



**A RESILIENT  
CANAL DISTRICT**  
DESIGNING A MORE BALANCED  
& ADAPTIVE URBAN DISTRICT

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ECOLOGICAL FACTORS IN URBAN DESIGN - LA 201

## DISTRICT GOALS



Meet immediate housing, infrastructure, and open space needs: serve as a template for an **EVOLVING DISTRICT & region**

Multi-benefit water management, habitat, and public spaces: **CELEBRATE RESILIENT DESIGN**

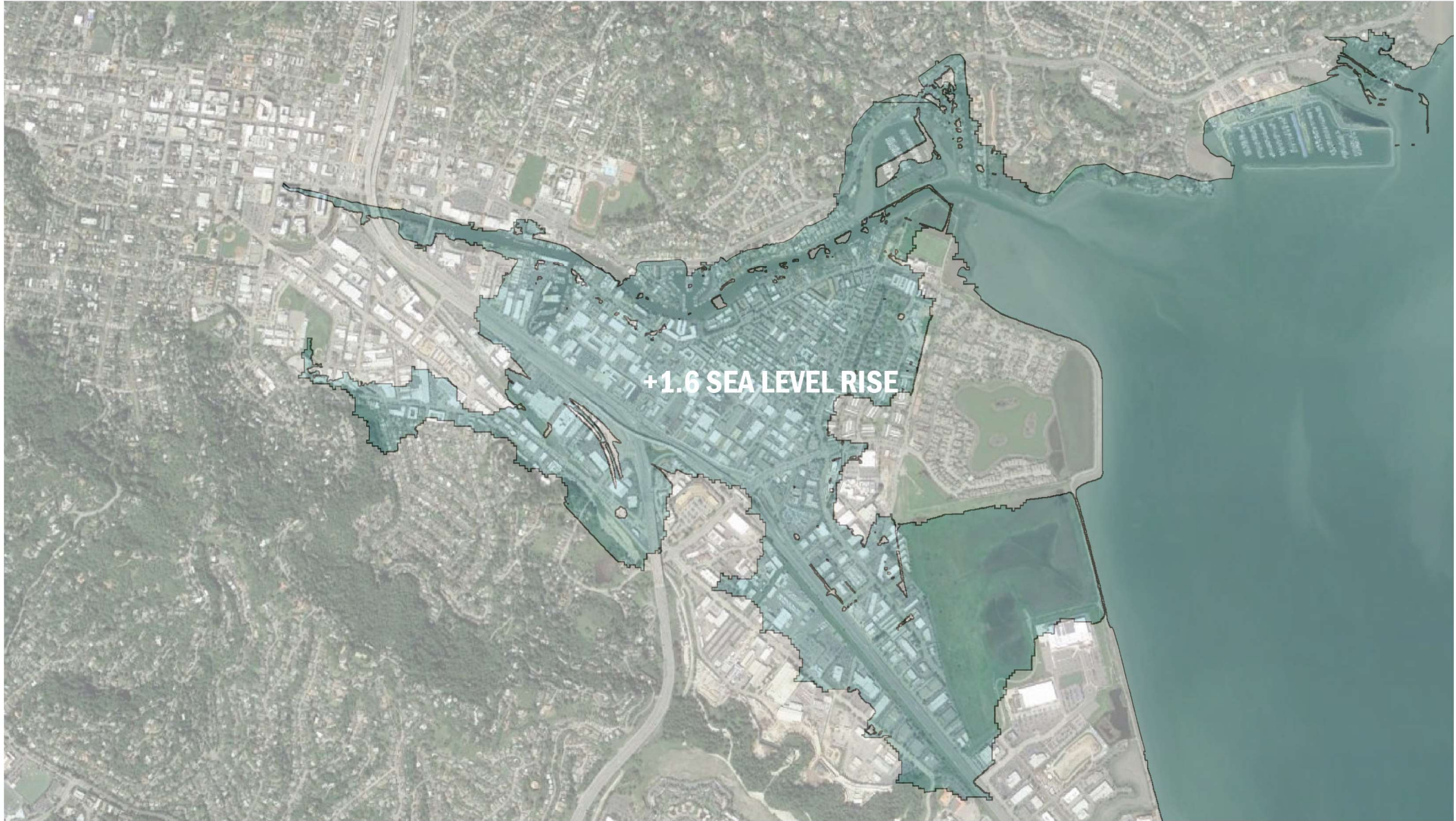
Provide for hazard **ADAPTATION**, mitigation, and preparedness





