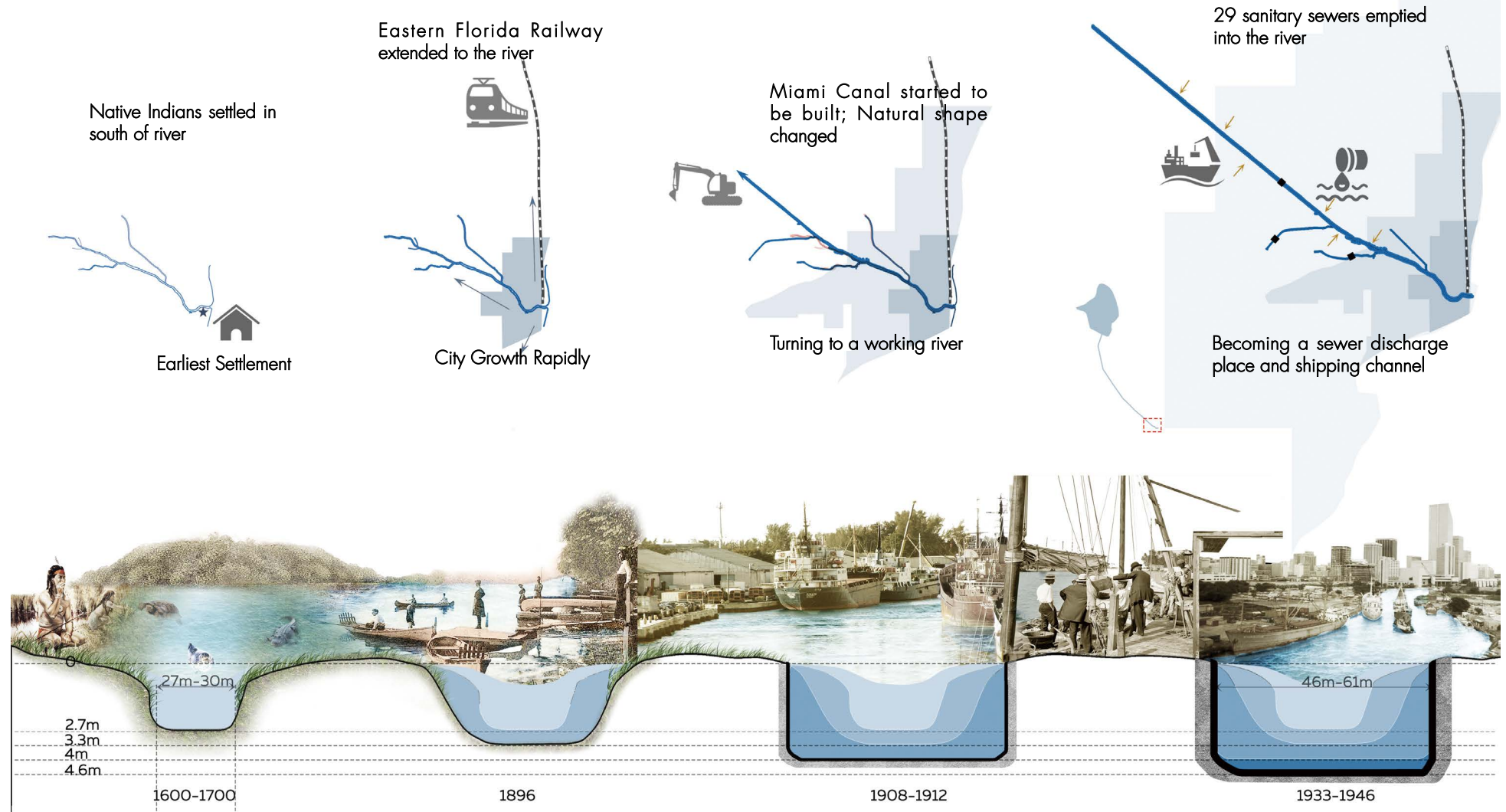


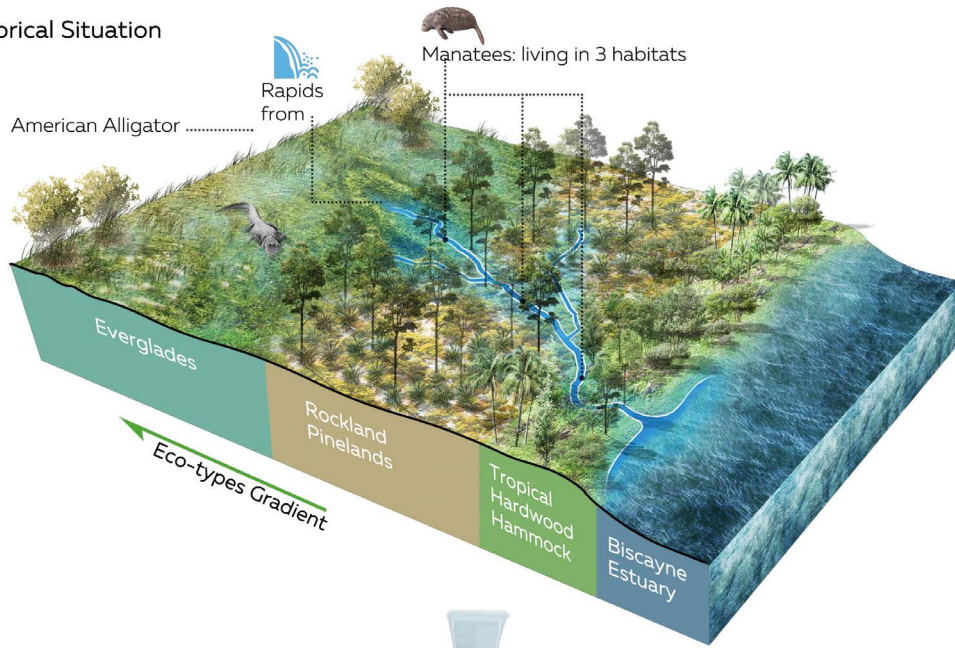
# Historical Changes of Miami River



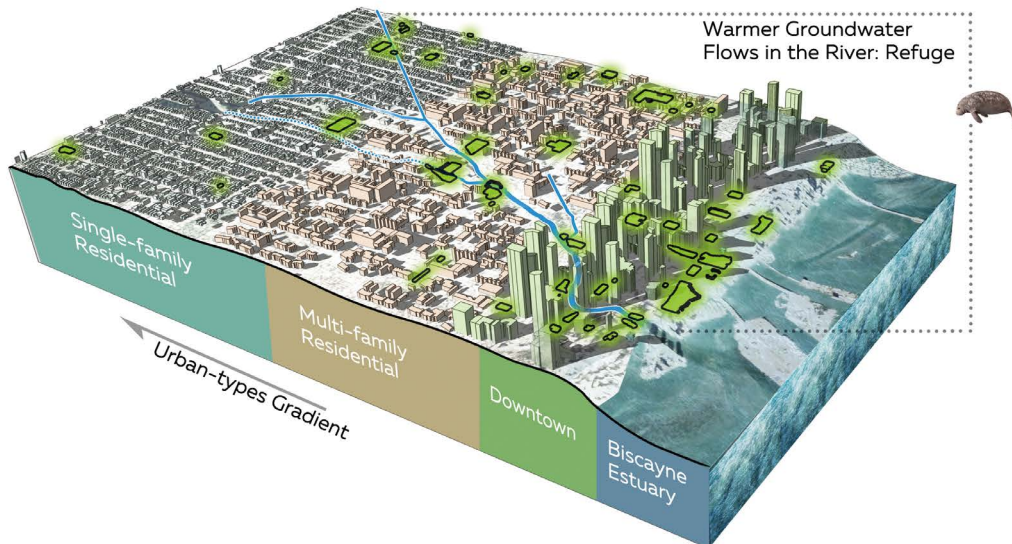
Change of the River Form & Shape

# Change of the Urban Environment

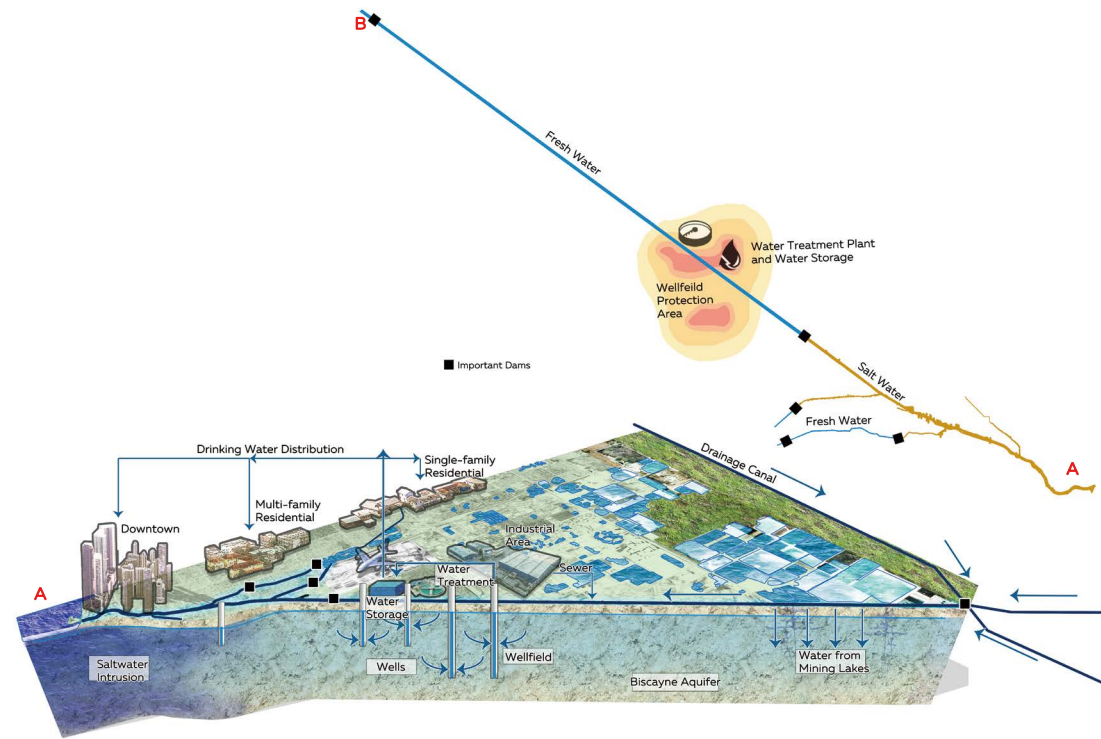
