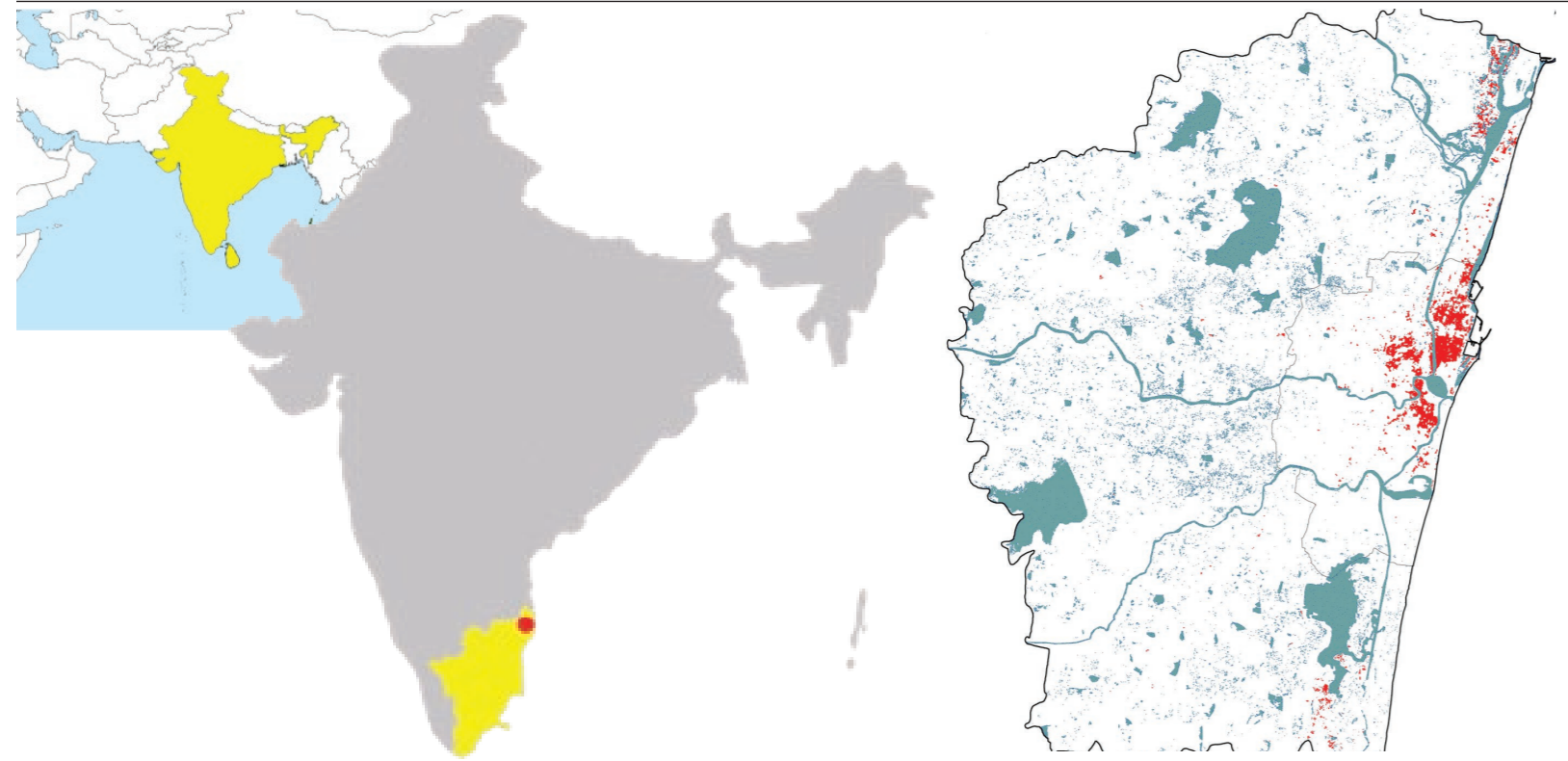
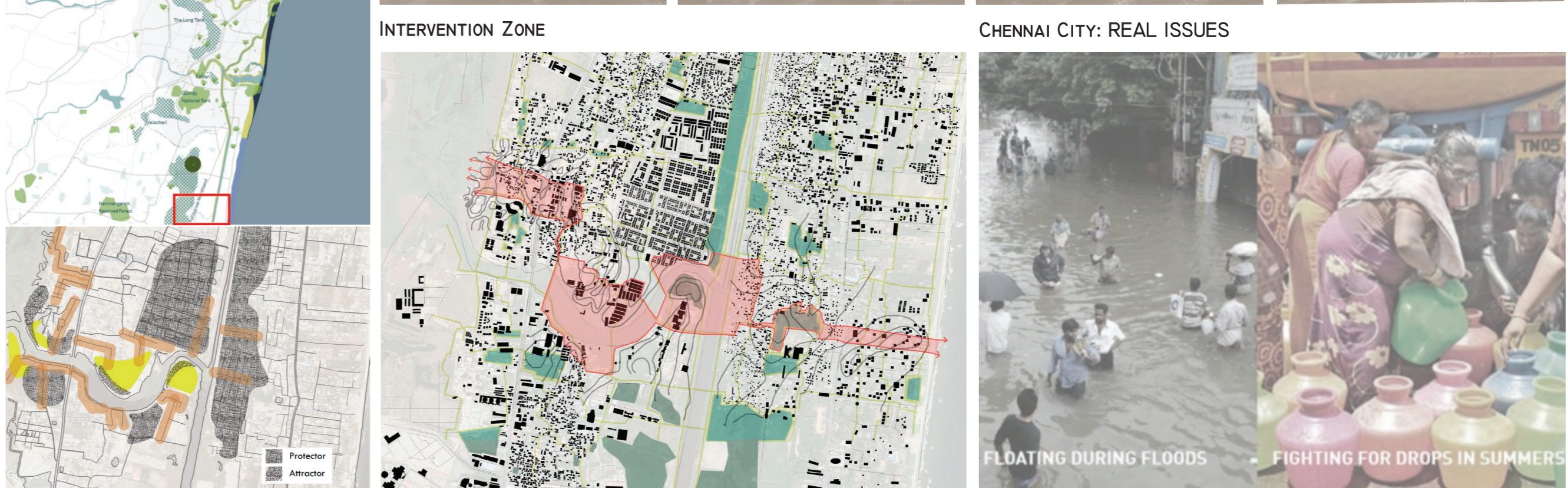
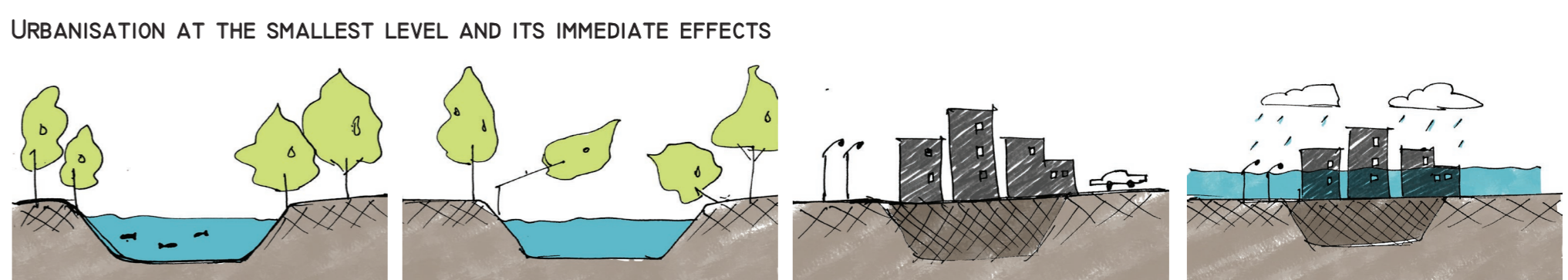
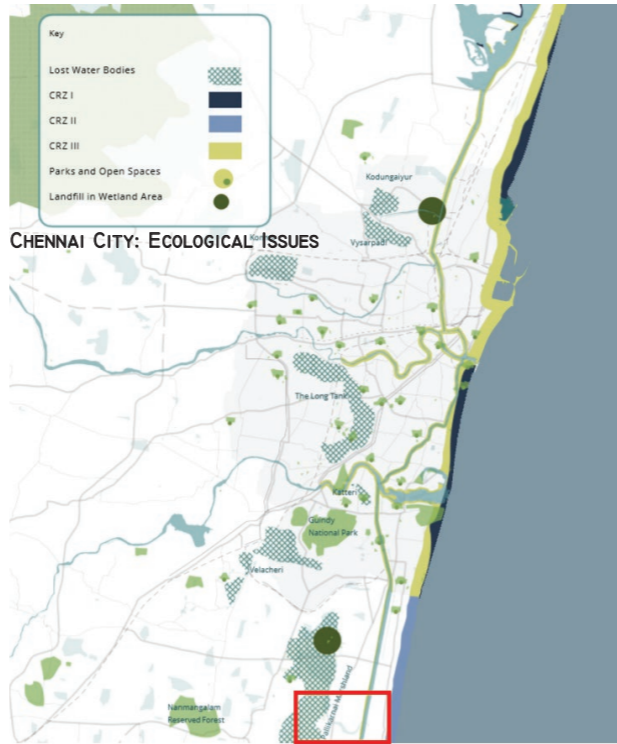
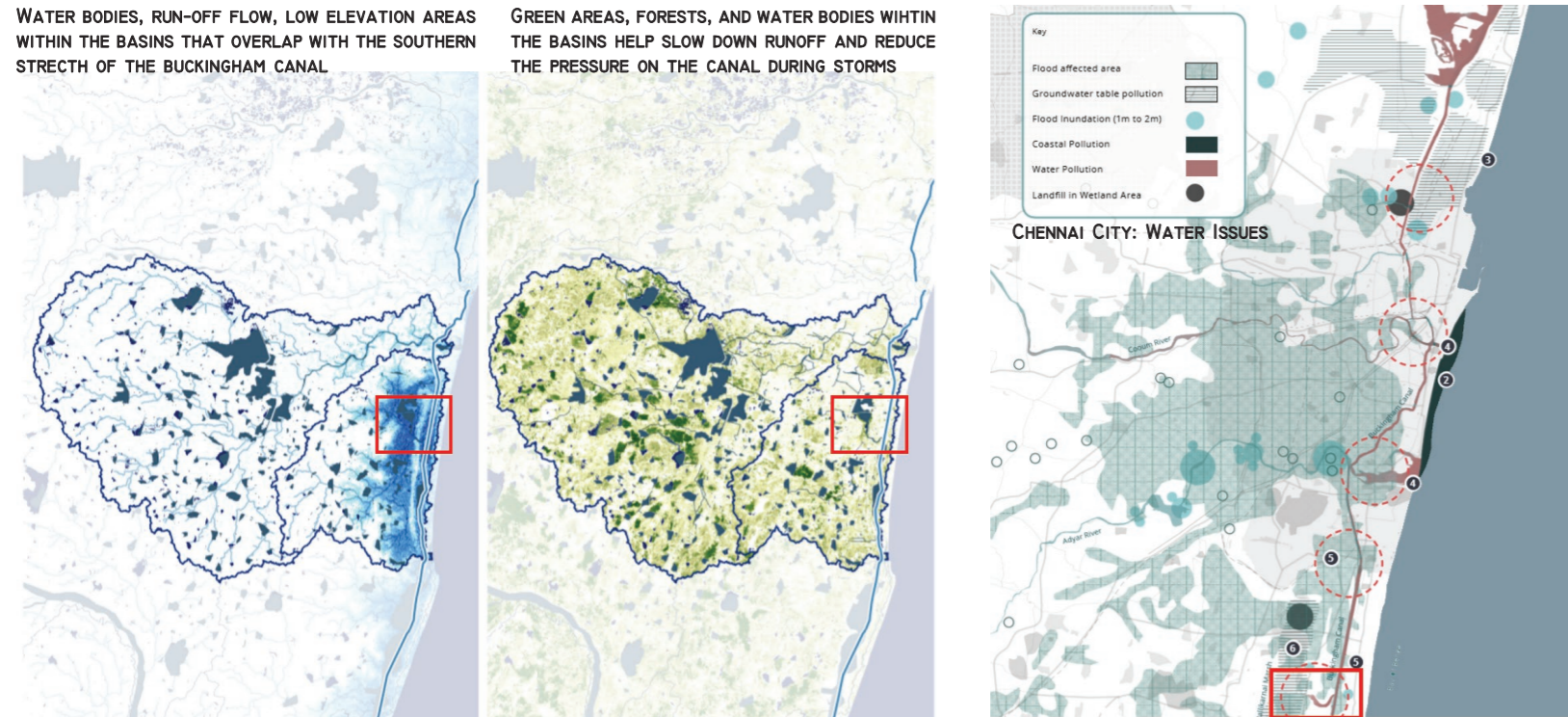


STUDY AND EVOLUTION OF SUSTAINABLE LANDSCAPE PROGRAMME FOR FLOOD AND DROUGHT MANAGEMENT IN SOUTH CHENNAI



CONTEXT

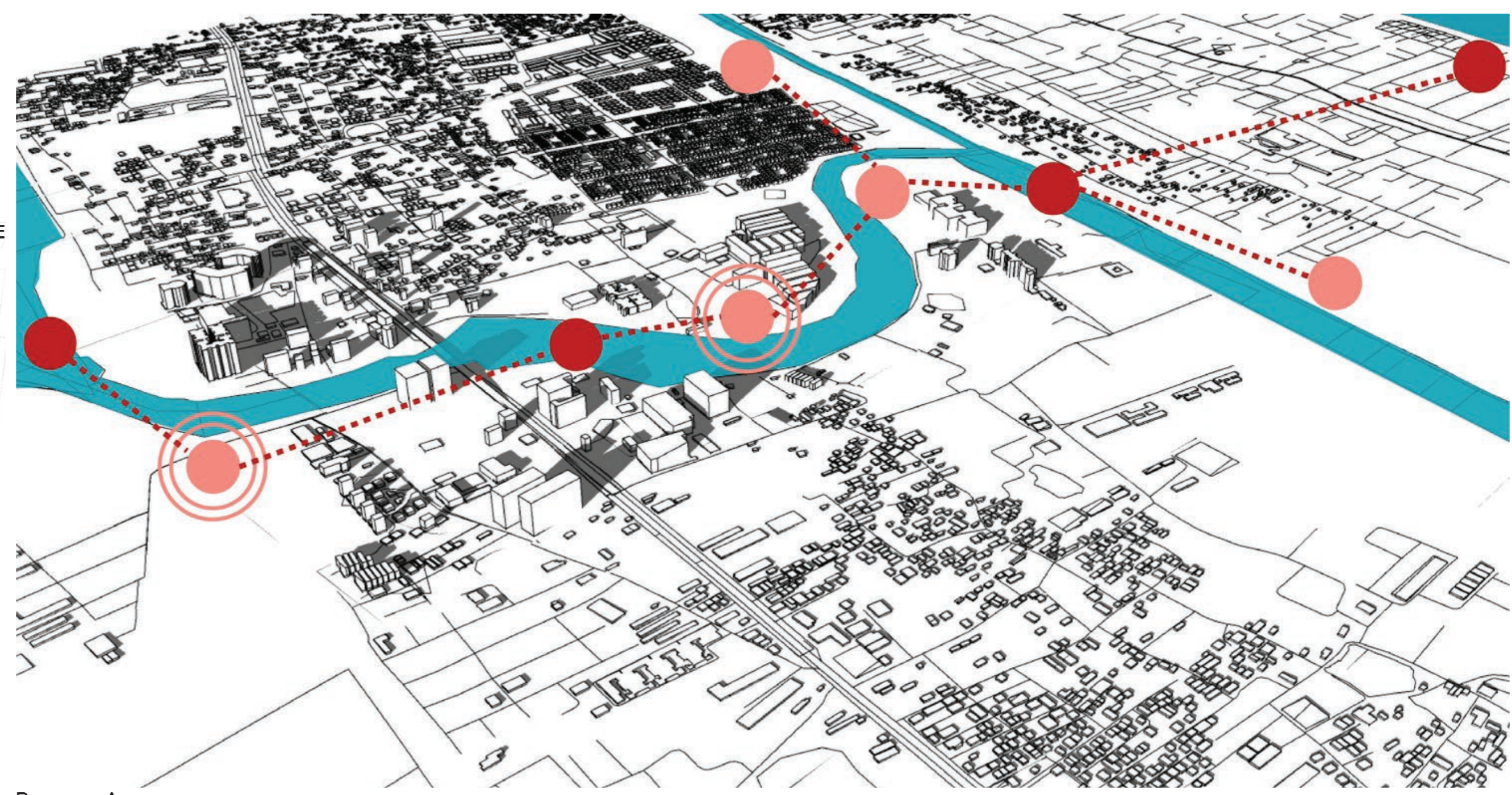