**+0.0 SEA LEVEL RISE**





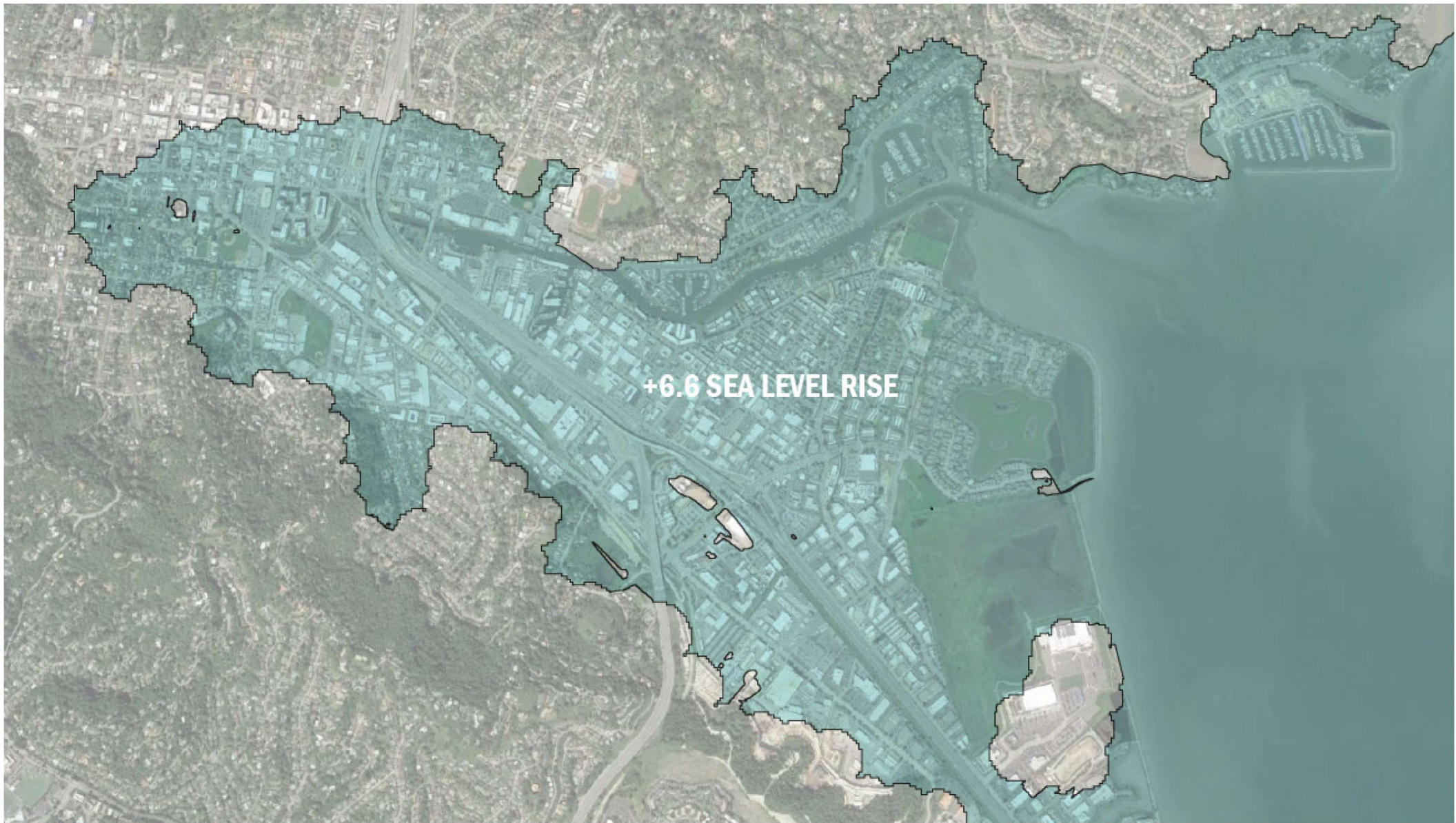
**+1.6 SEA LEVEL RISE**





**+3.3 SEA LEVEL RISE**





**+6.6 SEA LEVEL RISE**



PLENTY OF AMENITIES TO THE NORTH

POLLUTED WATERS COMING FROM UPSTREAM

CONSTANT DREDGING FOR BOATING

PICKLEWEED PARK

EXISTING WETLAND HABITAT

RECREATION ALONG THE CREEK

SPINMAKER POINT DRIVE

UNDERUTILIZED INDUSTRIAL PROPERTIES

LACK OF PUBLIC/PEDESTRIAN ACCESS ALONG THE CREEK

HIGH DENSITY DUE TO OVERCROWDING  
LOW SOCIO-ECONOMIC STATUS

CANAL STREET  
MILL STREET  
FRONT STREET

OVERPARKED

SPINMAKER POINT DRIVE

CANAL ALLIANCE GROUP

LARKSPUR STREET

LOW WALKSCORE: 67

KERNER STREET

AUTOMOBILE DEPENDENT

HIGHLY UTILIZED PUBLIC TANSIT

LAGOON

WETLAND HABITAT (SEASONAL)

