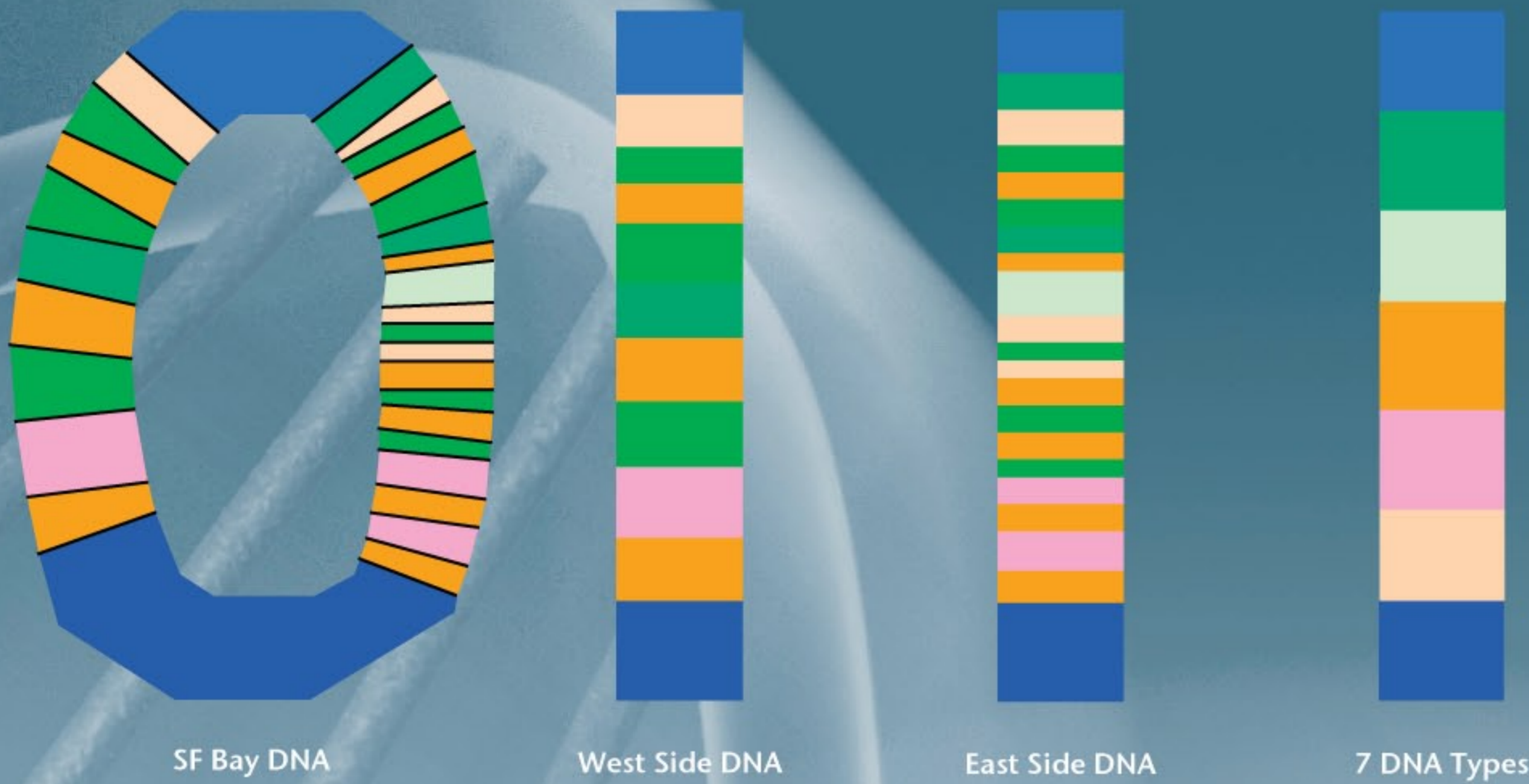