## Historical Situation

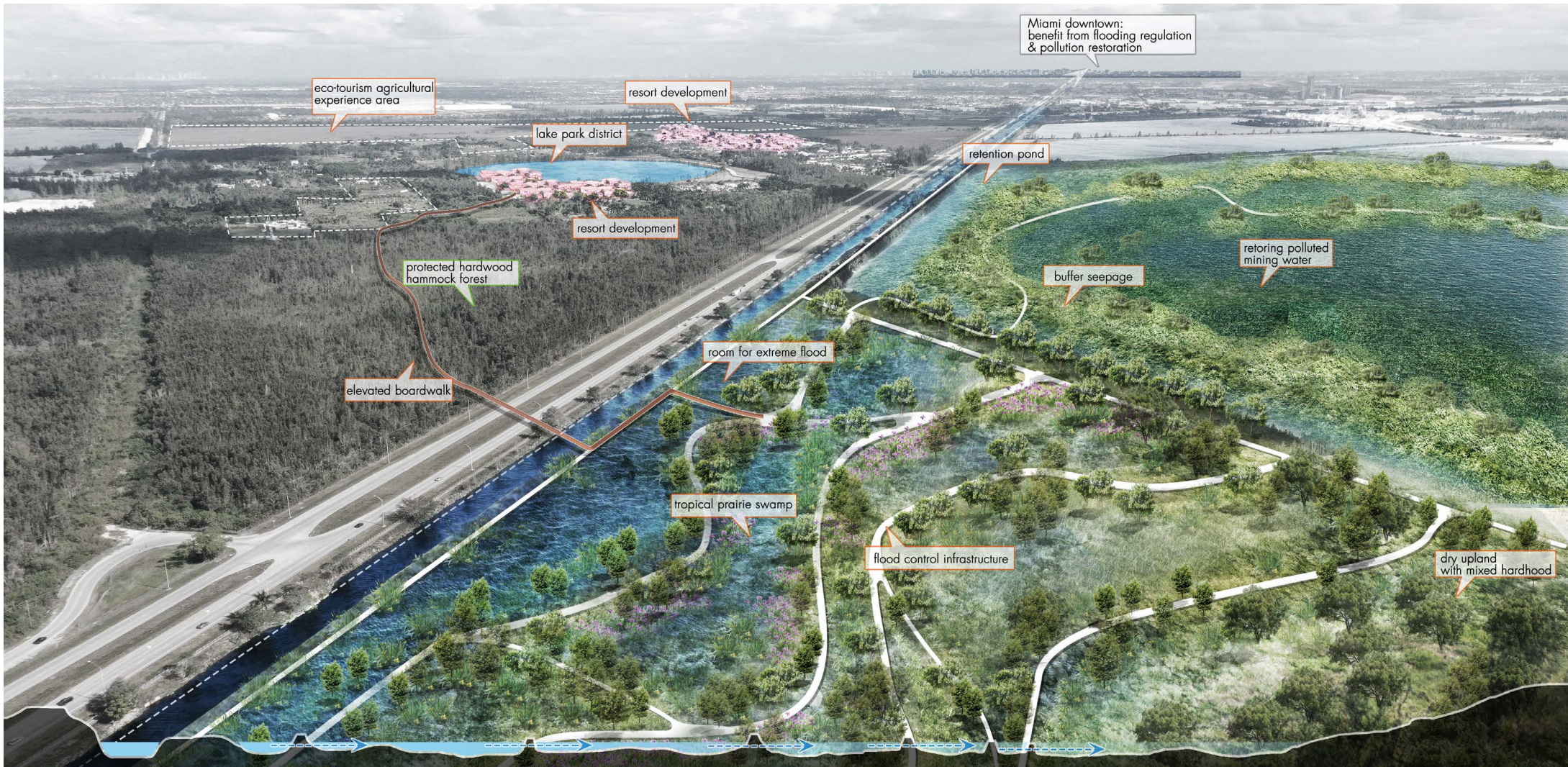


## Current Situation



Rich Ecosystems Diminished





eco-tourism agricultural experience area

lake park district

resort development

resort development

protected hardwood hammock forest