BELLAM BOULEVARD

CANAL COMMUNITY GARDENS

UNDEVELOPED PARK LANDS

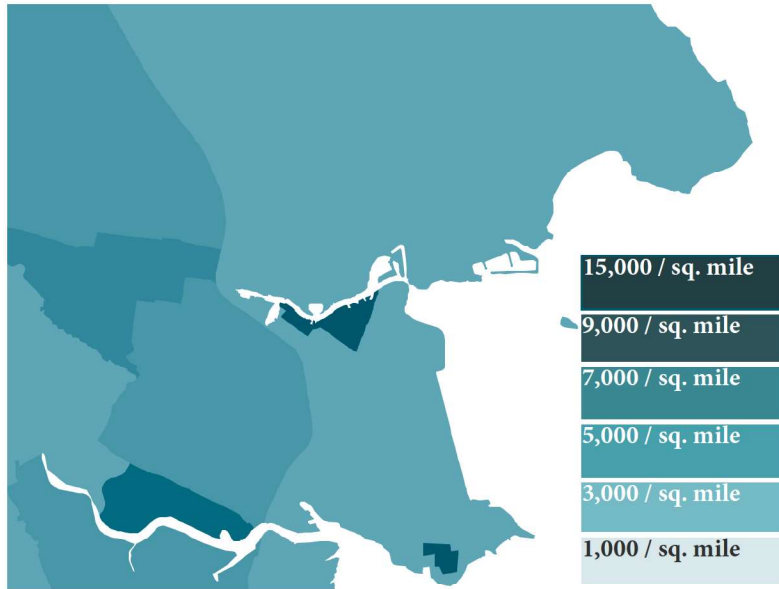
BAYPOINT VILLAGE DRIVE

UNDERUTILIZED LAND

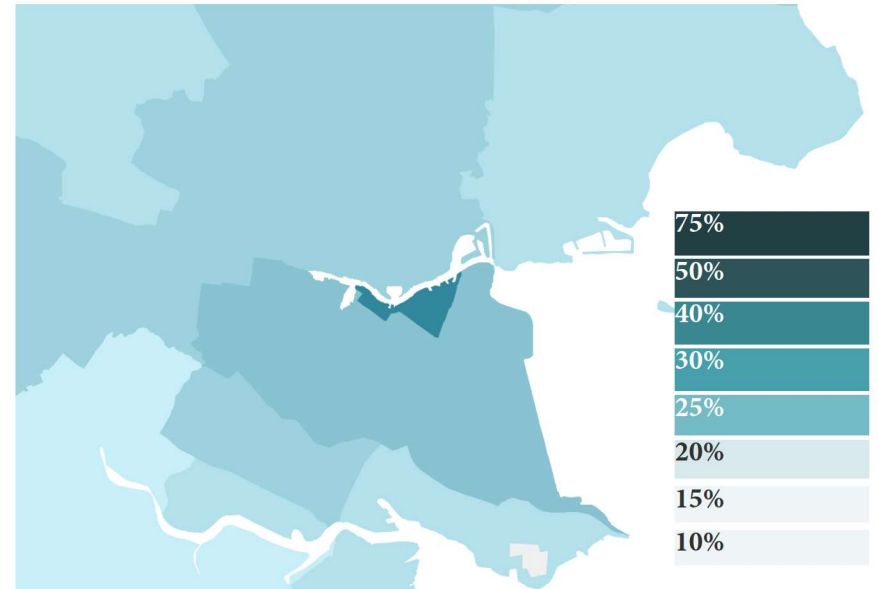
WILDLIFE HABITATS TO THE SOUTH

**TOTAL POPULATION: 11,918 | HOUSING UNITS: 3,043 | AVERAGE PEOPLE PER HOUSEHOLD: 4**

**POPULATION DENSITY\***



**HOUSEHOLDS BELOW POVERTY LINE\***







- HIGH DENSITY RESIDENTIAL**
- MEDIUM DENSITY RESIDENTIAL**
- LOW DENSITY RESIDENTIAL**