DUE TO RAPID URBANIZATION AND HUMAN INTERFERENCE, THE LAST REMAINING MARSHLAND OF CHENNAI CITY, THE PALLIKARNAI MARSHLAND, A UNIQUE ECOSYSTEM OF ITS KIND, HAS BEEN REDUCED TO ONE-THIRD OF ITS ORIGINAL EXTENT. THE MARSH HAS BEEN REDUCED AND FRAGMENTED, DUE TO CONSTRUCTION OF INSTITUTES, THE ADJACENT PERUNGUDI DUMP-YARD AND SEWAGE TREATMENT PLANT, IT CORRIDORS, RESIDENTIAL COMPLEXES. PALLIKARNAI MARSHLAND IS ONE OF THE MOST IMPORTANT WETLANDS IN INDIA. IT IS NATURAL AND UNIQUE IN ITS HYDROLOGY. IT IS HOME TO A LARGE NUMBER OF SPECIES OF PLANTS AND ANIMALS. IT IS, HOWEVER, UNDER VARIOUS KINDS OF THREATS; THREATS THAT ARE LARGELY DUE TO THE RAPIDLY CHANGING SURROUNDING URBAN LANDSCAPE OF CHENNAI. THE 'FROM THIS MARSHLAND STEMS THE OKKIYAM LAKE WHICH INCIDENTALLY DRAINS INTO THE INFAMOUS BUCKINGHAM CANAL, THAT RUNS PARALLEL TO THE COAST OF