elevated boardwalk

room for extreme flood

tropical prairie swamp

flood control infrastructure

retention pond

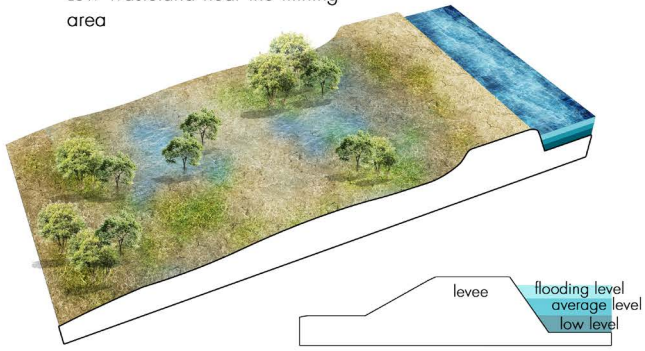
buffer seepage

retoring polluted mining water

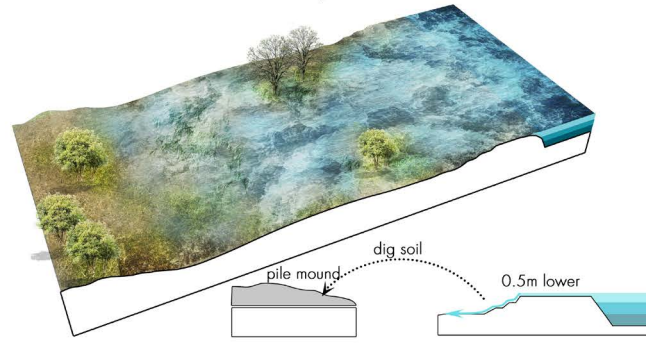