- GENERAL COMMERCIAL**
- NEIGHBORHOOD COMMERCIAL**
- LIGHT INDUSTRIAL**
- INDUSTRIAL**
- MARINA**
- WETLANDS**
- PARKS**
- CONSERVATION AREA**



# PHASE I

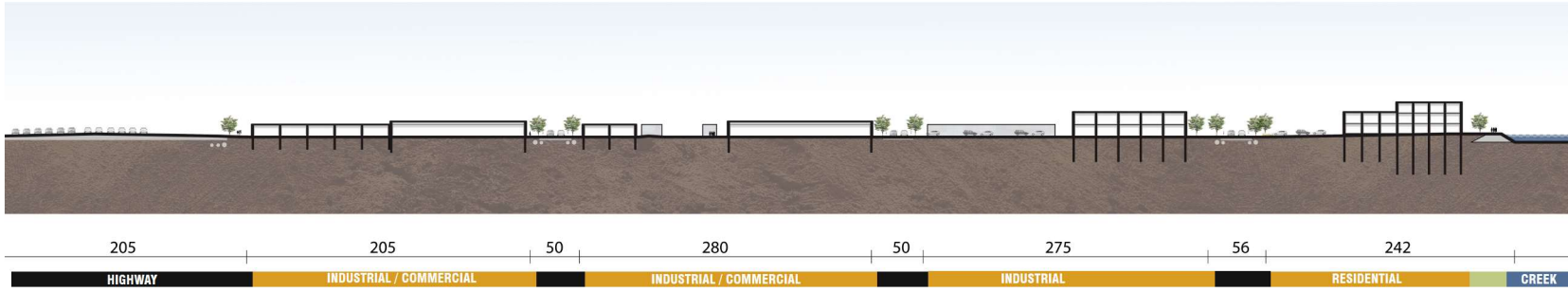
## 1.6' SEA LEVEL RISE 3' GROUND WATER TABLE

<b>SITE AREA:</b>	675 ACRES
<b>CONSTRUCTED WETLANDS:</b>	193 ACRES
<b>WATER STORAGE:</b>	488.3 ACRE FEET
<b>NEW HOUSING UNITS:</b>	13,148
<b>COMMERCIAL/MIXED USE:</b>	1.6 MILLION SF
<b>INDUSTRIAL/MIXED USE:</b>	1.4 MILLION SF



