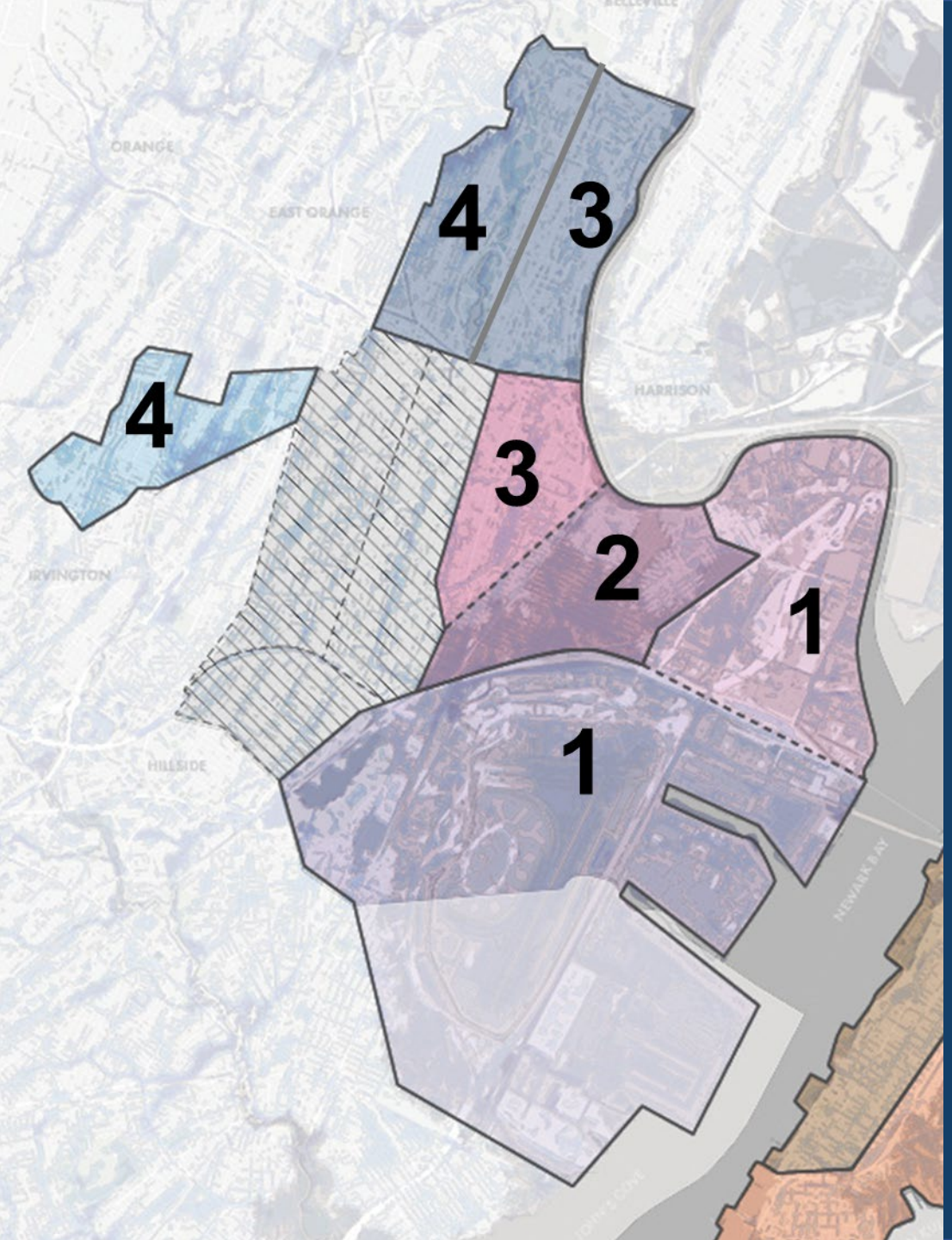
WELCOME TO THE

RESILIENT NORTHEASTERN NJ

BREAKOUT 4 – WESTERN NEWARK

April 7, 2022 4:30 – 5:30 PM and 7 – 8 PM

If you are viewing on livestream and want to join the breakouts, please go to https://tinyurl.com/nenj-nwk-mtg



BREAKOUT 4

Ivy Hill & Vailsburg, Upper Roseville, & Western Newark

Community Meeting Guidelines

TO ENSURE THAT WE ARE ABLE TO MAXIMIZE OUR TIME TOGETHER AS A GROUP

- **Please remain on mute unless speaking**
- **During the main presentation:**
  - Please submit questions in the chat
  - Please turn off video to allow for ASL accessibility
- **During the breakouts:**
  - If you are able and willing to, please consider turning on your camera
  - Use one mic and stack
  - Acknowledge everyone's voice and time. If you find yourself speaking frequently, consider opening the floor to your group members. We look forward to hearing what everyone has to say!
  - Please speak from your own experience
  - If there are several group members with things to share, please use the 'raise hand' function, the chat, or gesticulating in Zoom and a facilitator will call on you
- **Please save discussion for the breakouts and report out**

Join the conversation!