dry upland with mixed hardwood

Miami downtown:  
benefit from flooding regulation  
& pollution restoration

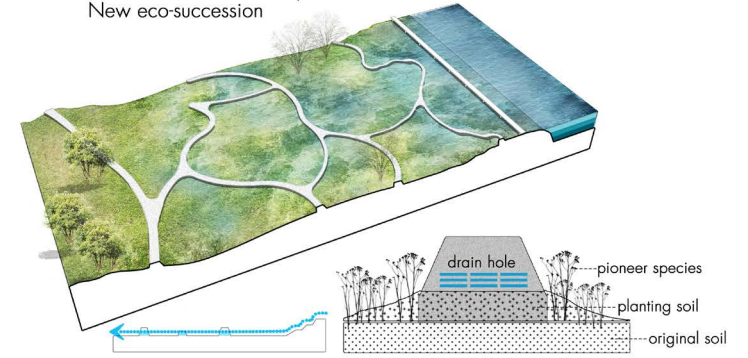
Low wasteland near the mining area



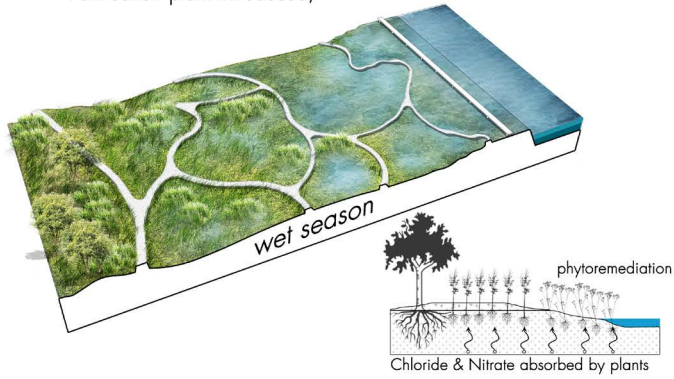
New room for extreme flood;