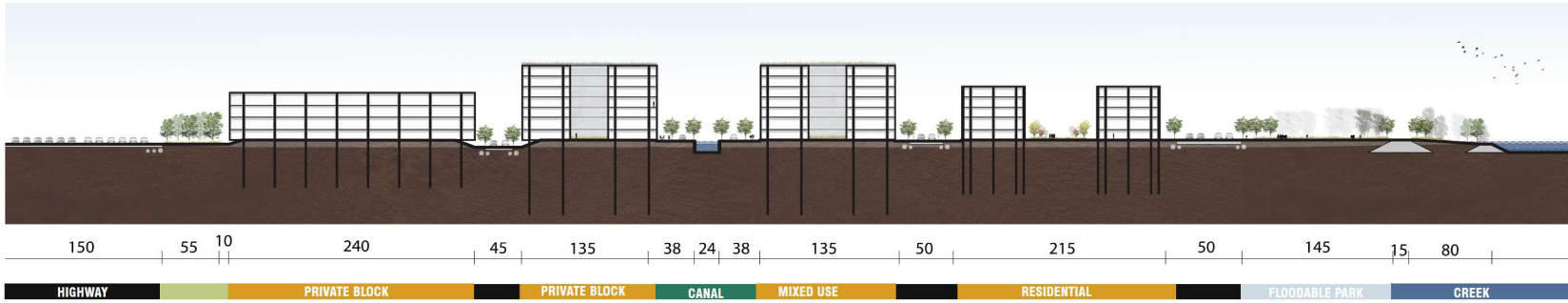


## A. EXISTING



EXISTING KING TIDE: 7'  
EXISTING HIGH TIDE: 5'

## A. PHASE 1

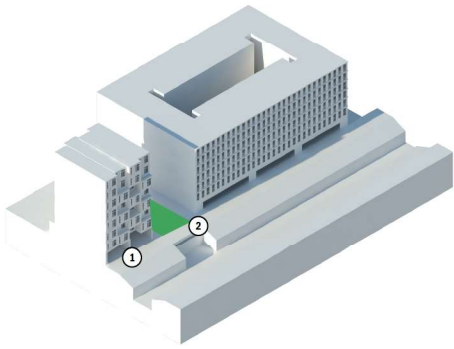


KING TIDE AT 3.3' SLR: 10.3'  
HIGH TIDE AT 3.3' SLR: 8.3'  
MEAN CREEK LEVEL AT 3.3' SLR: 4.3'  
(GROUNDWATER: 4.3')





# URBAN CANALS

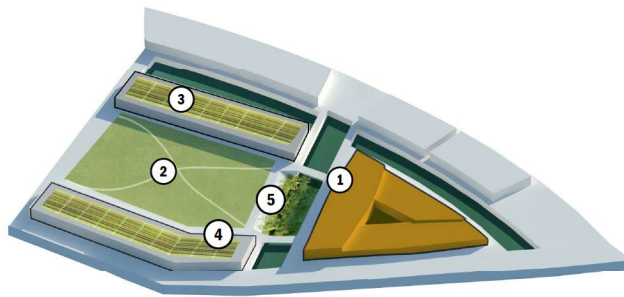


- ① CANAL DISTRICT PROMENADE WITH RETAIL FRONTAGE
- ② CANAL PLANTING FILTERS





# COMMUNITY HUB



- ① RESILIENCY CENTER / MICROGRID / COMMUNITY CENTER
- ② COMMUNITY GREEN WITH ALTERNATE USES FOR DISASTER PREPAREDNESS
- ③ RELOCATED SCHOOL / DAYCARE CENTER
- ④ URBAN VERTICAL FARM / GROCERY STORE
- ④ URBAN CANAL PARK





# PHASE II

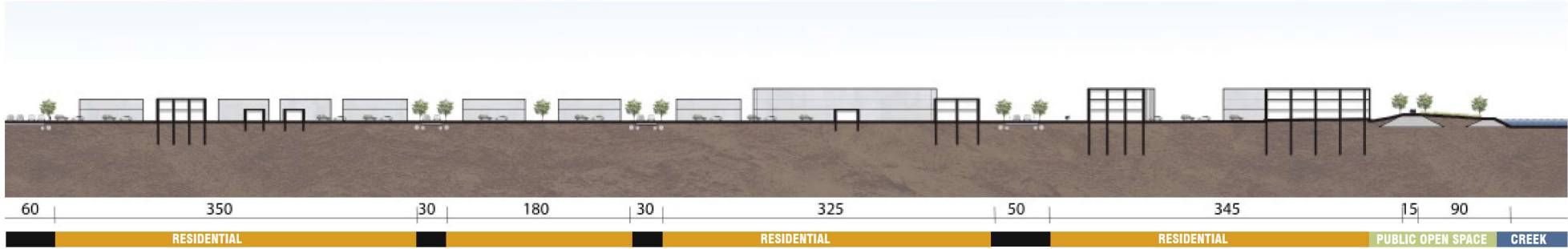
10' SEA LEVEL RISE 11' GROUND WATER TABLE