CHENNAI. THIS CANAL WAS ORIGINALLY BUILT TO SERVE AS A HOPE OF TRANSPORTATION OF TRADING GOODS ALONG THE EAST COAST OF SOUTHERN INDIA. IT IS ALMOST 800 KM LONG AND BUILT DURING THE BRITISH REGIME IN THE LATE 19TH CENTURY. HOWEVER, OVER THE LAST 50 YEARS, THE CANAL HAS DECLINED TO NOTHING BUT STAGNANT, POLLUTED WATER, FLANKED BY SLUM DEVELOPMENTS.



DYNAMIC 1: FRAGMENTED PROVISION OF GREEN AND GREY INFRASTRUCTURE IN PARTICULAR CONTEXTS OF THE MARSHLAND, LAKE AND CANAL

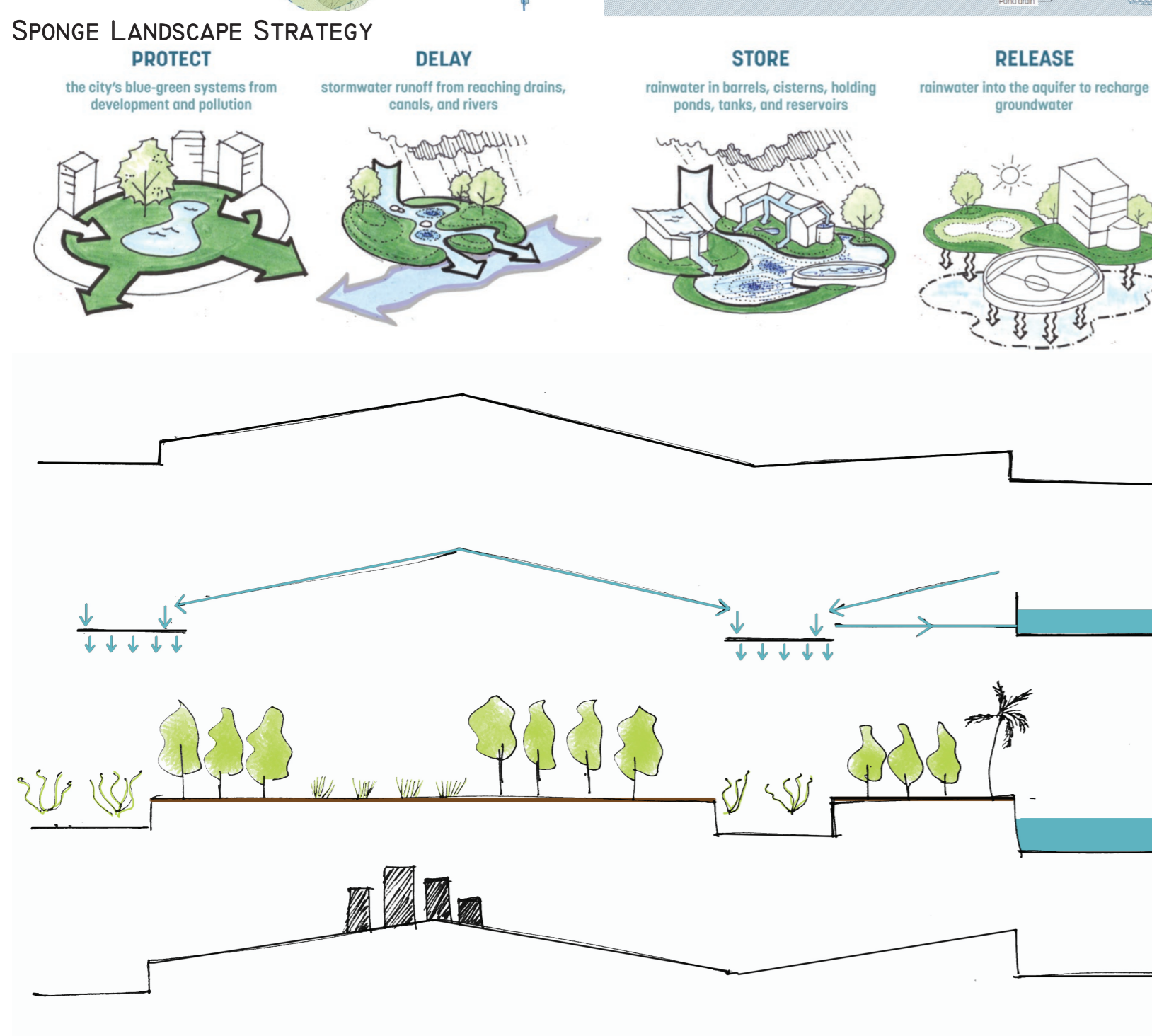
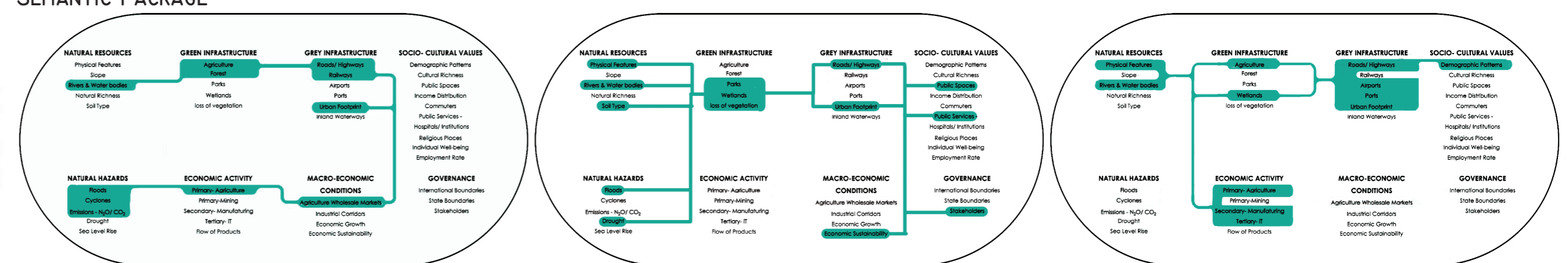
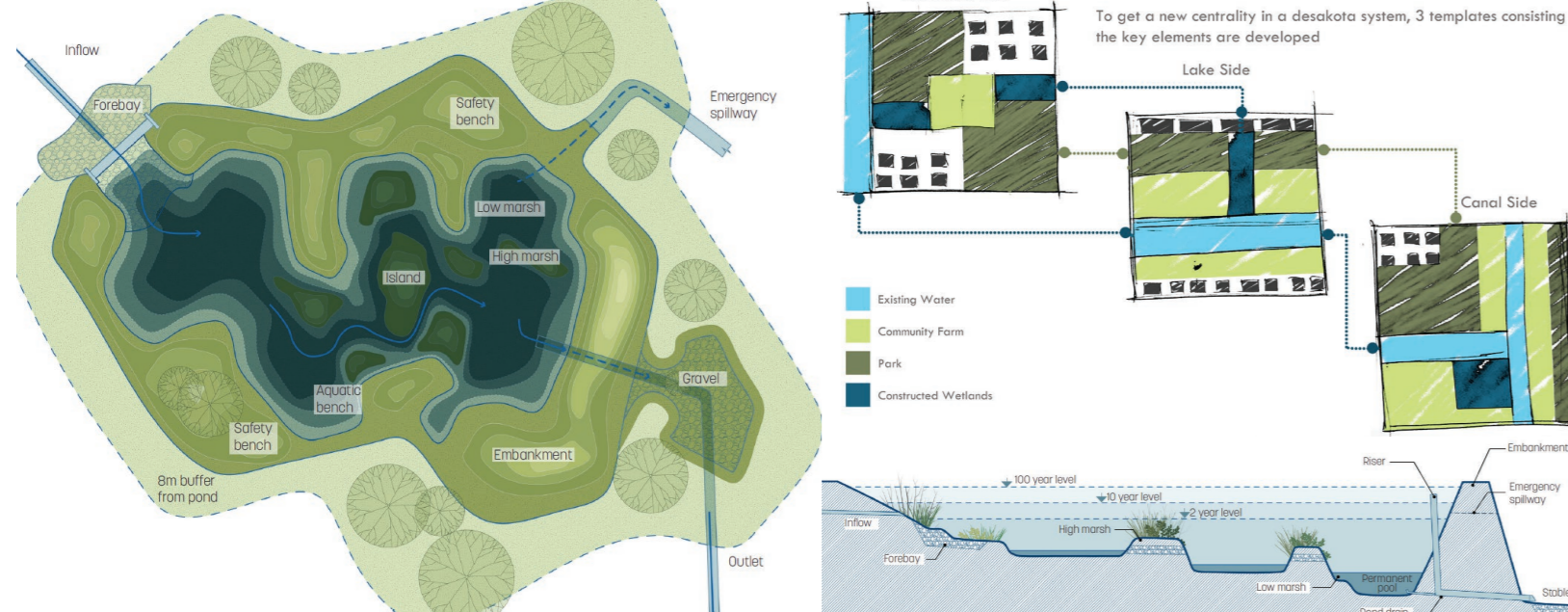
DYNAMIC 2: LACK OF PUBLIC SPACE AND COMMUNITY INTERACTION

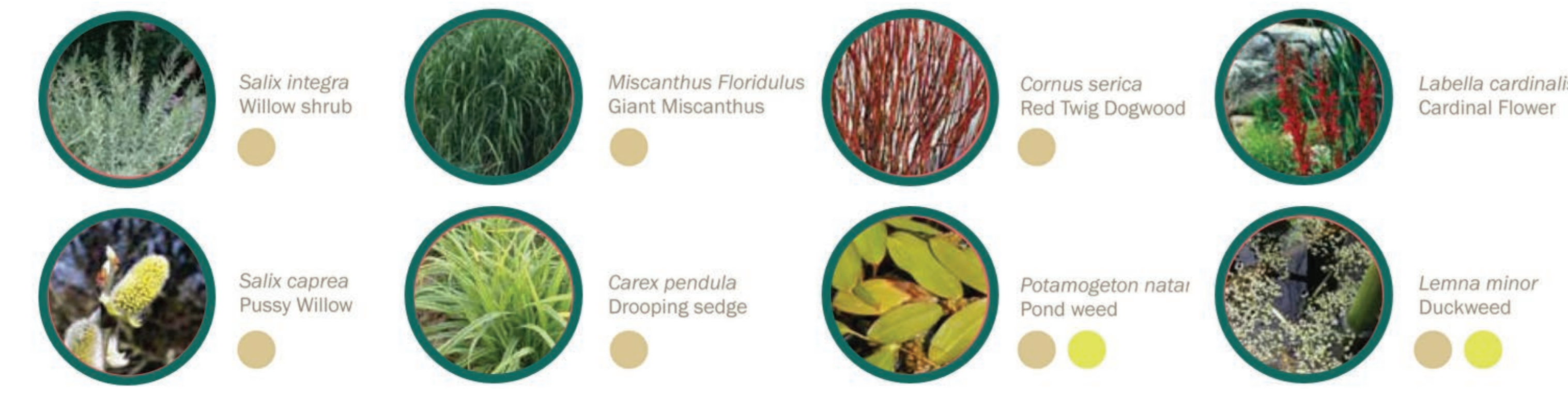
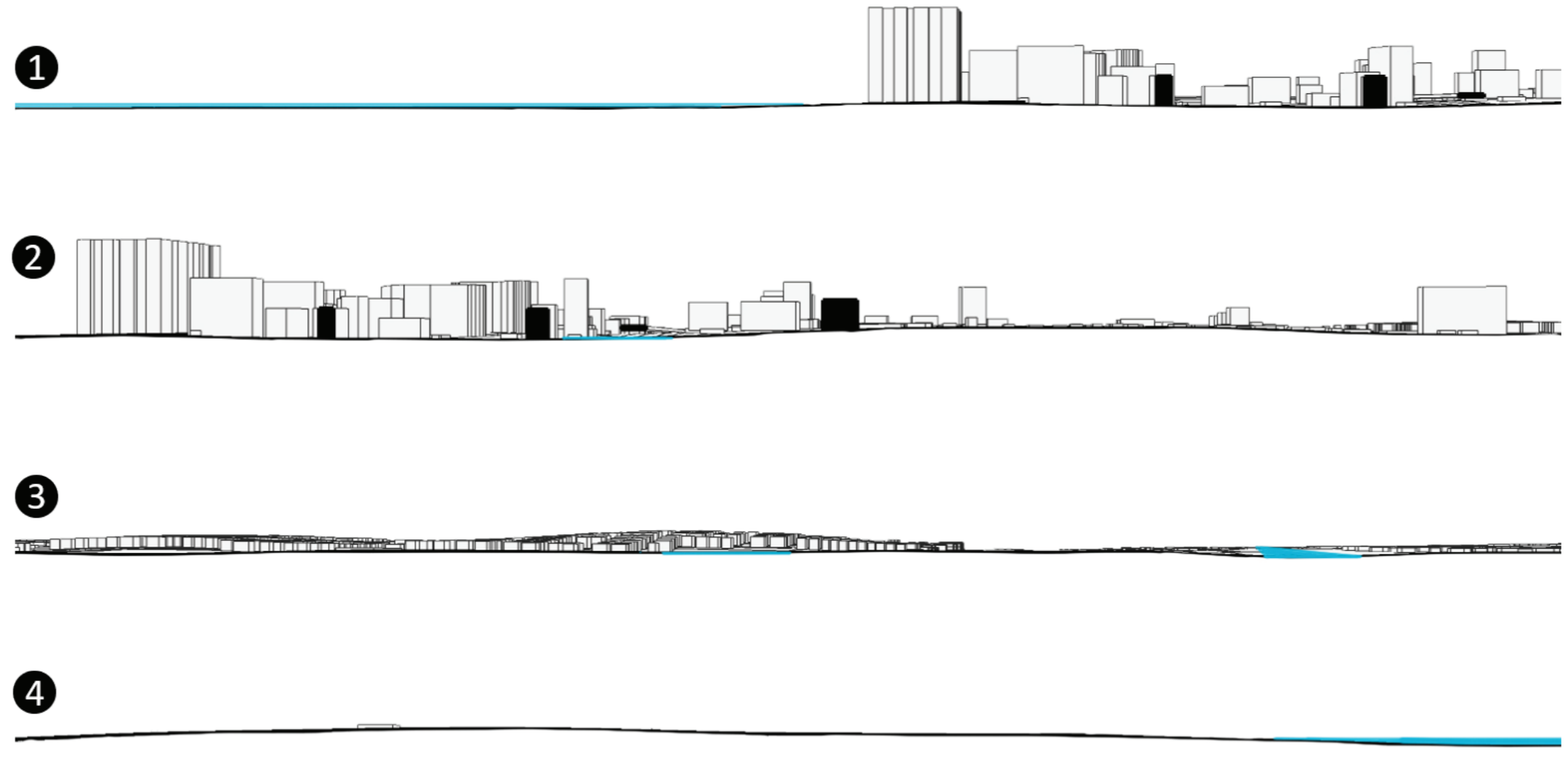
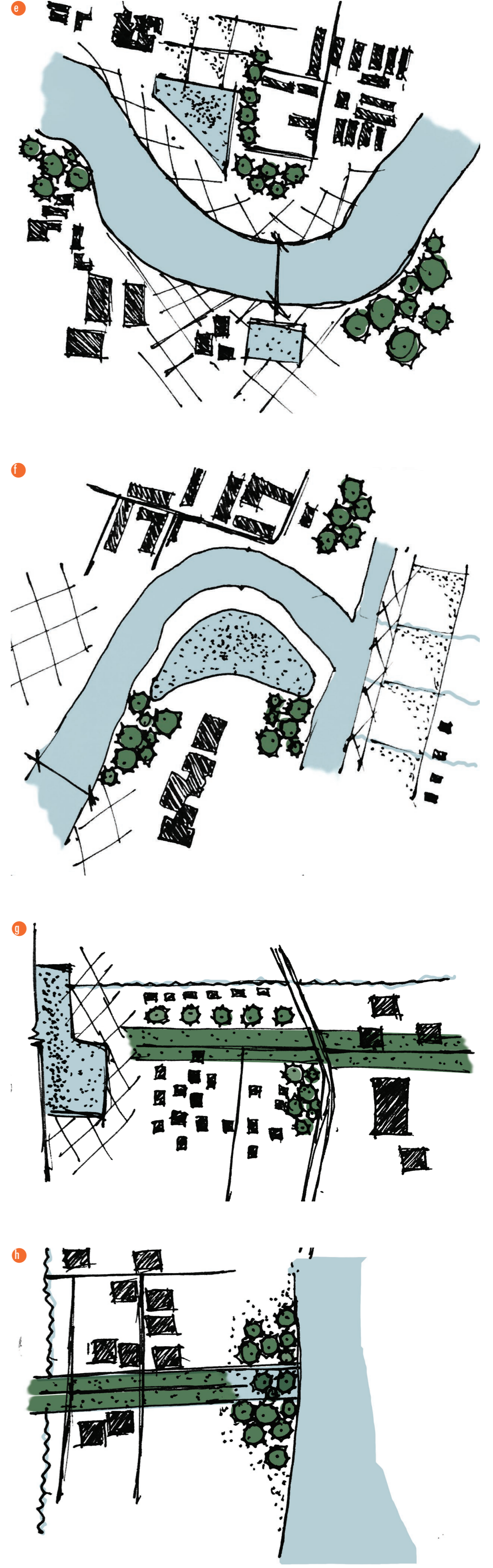
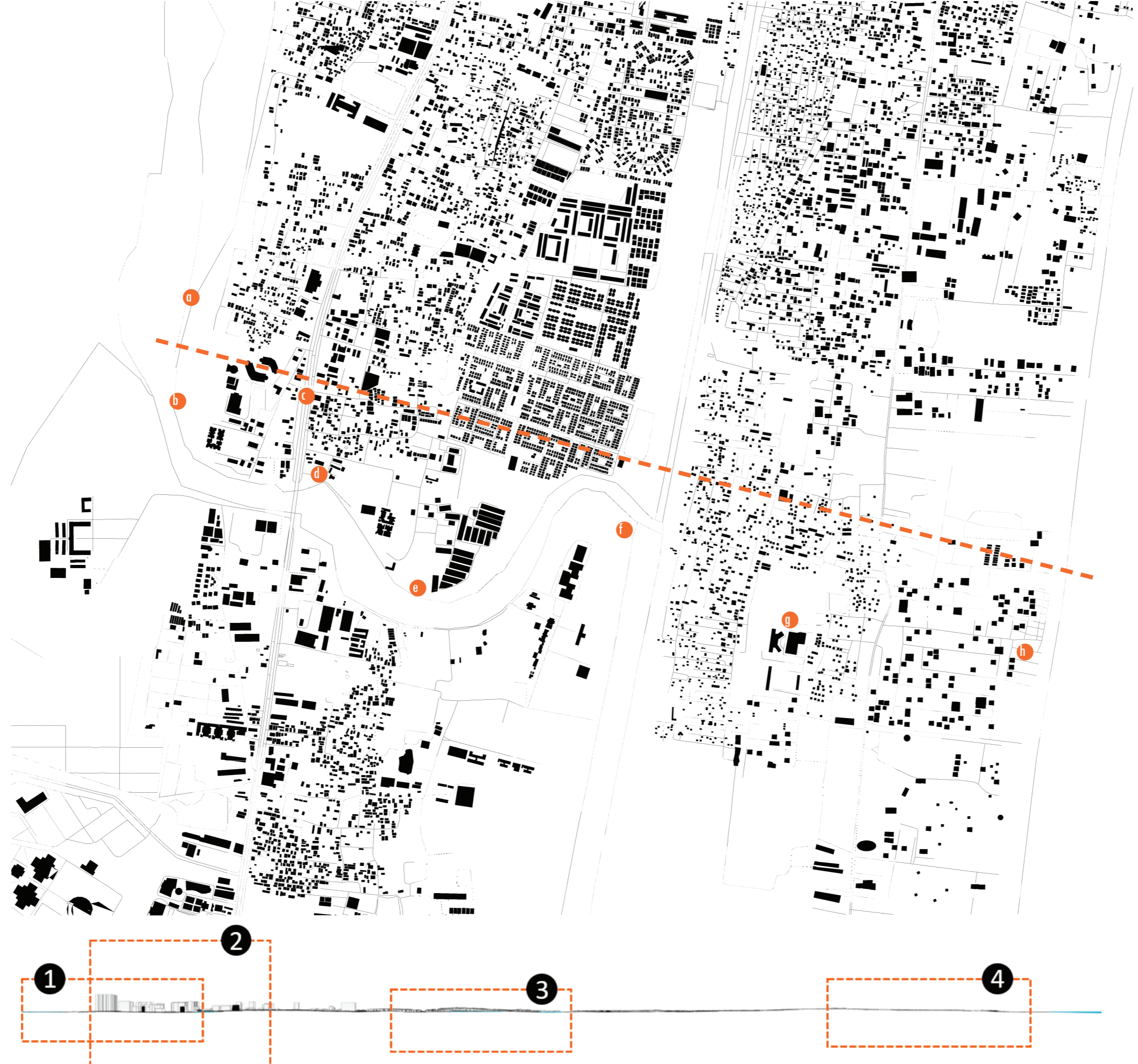