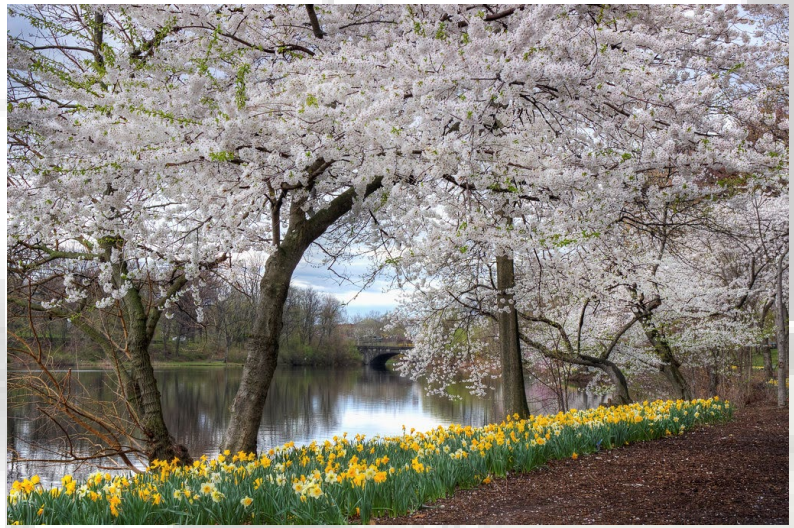
Please use the chat function to ask questions as we go!

If the meeting abruptly ends, please be patient and re-join using the same Zoom link. You will also receive an email with the meeting link.

RESILIENT NORTHEASTERN NEW JERSEY

TOPICS

- What's important and at risk in this neighborhood?
- For each solution scenario:
  - Possible actions
  - How the area might change
  - Key considerations
  - What do you think?
- Discussion
  - Of everything we discuss, what is most important to advance?
  - What do you want to not happen?



"We have tools and ideas, like a carpenter, but this is your house"

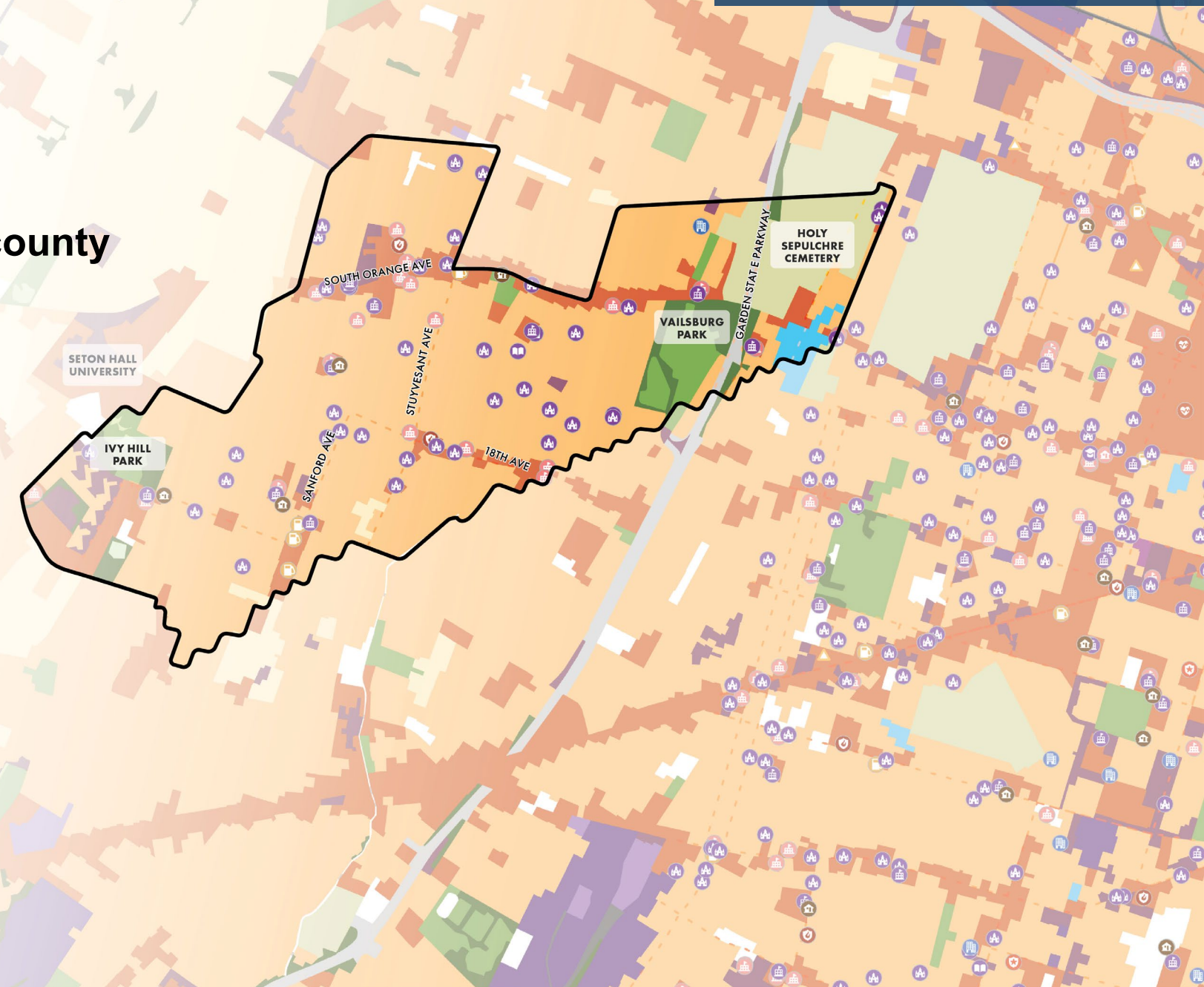
For this regional level plan, we have broken the community down into geographic areas. This means that there is nuance and community boundaries that might not always be honored. Let us know when we don't get it right.