Structure with drain hole;  
New eco-succession



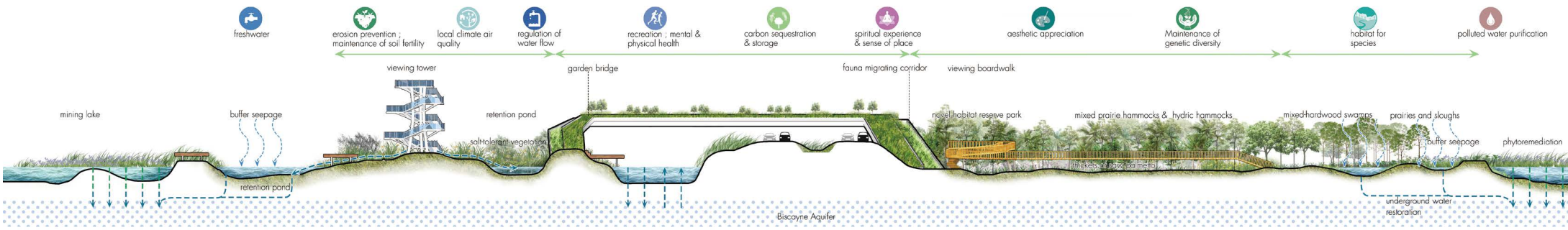
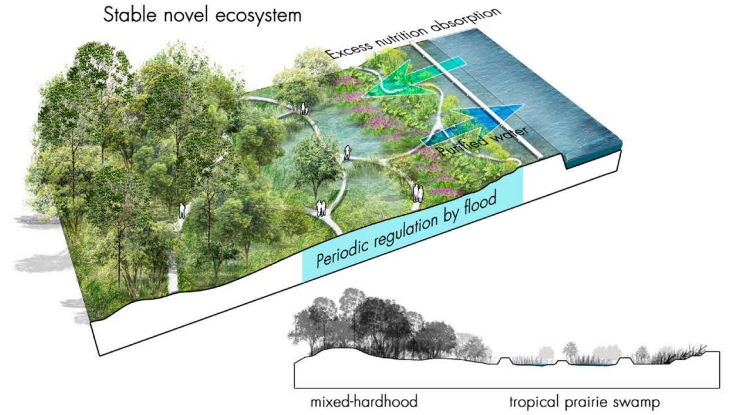
Purification plant introduced;



Hardhood introduced;



