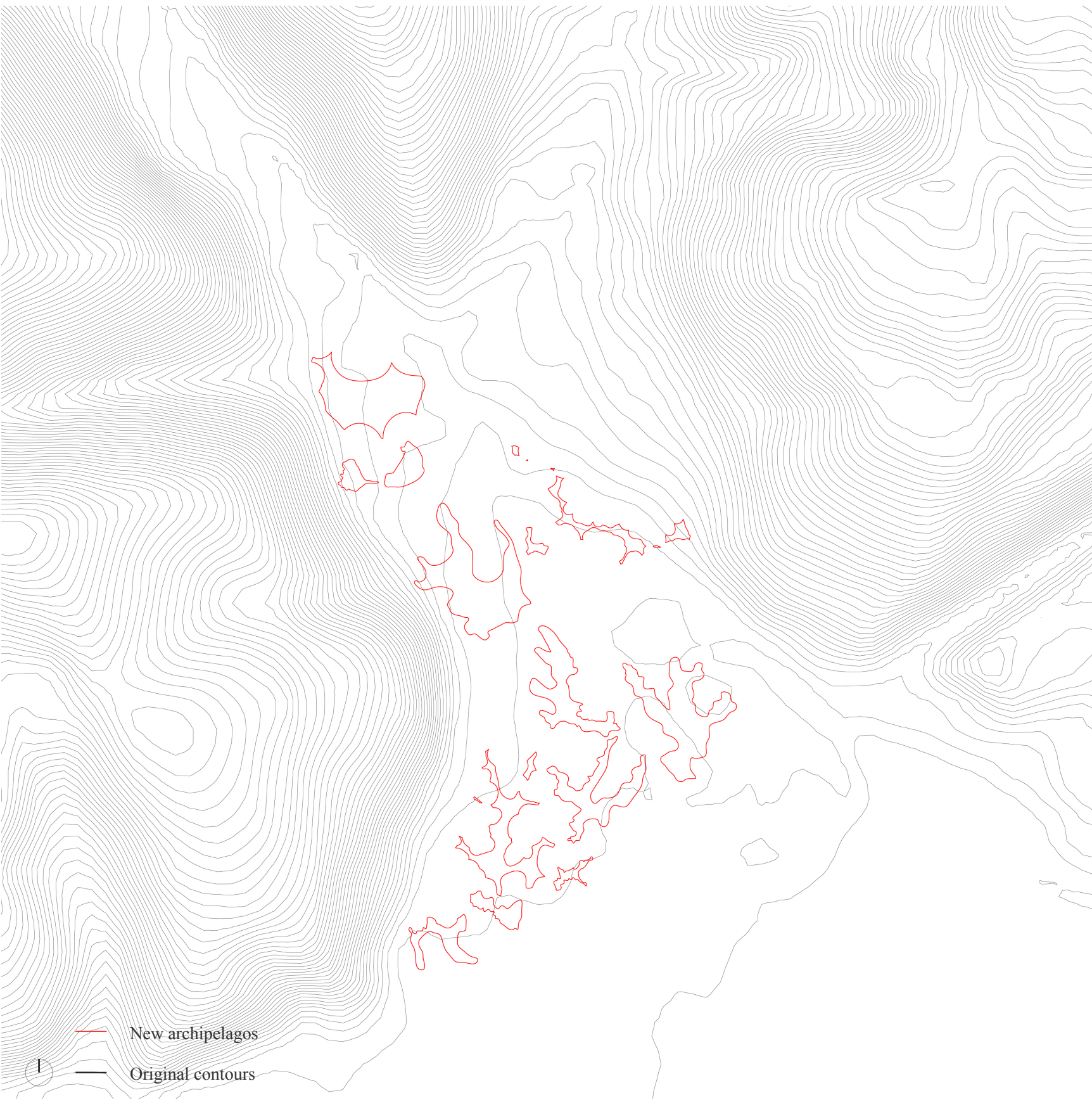
Matsushima islands



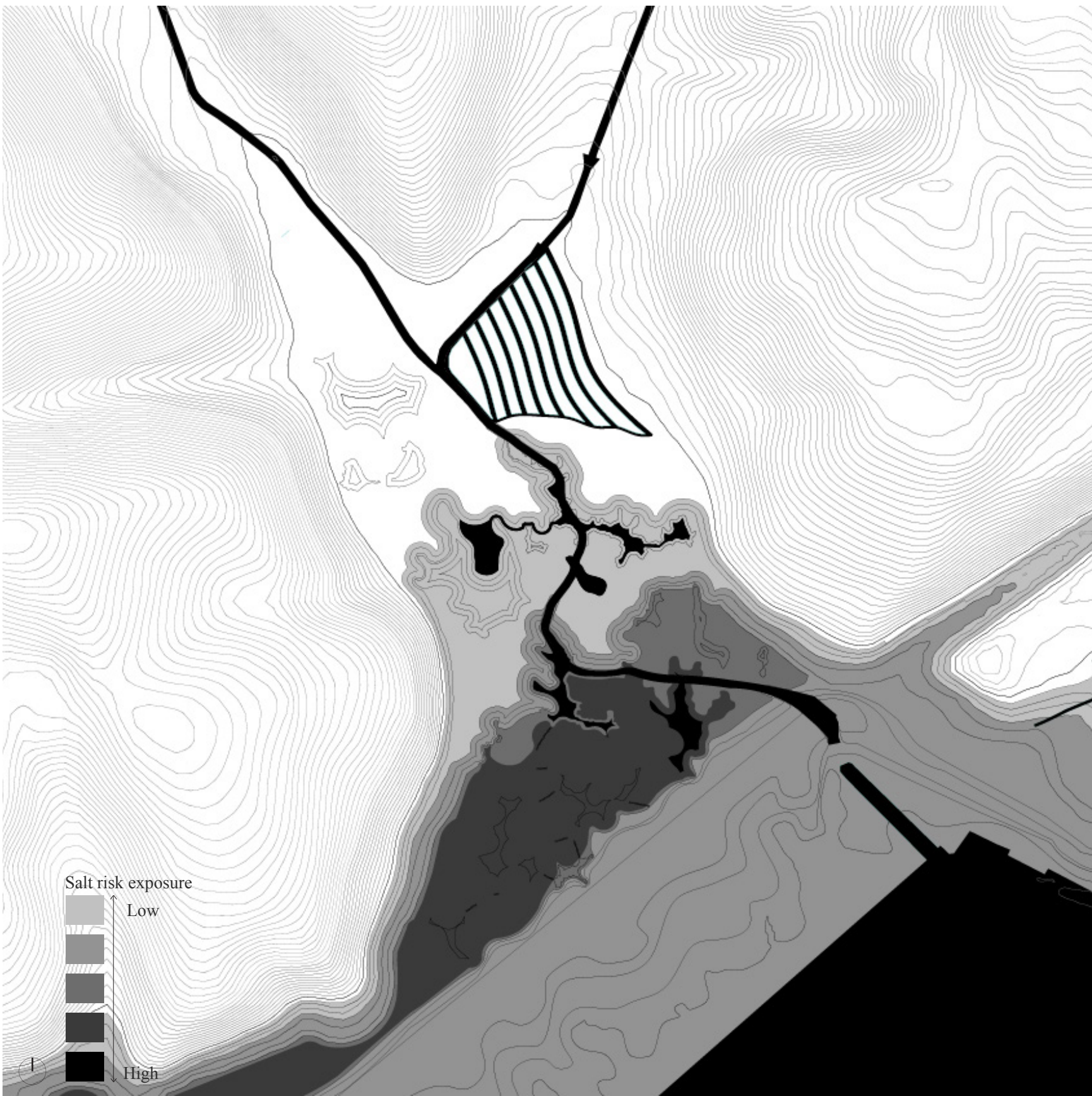
Original topography, risk of salt-water intrusion after Tsunami



Matsushima archipelago figure overlaid to the site



The new topography accepting salt-water intrusion









# Belvedere

section 1:200



The belvedere is surrounded by autumn trees such as Acer, ginkgo, and Japanese chesnuts, which colors flourish around the belvedere. Those trees allow visitors entering the forest more accessible for the purpose of viewing.

## Plant spieces

*Acer Palmatum,*



*Ginko biloba,*



*Castanea crenata,*



*Zelkoba serrata*



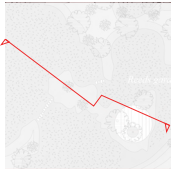
*Cryptomeria japonica,*

*Chamaecyparis obtusa,*



# The reeds garden

section 1:200



Common reeds surround the observation spot for the winter solstice. In addition, Japanese black pines are planted on the placed archipelago, which creates a Japanese atmospheric landscape.

## Plant spieces

*Pinus thunbergii*,



*Pharagmites australis*,



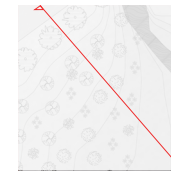
*Lathyrus japonicus*





# The dune forest

section 1:200



The dune forest creates the entrance of the sea, which also works to mitigate the power of the wave when the tsunami hits, and as a regular windbreaker.