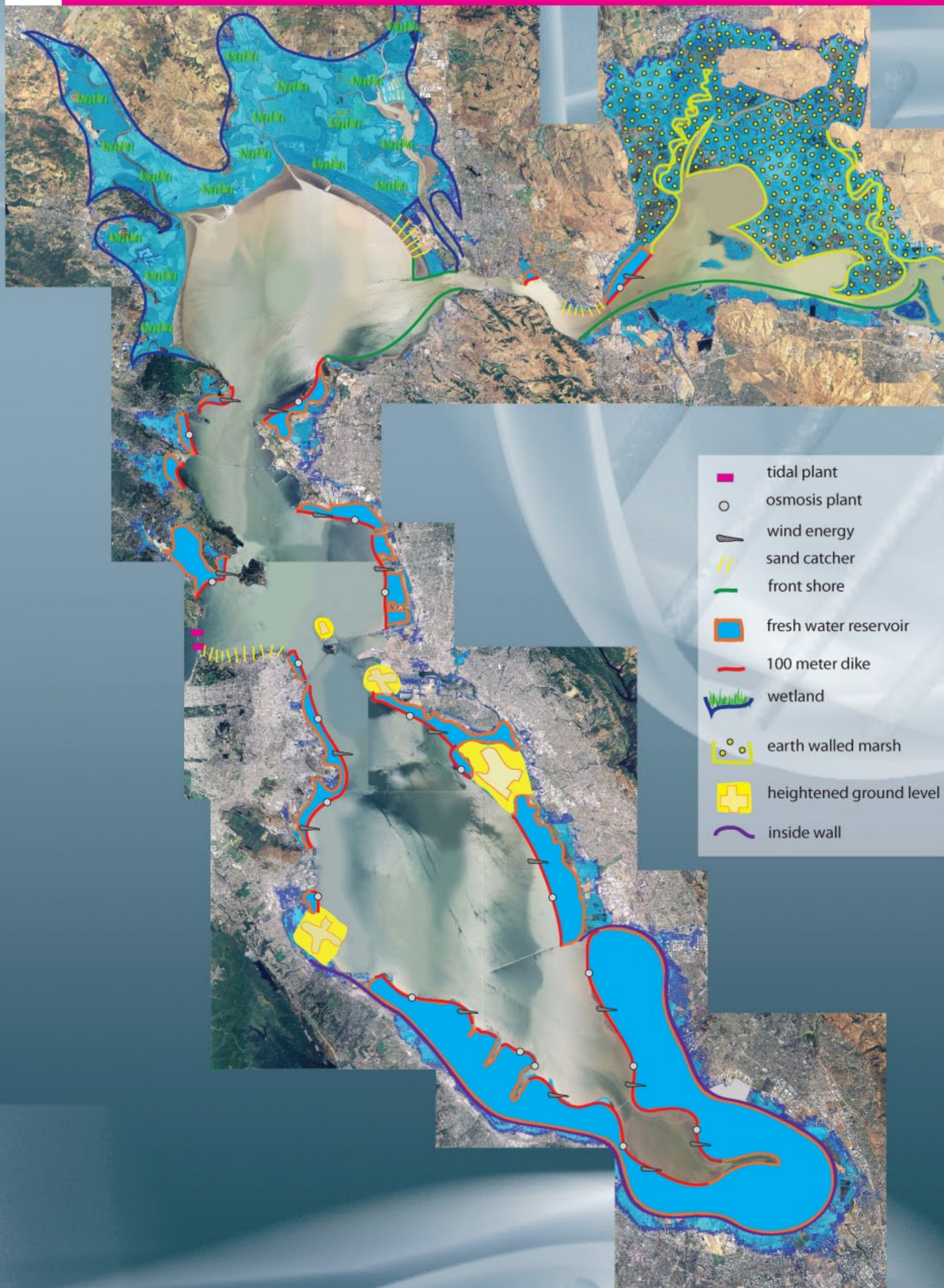