All content working DRAFT for planning and discussion purposes

AREA CONTEXT

Ivy Hill & Vailsburg

- **Strong sense of community**
- **Value of small businesses and commercial strips**
- **Treasured neighborhood and county parks**



Land Use

Residential
- High Density
- Medium to Low Density (Single Unit)

Commercial & Industry
- Commercial/Services
- Cultural Attractions
- Industrial & Commercial Complexes
- Industrial
- Transportation, Services & Utilities
- Other Urban/Built-Up Land

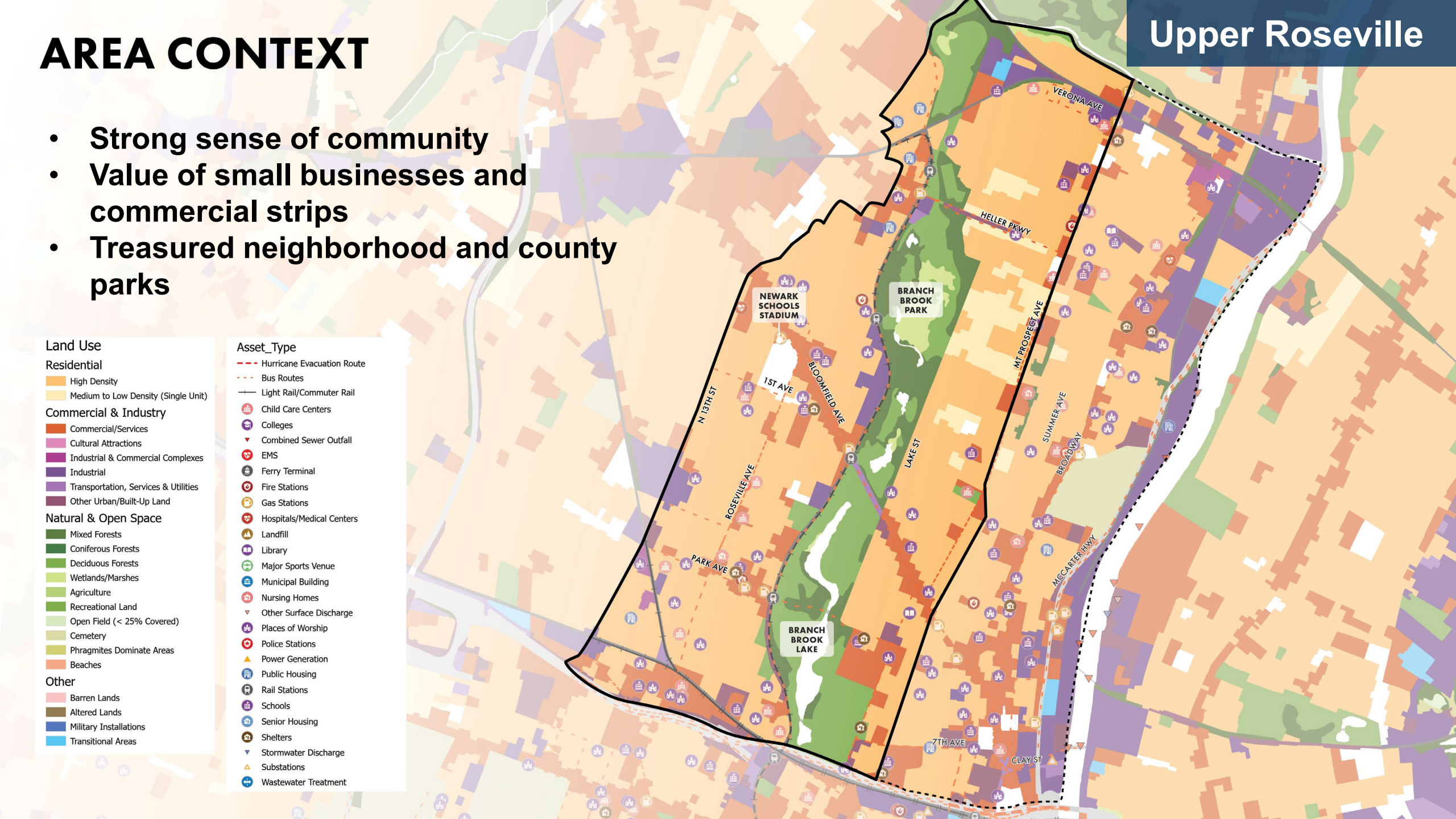
Natural & Open Space
- Mixed Forests
- Coniferous Forests
- Deciduous Forests
- Wetlands/Marshes
- Agriculture
- Recreational Land
- Open Field (< 25% Covered)
- Cemetery
- Phragmites Dominate Areas
- Beaches