Stable novel ecosystem





elevated park

commercial service

urban green complex

elevated park

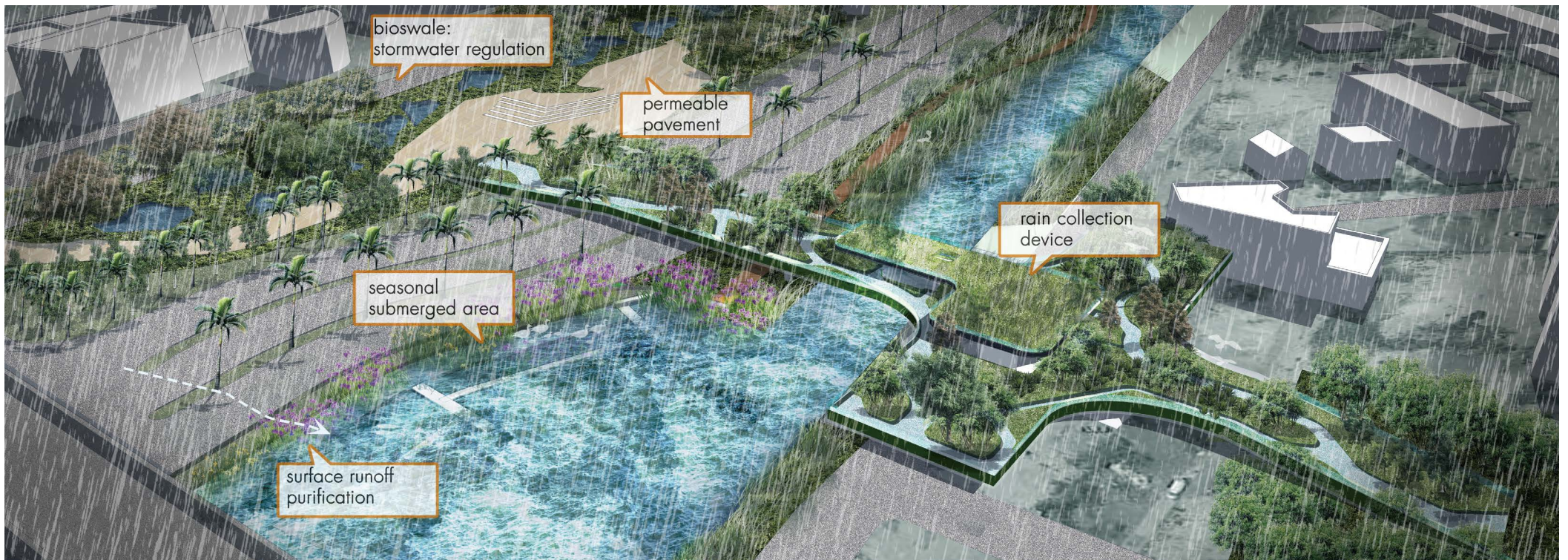
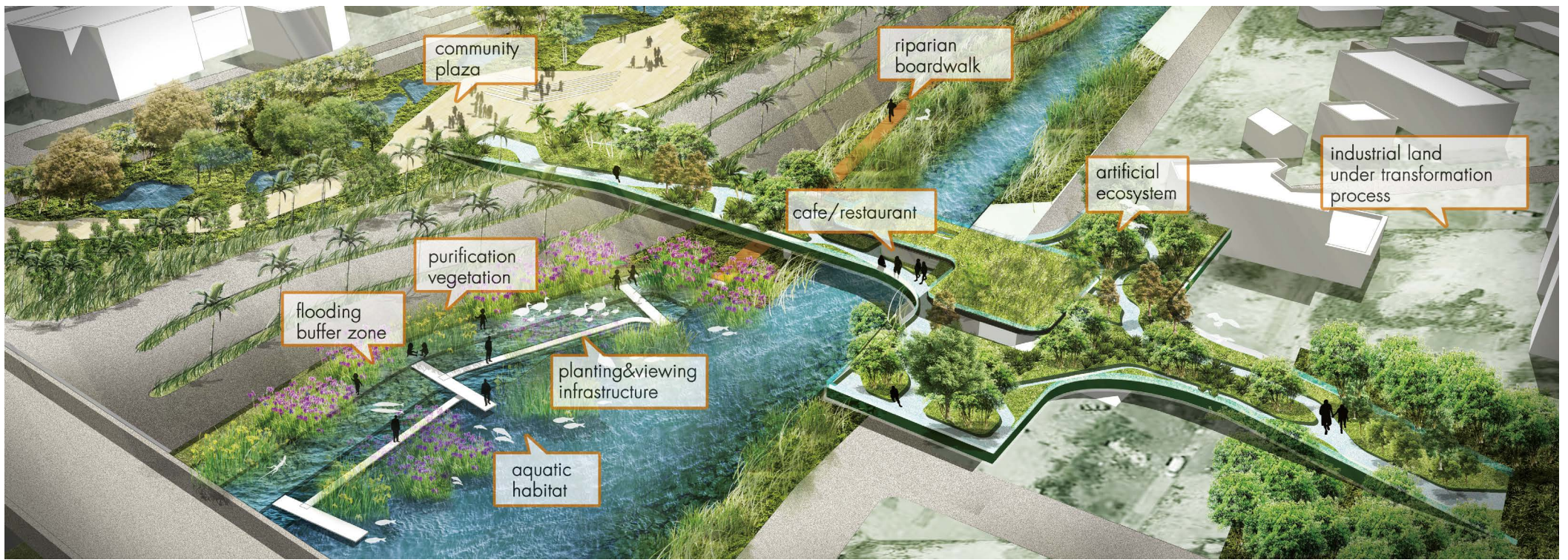
urban green complex