SFBDNA

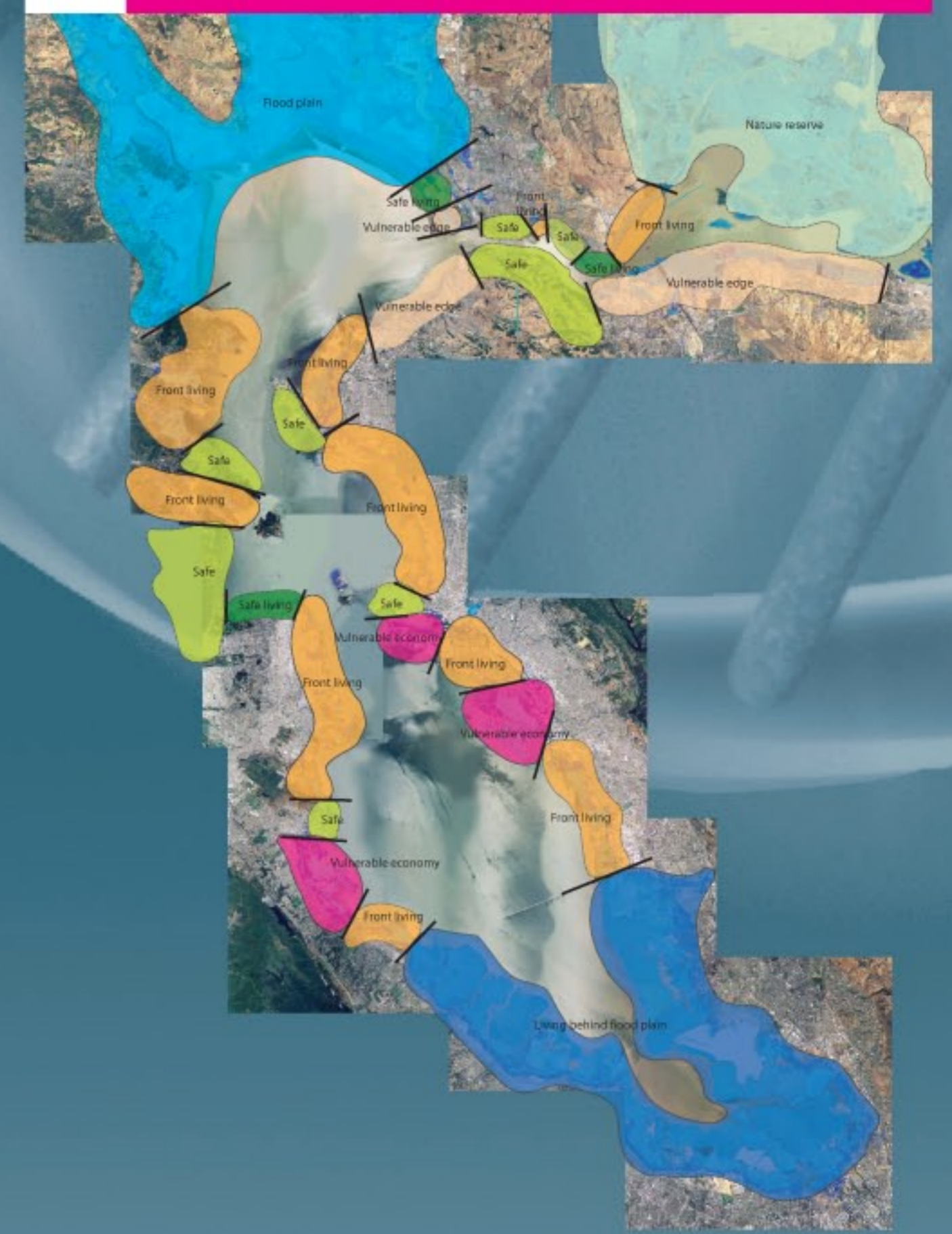
1 DNA



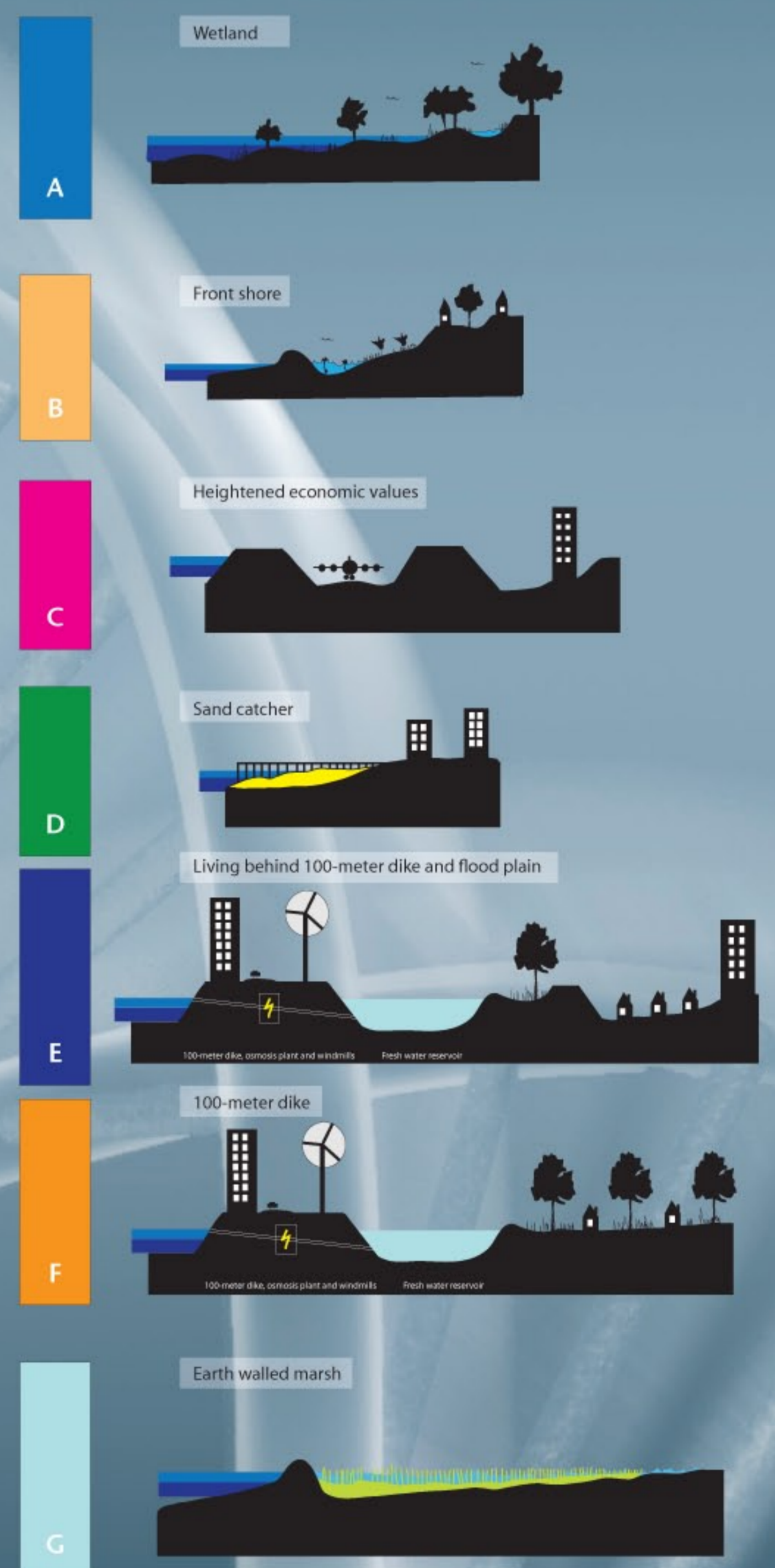
3 CONCEPT



2 TYPOLOGY



4 CROSS SECTIONS



1 DNA

The SF Bay area can be seen as one entity, containing many different parts. Every part on its own can be found elsewhere on the globe, but the specific combination of sections makes the bay area a unique place and unity. It's got a unique DNA. This unity is not only fed by the landscape or the developed functions at each section, but is also defined by the way the section is threatened by a rising sea level (or not). Based on the existing situation and the future climatic developments seven types are distinguished.

2 TYPOLOGY

The seven types of the SF Bay area are defined on the basis of the existing landscape conditions and existing functions and the vulnerability of the area for sea level rise. The nature reserve is the marshland area, the flood plain is the area that will flood regularly without threatening huge living areas and the flood plain with living is the southern plain with living areas threatened by a rising sea level. Front living is an area where living areas are apparent on the shore, vulnerable edges are sections threatened by sea level rise without living functions, economic value areas are areas where airports or large economic functions are positioned. Safe living is an area where living is almost not or moderately threatened and safe areas are area without any threat.

3 CONCEPT

The concept of SFBDNA aims not only to design a plan which defends the area against flooding, but takes sea level rise as an opportunity to create new landscapes in which not only the problem of sea level rise is tackled, but other main problems resulting from climate change are solved at the same time. The SF Bay area thus anticipates, each type of DNA with its own solution, on dealing with sea level rise by protecting and developing new landscapes, creating fresh water reservoirs to deal with future scarcity of fresh water, creating sustainable energy production to meet the challenge of decreasing availability of fossil resources and creating areas and gradients to solve the problem of a declining biodiversity.