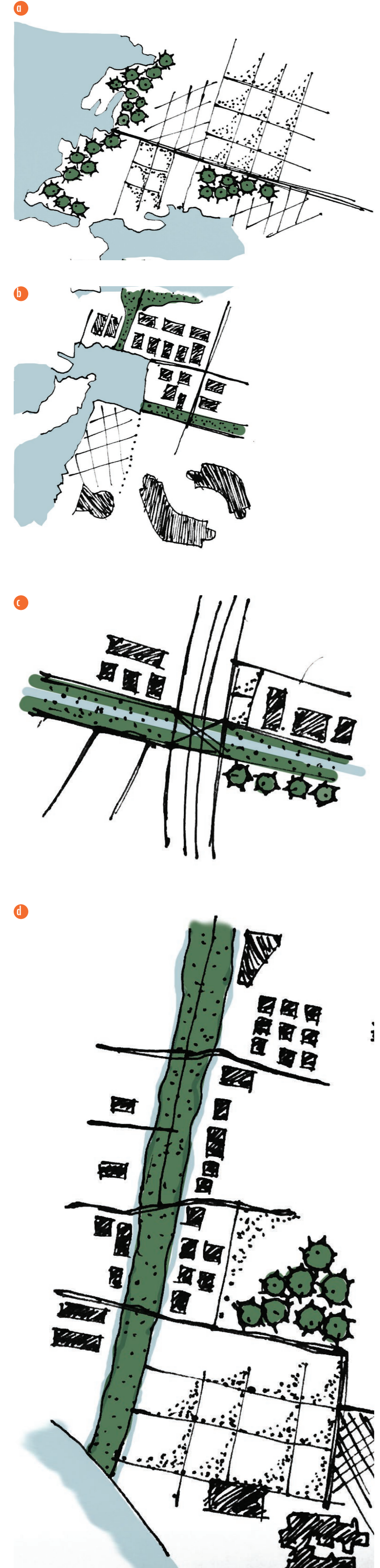
DYNAMIC 3: FRAGILE PHYSICAL STATE OF THE DESAKOTA DUE TO RAPID URBANIZATION



PROJECT AIM

THE GOAL OF THE PROJECT IS TO ANALYSE THE METROPOLITAN COMPLEXITY, STRETCHING ALONG THESE THREE POINTS, PALLIKARNAI MARSHLAND-OKKIYAM LAKE-BUCKINGHAM CANAL, AND DELIVER A SENSIBLE WETLAND-URBAN PROJECT THAT CAN SERVE AS A MODEL WHICH CAN BE USED AT OTHER SPONGE SITES