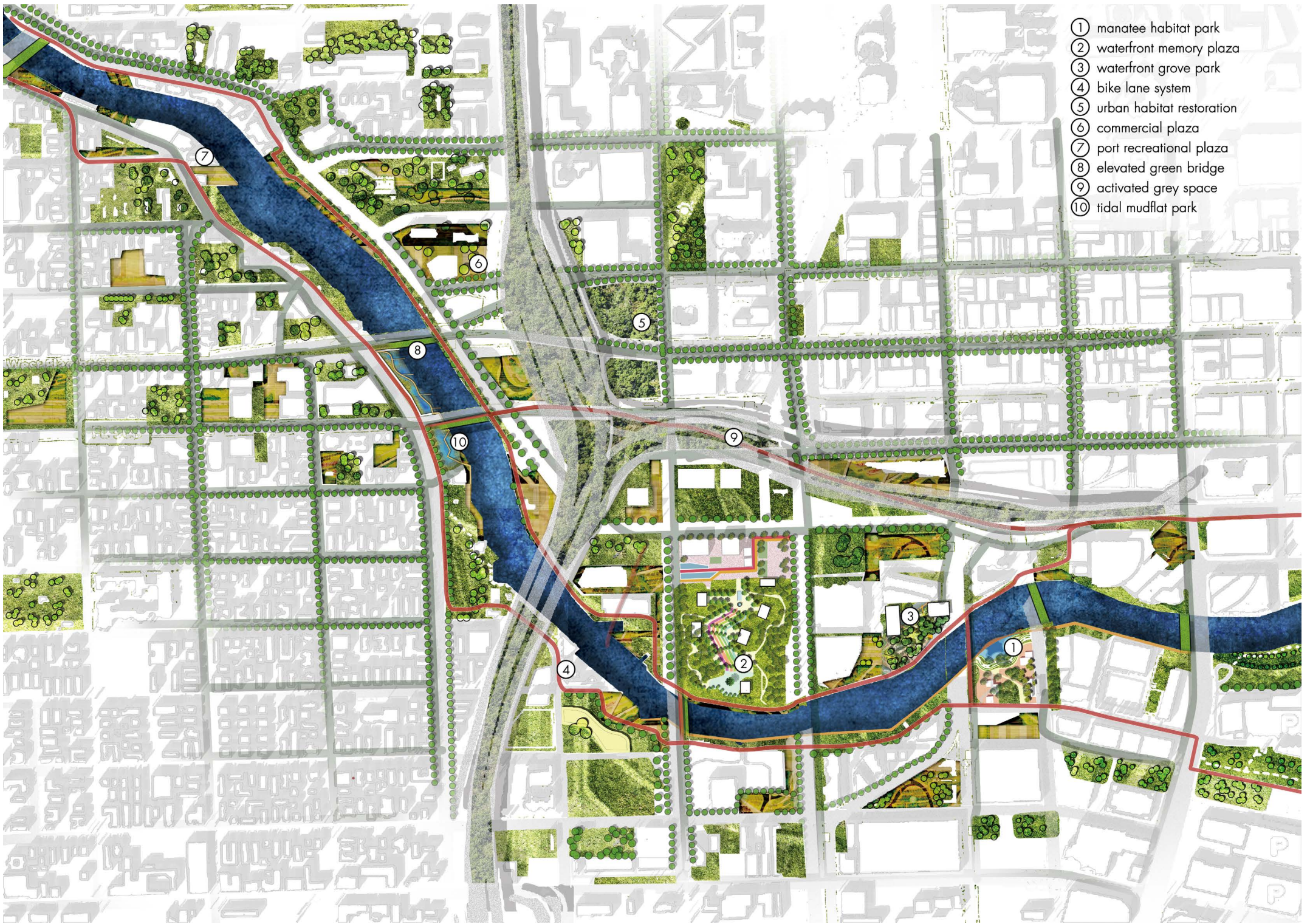
elevated park

bioswale

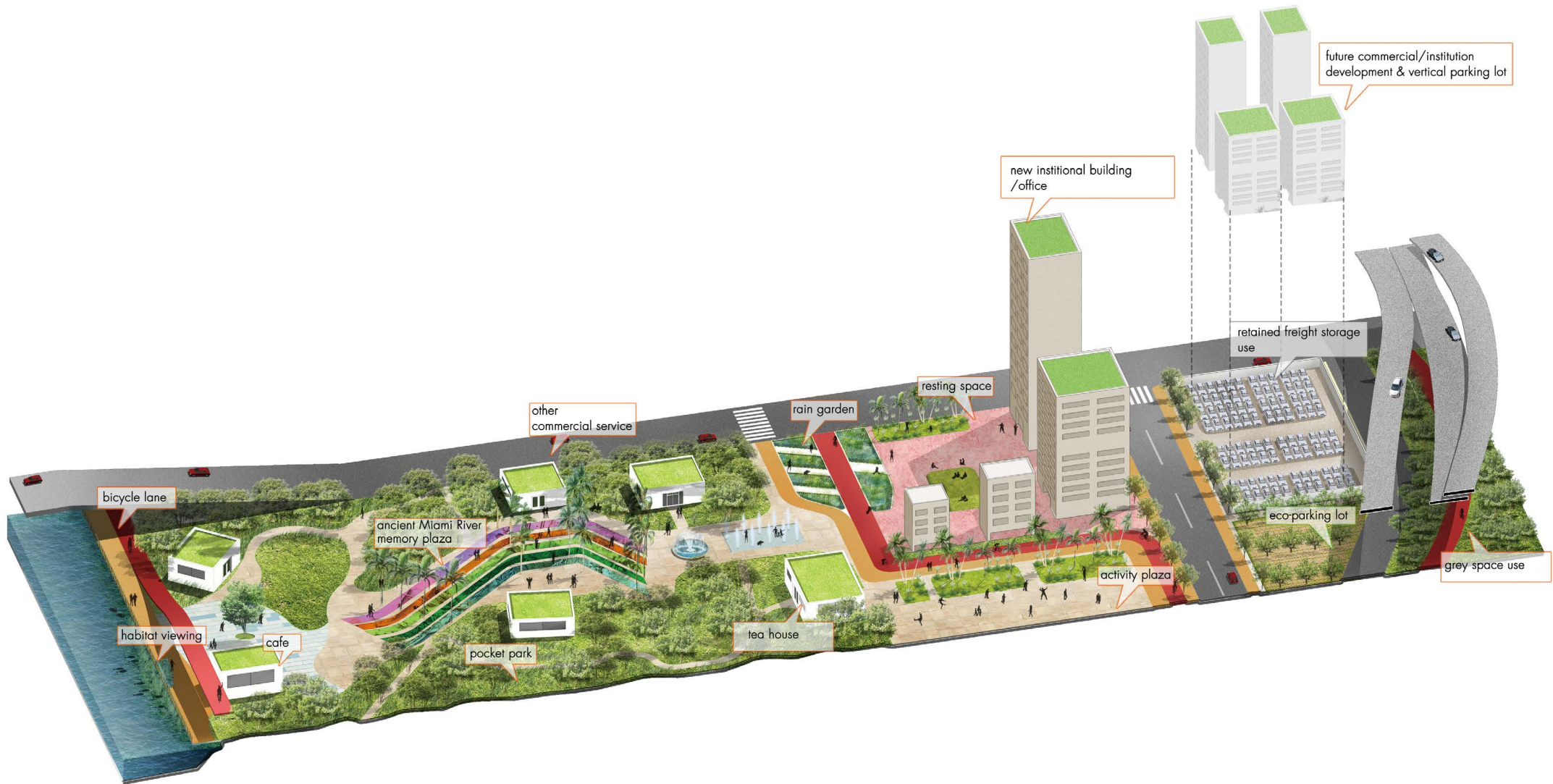
Industrial land

urban green complex



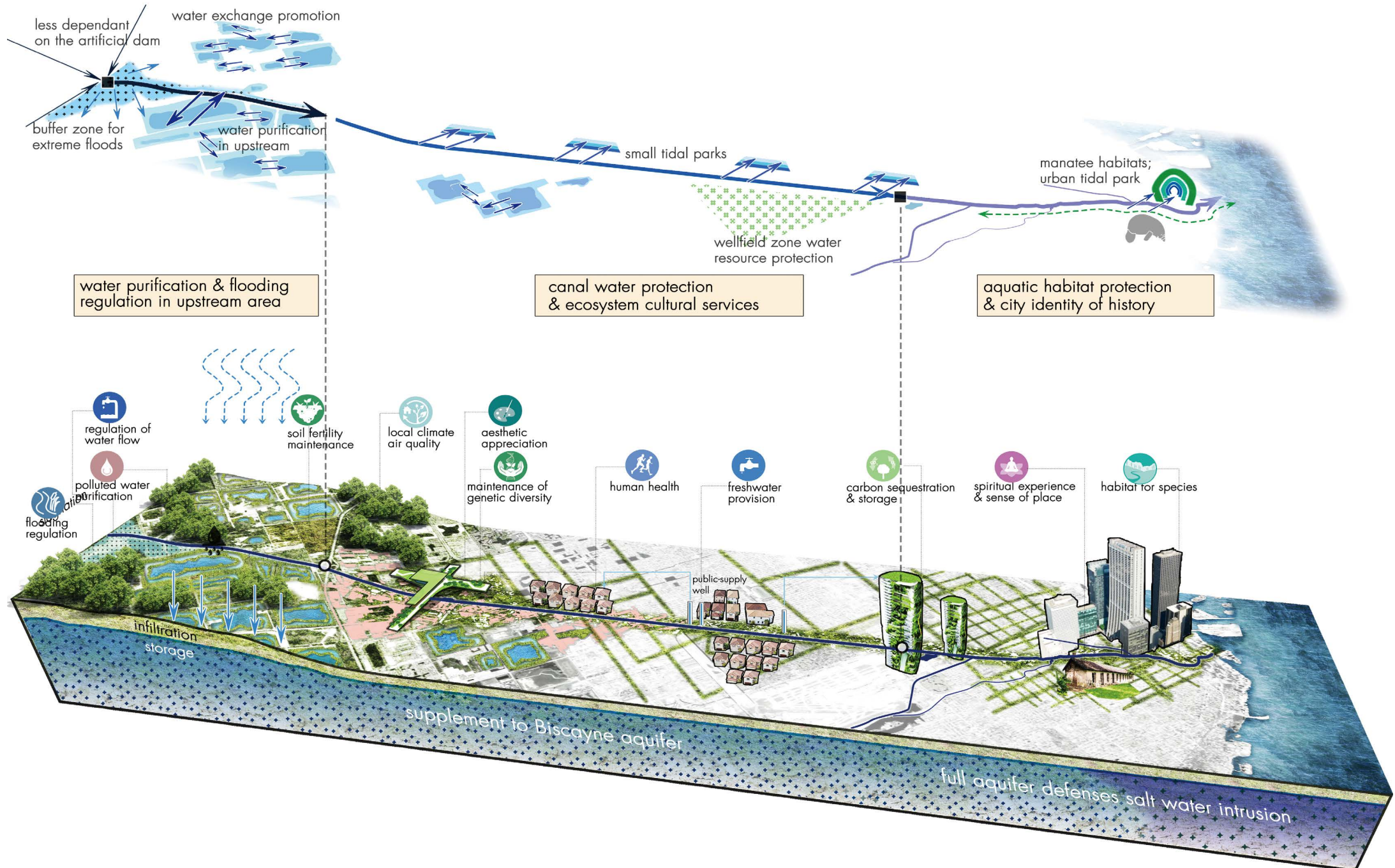


- ① manatee habitat park
- ② waterfront memory plaza
- ③ waterfront grove park
- ④ bike lane system
- ⑤ urban habitat restoration
- ⑥ commercial plaza
- ⑦ port recreational plaza
- ⑧ elevated green bridge
- ⑨ activated grey space
- ⑩ tidal mudflat park









less dependant on the artificial dam

water exchange promotion

buffer zone for extreme floods

water purification in upstream

small tidal parks

wellfield zone water resource protection

manatee habitats; urban tidal park

water purification & flooding regulation in upstream area

canal water protection & ecosystem cultural services

aquatic habitat protection & city identity of history

regulation of water flow

soil fertility maintenance

local climate air quality

aesthetic appreciation

human health

freshwater provision

carbon sequestration & storage

spiritual experience & sense of place

habitat for species

polluted water purification

flooding regulation

maintenance of genetic diversity

public supply well

infiltration storage

supplement to Biscayne aquifer

full aquifer defenses salt water intrusion