## Plant species

*Pinus thunbergii*,



*Rosa rugosa*,



*Lathyrus japonicus*,



*Limonium tetragonum*,



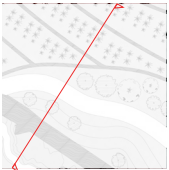
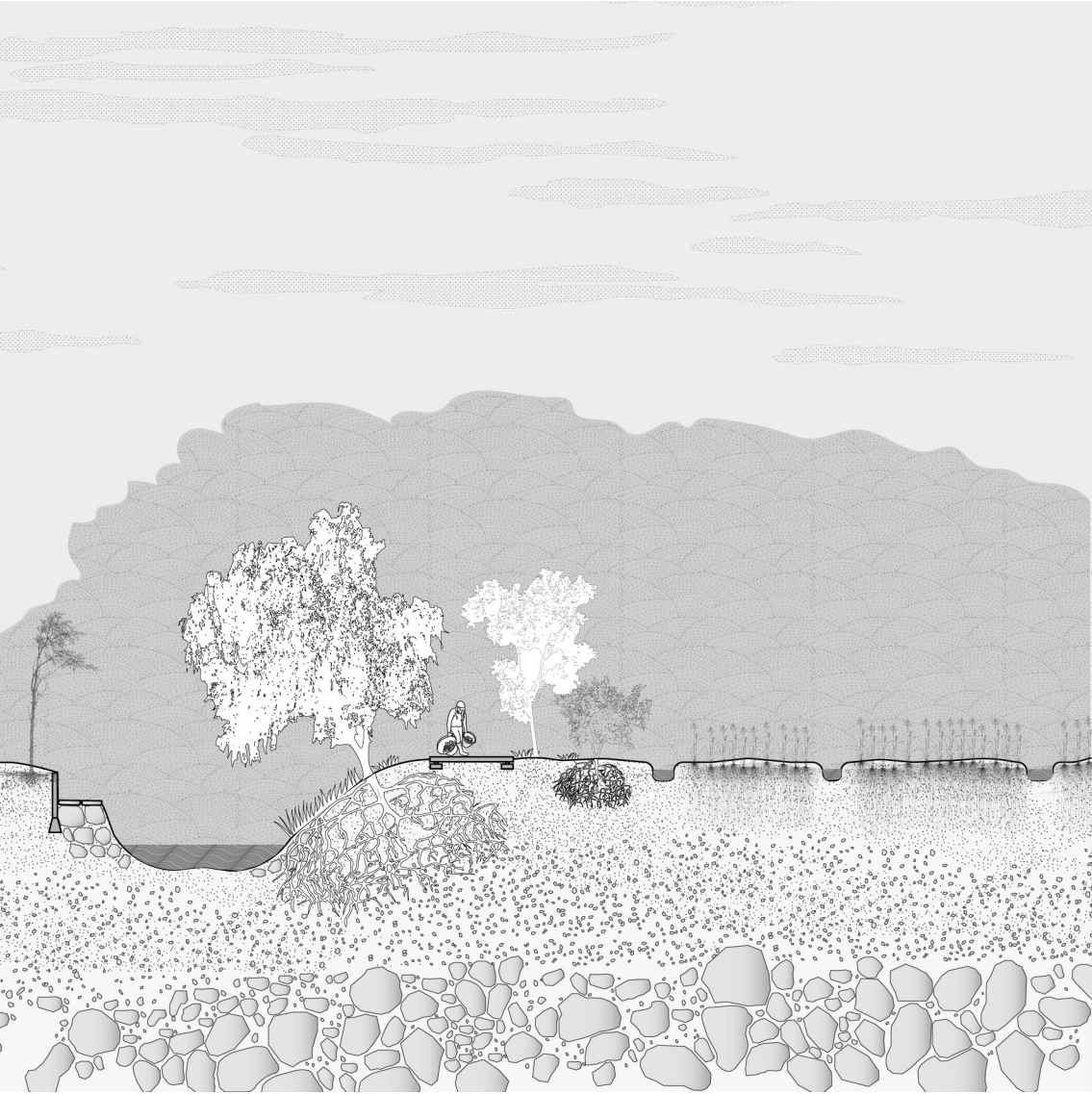
*Salicornia europaea*









# The rice paddies

section 1:200



The rice paddies and orchards used by the residents living on the next hill allow living in a self-sufficient economy and lifestyle.

## Plant spieces

- Salix babylonica,* 
- Oryza sativa,* 
- Vaccinium corymbosum,* 
- Ficus carica* 









# The water garden

section 1:200



The reddish spring trees are planted around the pond in the water garden, with reflecting cherry blossoms petals. The residents can participate in creating the community garden autonomously.