Other
- Barren Lands
- Altered Lands
- Military Installations
- Transitional Areas

Asset_Type
- Hurricane Evacuation Route
- Bus Routes
- Light Rail/Commuter Rail
- Child Care Centers
- Colleges
- Combined Sewer Outfall
- EMS
- Ferry Terminal
- Fire Stations
- Gas Stations
- Hospitals/Medical Centers
- Landfill
- Library
- Major Sports Venue
- Municipal Building
- Nursing Homes
- Other Surface Discharge
- Places of Worship
- Police Stations
- Power Generation
- Public Housing
- Rail Stations
- Schools
- Senior Housing
- Shelters
- Stormwater Discharge
- Substations
- Wastewater Treatment

AREA CONTEXT

- **Strong sense of community**
- **Value of small businesses and commercial strips**
- **Treasured neighborhood and county parks**



RISK CONTEXT

Ivy Hill & Vailsburg

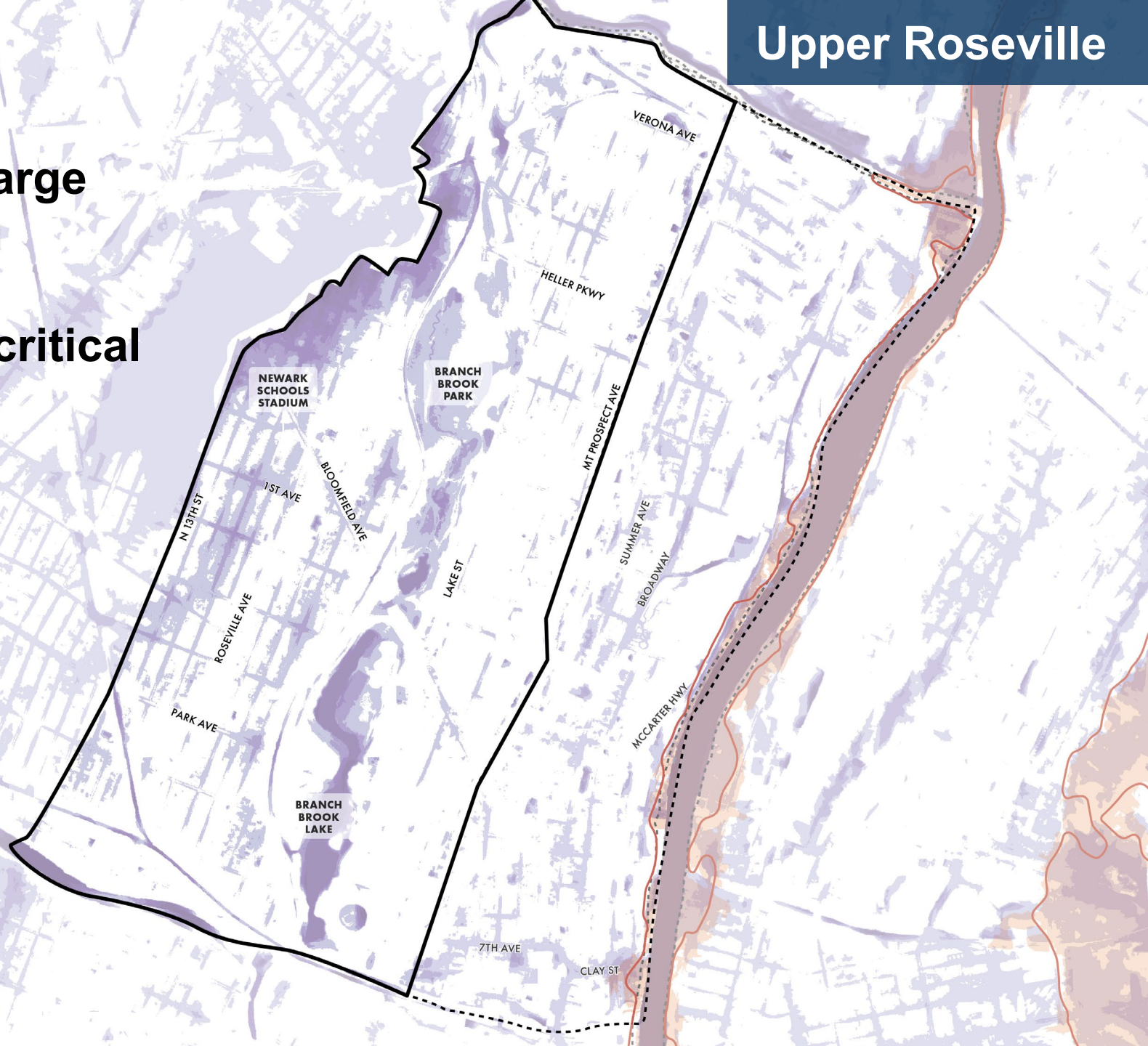
Rainfall flooding can impact large swaths of this area. Local topography can concentrate stormwater flooding, placing critical assets and key transportation corridors at risk.