TOTAL HOUSING UNITS:	16,262
PUBLIC OPEN SPACE:	45 ACRES
PRIVATE OPEN SPACE	44 ACRES
WATER STORAGE:	1,811 ACRE FEET

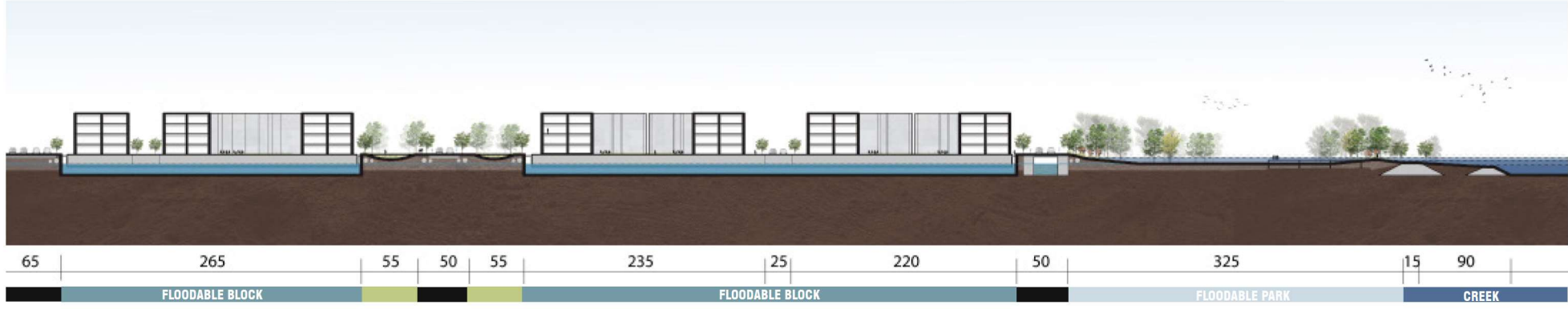




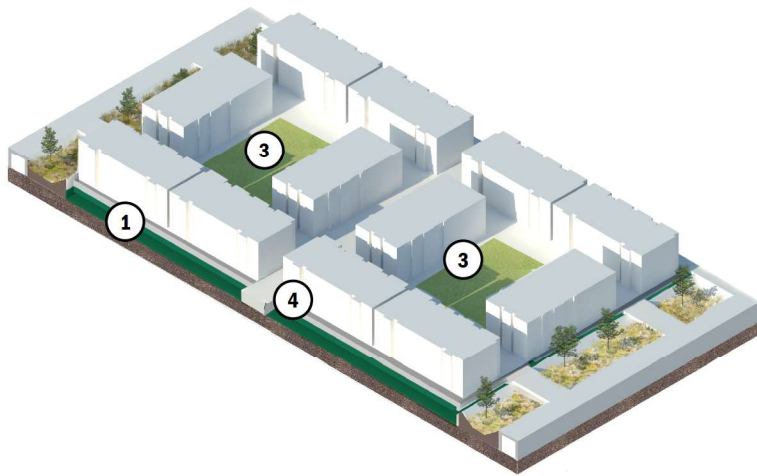
**C. EXISTING**



**C. PHASE**



# FLOATING BLOCKS

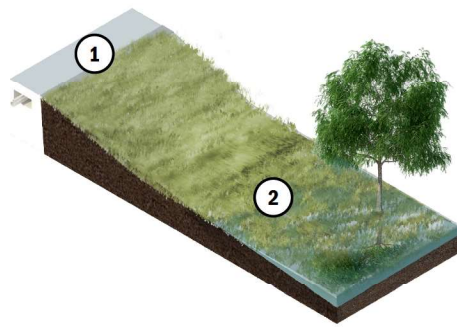


- ① LIGHT WEIGHT CONCRETE IN AN ARTIFICIAL POND
- ② BIOSWALE AND EMERGENCY WATER STORAGE
- ③ SHARED OPEN SPACE
- ④ HINGE RAMP INTEGRATED WITH UTILITY LINE CONNECTIONS





# FLOODABLE PARKS



- ① CONNECTION TO ROAD NETWORK ON LEVEE
- ② PUBLIC OPEN SPACE THAT CAN COLLECT STORM WATER DURING MAJOR FLOODING EVENTS







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