ACROSS THE CHENNAI METROPOLITAN AREA AND ACROSS THE NATION. THE PROJECT WOULD AIM TO CREATE A REGIONAL SPONGE BY INTERCONNECTING THE WATER BODIES AND GREEN SPACES, FACILITATING THE RECHARGE OF GROUND WATER AND PREVENTING THE FREQUENT FLOODS. THE PROJECT DEALS WITH THE VARIOUS ASPECTS OF DESIGN SUCH AS SPONGE LANDSCAPE STRATEGIZING, INFRASTRUCTURE PLANNING, AND LANDSCAPE DESIGN OF THE SAME. INTEGRATING THESE SERVICES AND SITES WOULD BE A KEY ASPECT IN ENSURING THE HOLISTIC SUSTAINABILITY. THE 3 MAIN NODES OF THE PROJECT WOULD ACT AS TIE POINTS, PROVIDING A CLEAR CANVAS OF THE AREA OF INTERVENTION. THIS WOULD THEN TRANSLATE TO A DESIGN THAT NOT ONLY SUSTAINS ITSELF BUT ALSO ADAPTS ITSELF TO CHANGING CLIMATES, USER GROUPS AND NATURAL CALAMITIES.





● Plant processes CTB's
 ● Plant processes Heavy Metals