24 HOUR, 100 YEAR STORM

2070 MODEL (HIGH TIDE + SLR + 10% RAINFALL INCREASE)

RISK CONTEXT

Rainfall flooding can impact large swaths of this area. Local topography can concentrate stormwater flooding, placing critical assets and key transportation corridors at risk.

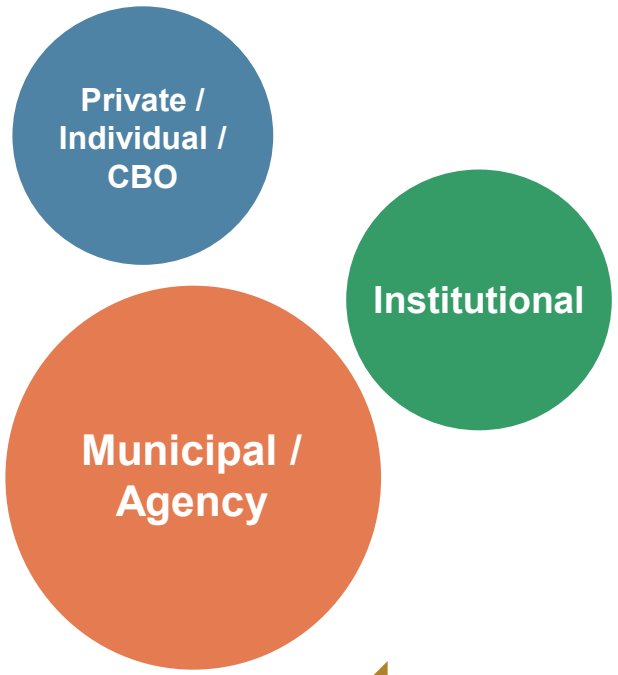


SCENARIOS

The scenarios are not alternatives. The action plan could be a combination of actions from the different scenarios.