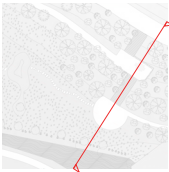
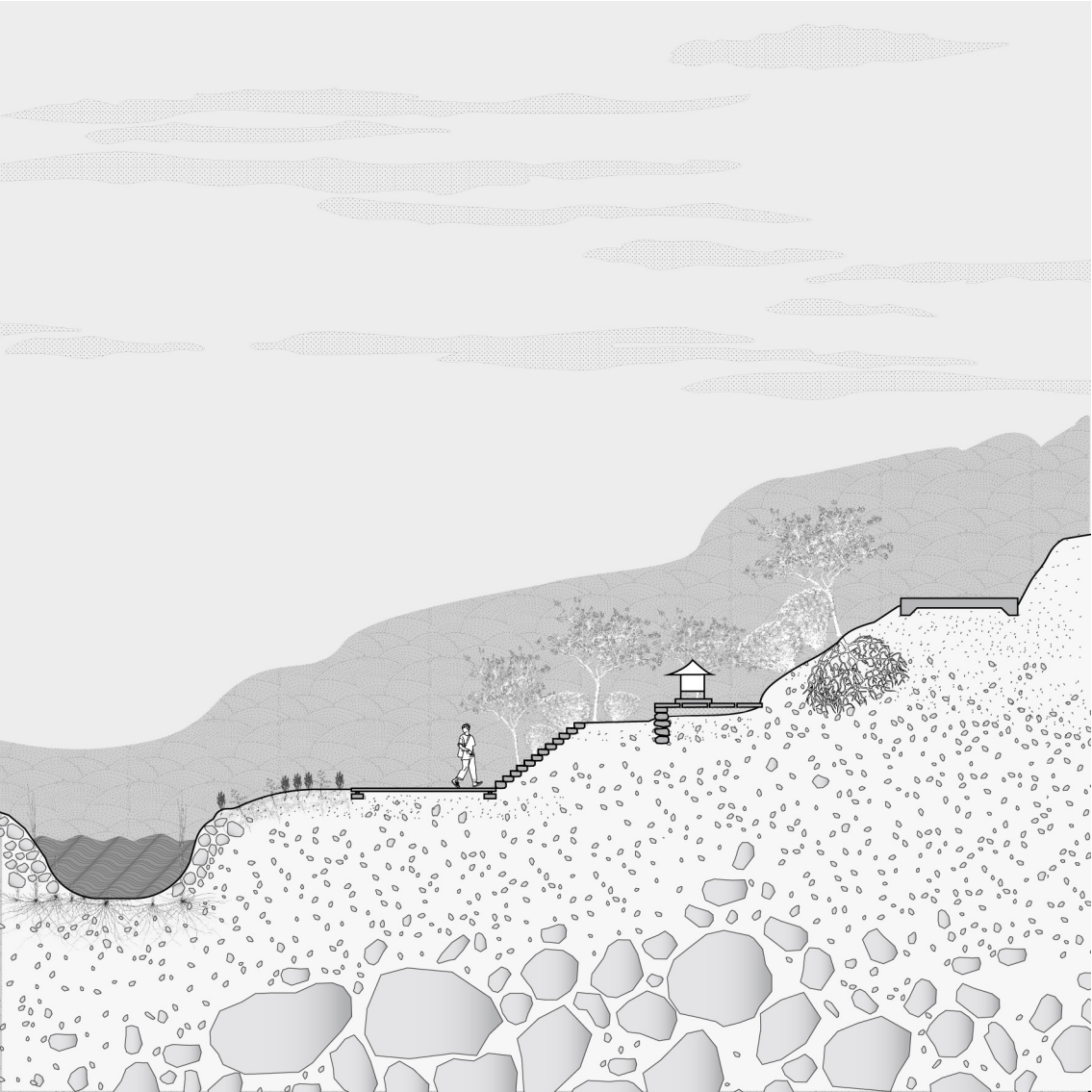
## Plant spieces

- Salix babylonica*, 
- Cerasus jamasakura*, 
- Wisteria floribunda*, 
- Spiraea thunbergii*, 
- Kaempfri Azaleas*, 
- Prunus mume*, 







# Glasswort garden

section 1:200



Around the Kasuga small shrine entrance, *Salicornia europaea* is planted, and the color turns red in the autumn. From the access to the path to the middle terrace, hydrangea is planted to feel the season's transition from spring to summer.

Plant spieces :

- Lagerstroemia indica* 
- Araila elata,* 
- Kaemfri Azaleas,* 
- Hydrangea macrophylla,* 
- Salicornia europaea* 