4 CROSS SECTIONS

In the wetland area (A) periodically flooding is possible, creating a tidal landscape with permanent and semi permanent natural hills above the new sea level. The front shore (B) deals with the vulnerable edges by creating an earthen wall as a front shore, behind which a tranquil lagoon emerges, where biodiversity increases. Heightened economics (C) are areas, where the land is heightened around and under existing economic functions, protecting and safeguarding these functions. The airports for instance will be embedded in surrounding sand hills. The sand catcher (D) enables the foreshore to catch sand, enhancing the ground level to grow with the sea level in order to create a protective zone in front of the safe living areas. The existing living areas at a distance from the bay (E, southern part) will be protected by a zone consisting of a '100-meter dike', on and in which sustainable energy is produced by wind and osmosis plants, and behind which a fresh water reservoir is created, storing enough fresh water to provide all inhabitants with drinking water. An identical '100-meter dike' protects the front living areas (F). This dike is so broad that it is impossible to breach and gives space to realize sustainable energy units on and in the dike. At the same time the dike creates fresh water reservoirs behind it. On shore plantation provides an enriched biodiversity. The earth walled marshes (G) are surrounded by an earthen wall, which protects the area against a rising sea level and keeps discharging water from the hills in the marshes, enhancing the development of marsh and the accompanying biodiversity.