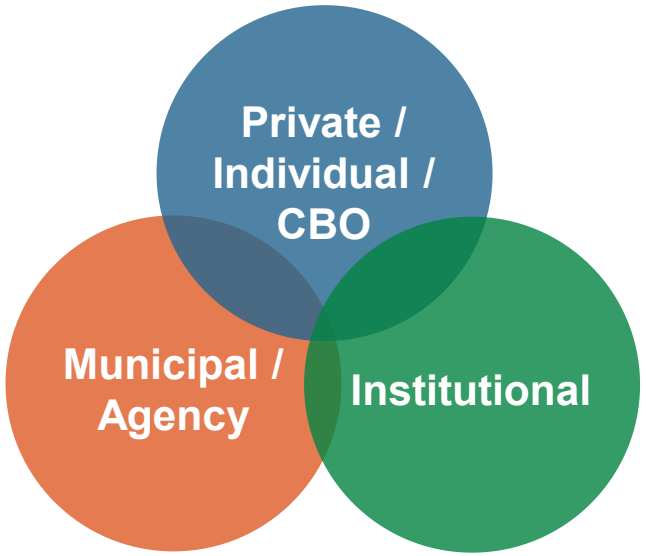
Scenario 1

Individual Initiative



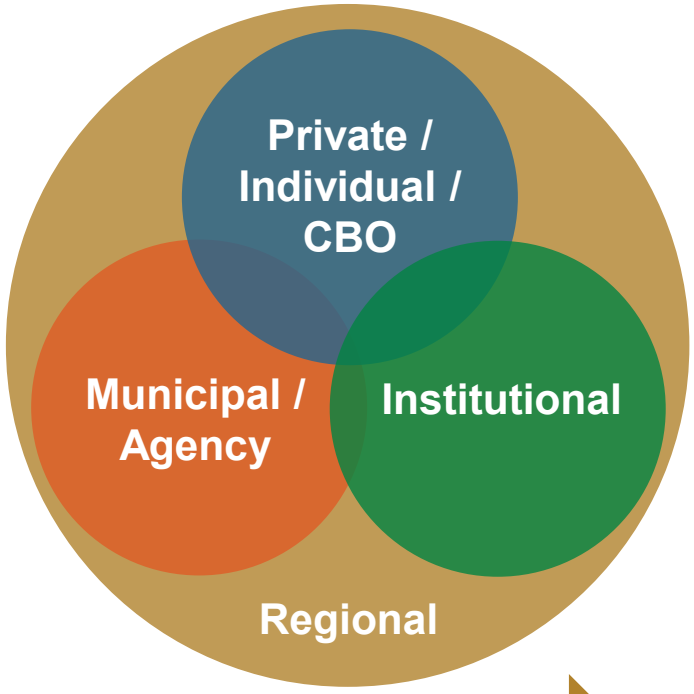
Scenario 2

Shared Responsibility



Scenario 3

Regional Coordination

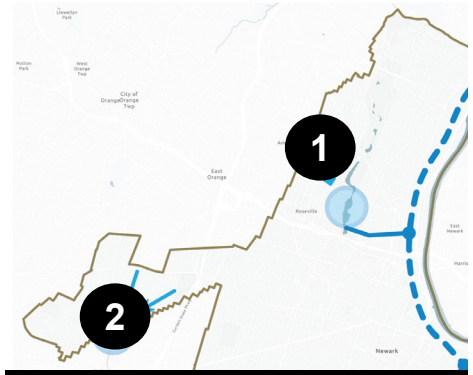


CBO's are community-based organizations

ENGAGEMENT WITH RESIDENTS AND OTHER STAKEHOLDERS ACROSS ALL

RESILIENT NORTHEASTERN NEW JERSEY

KEY CHANGES, SCENARIO 1 – INDIVIDUAL INITIATIVE



DRAINAGE IMPROVEMENTS

1. IMPROVED STORMWATER SURFACE CONVEYANCE

Waterplein Benthemplein
Rotterdam, Netherlands

2. URBAN STORMWATER RETENTION PARKS

Venice Island
Philadelphia

OBJECTIVES, SCENARIO 1

Improve drainage along existing pathways, taking advantage of areas that can be easily separated from the combined sewer system.

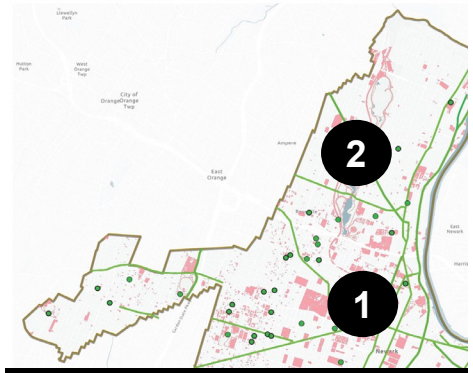
KEY CONSIDERATIONS, SCENARIO 1

ISSUES TO CONSIDER

Separating stormwater and directing to green corridors gets water out of the sewer system and improves water quality **BUT** requires significant investment and coordination before benefits can be realized.

RESILIENT NORTHEASTERN NEW JERSEY

KEY CHANGES, SCENARIO 1 – INDIVIDUAL INITIATIVE



GREEN INFRASTRUCTURE

1. PERMEABLE PARKING SURFACES

TU Delft
Netherlands

2. R.O.W GREEN INFRASTRUCTURE

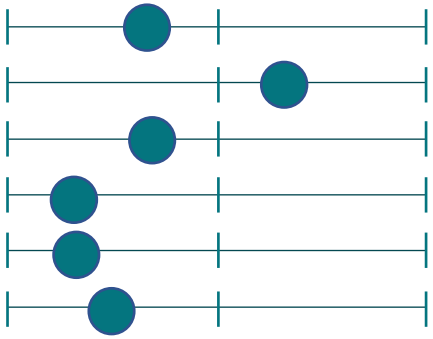
Queens, New York City

OBJECTIVES, SCENARIO 1

Expand green infrastructure installations on public property targeting key primary corridors and lots with significant impervious area.

KEY CONSIDERATIONS, SCENARIO 1

CONSTRUCTION TIME
IMPACT TO PUBLIC ACCESS & USE
COSTS
PERMITTING
CONSTRUCTABILITY
LEVEL OF PROTECTION



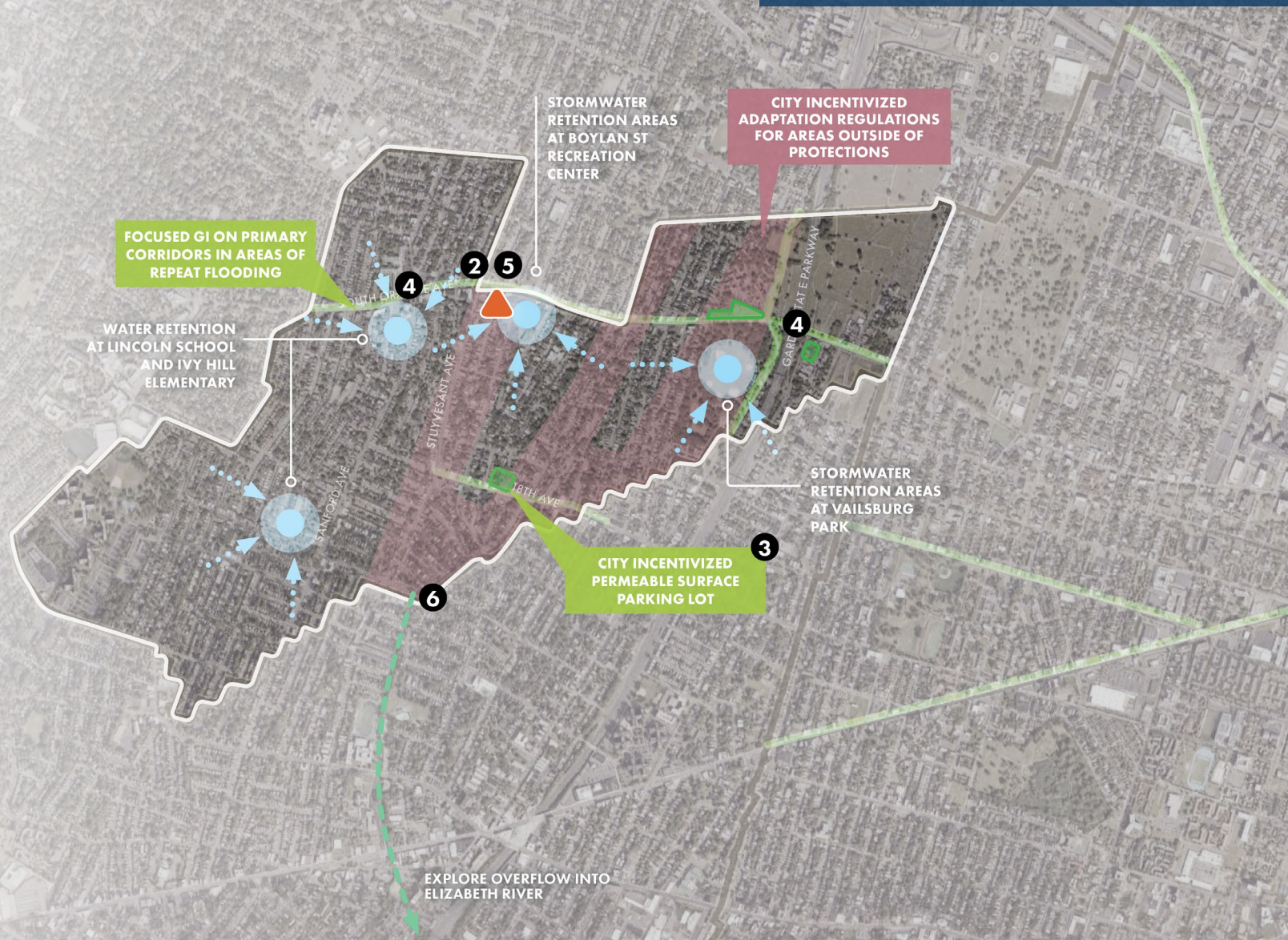
ISSUES TO CONSIDER

Green infrastructure projects can treat stormwater at the source and add other benefits to the city **BUT** will compete with other needs in the public right of way and is limited in treating large storm events.

RESILIENT
NORTHEASTERN
NEW JERSEY

SCENARIO 1
INDIVIDUAL INITIATIVE

Ivy Hill & Vailsburg



- ROW GREEN INFRASTRUCTURE
- SUGGESTED BLUE AND GREEN ROOFS
- SUGGESTED PIPED FLOW PATHS
- SUGGESTED PIPED FLOW PATHS TO RETENTION SITES
- SUGGESTED DITCH DRAINAGE FLOW PATHS
- RESILIENCE HUB
- AREAS TO ADAPT

NON-PHYSICAL SOLUTIONS

1. ADOPT ORDINANCES TO STATE MODELS & GUIDANCE
2. GI PROGRAM FOR CITY PROPERTIES
3. GUIDELINES FOR GI ON OPEN SPACE
4. TREE CANOPY PROGRAMS
5. RESILIENCE HUBS AT CITY PROPERTIES
6. MUNICIPAL TRASH CLEANUP & CATCH BASIN PROGRAMS
7. PROMOTE & INCORPORATE RESIDENT FLOOD REPORTING
8. INTER-DEPARTMENT & MUNICIPAL COORDINATION

All content working DRAFT for planning and discussion purposes

SCENARIO 1
INDIVIDUAL INITIATIVE

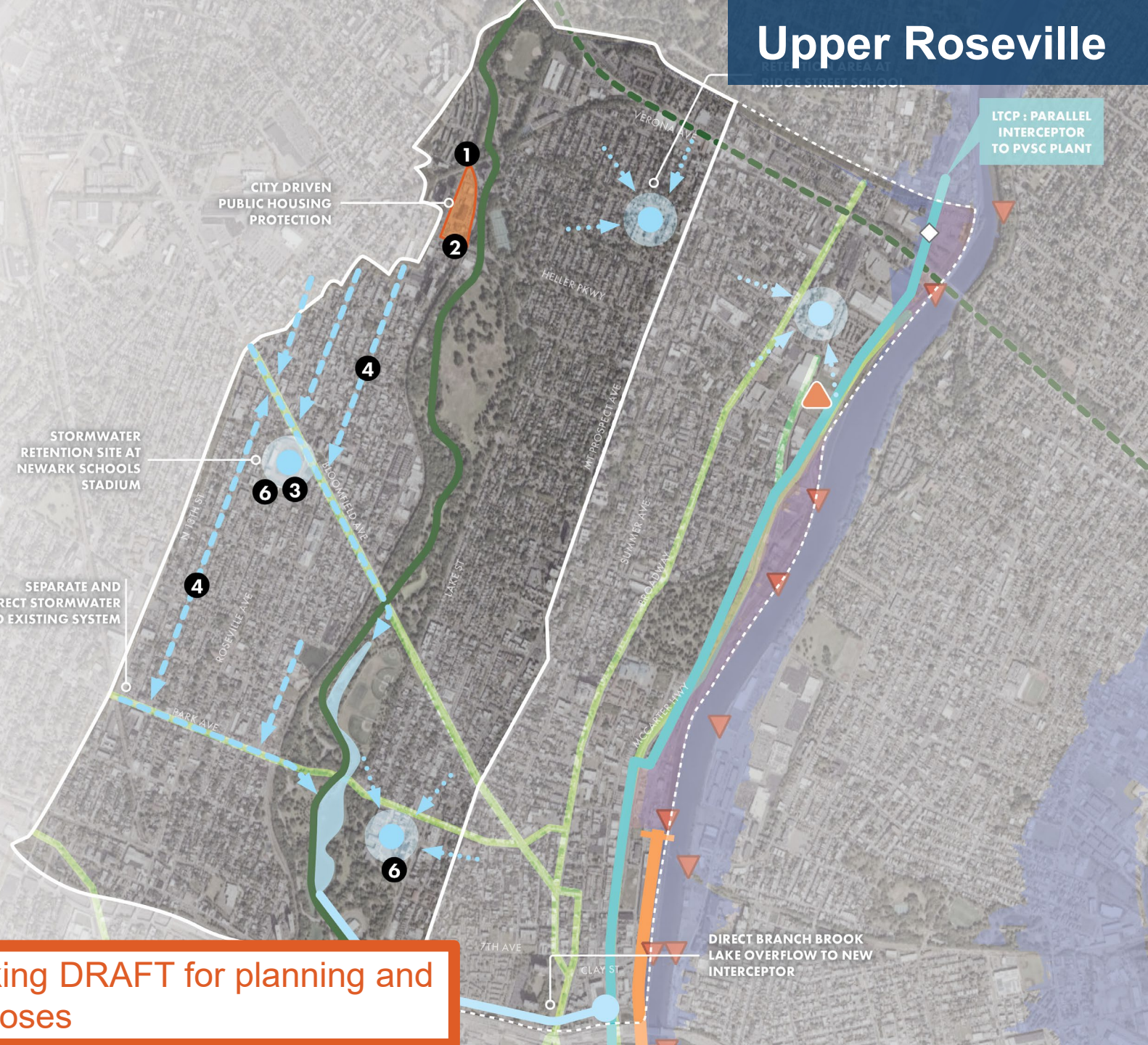
EXISTING CONDITIONS
- PROJECTS ALREADY PLANNED OR IN PROGRESS
- EXISTING OUTFALLS
- PROPOSED LTCP INTERCEPTOR

RESILIENT NJ MEASURES
- COASTAL PROTECTION ALIGNMENTS
- POTENTIAL ALTERNATE COASTAL ALIGNMENTS
- GREEN INFRASTRUCTURE CORRIDORS
- SUGGESTED FLOW PATHS
- SUGGESTED RETENTION AREAS
- NEW STORMWATER OUTFALLS
- PROPOSED GREENWAY CORRIDORS
- AREAS OUTSIDE PROTECTIONS
- SITES TO ADAPT
- POSSIBLE RESILIENCE HUB LOCATION

NON-PHYSICAL SOLUTIONS

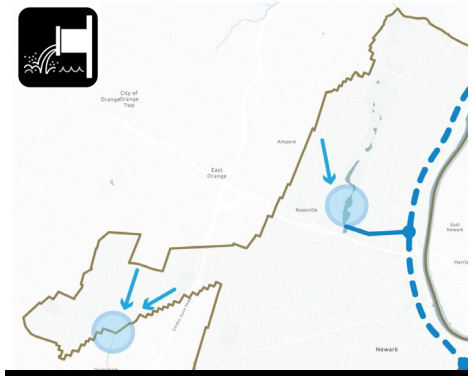
1. ADOPT ORDINANCES TO STATE MODELS & GUIDANCE
2. GI PROGRAM FOR CITY PROPERTIES
3. GUIDELINES FOR GI ON OPEN SPACE
4. TREE CANOPY PROGRAMS
5. RESILIENCE HUBS AT CITY PROPERTIES
6. MUNICIPAL TRASH CLEANUP & CATCH BASIN PROGRAMS
7. PROMOTE & INCORPORATE RESIDENT FLOOD REPORTING
8. INTER-DEPARTMENT & MUNICIPAL COORDINATION

Upper Roseville



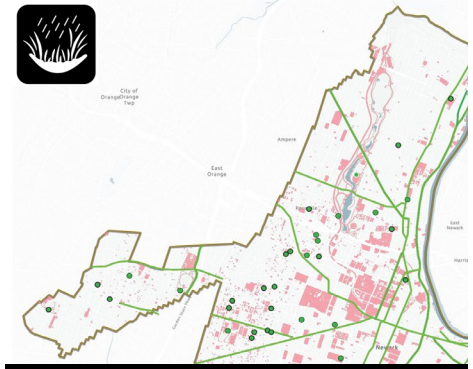
All content working DRAFT for planning and discussion purposes

NON-PHYSICAL SOLUTIONS, SCENARIO 1



DRAINAGE IMPROVEMENTS

Policy based measures like trash clean-up & catch basin programs help with drainage efficiency while larger measures like a Municipal Stormwater utility increase resilience equity.



GREEN INFRASTRUCTURE

Measures like tree programs and Green Infrastructure requirements on public open-space are essential to meeting resilience goals in Scenario 1.

OUTREACH, EDUCATION & CAPACITY BUILDING

- City-led Flood Management 101 Campaign
- Interdepartmental Coordination including Staff increase and municipal chief resilience officer
- Promote & incorporate resident flood reporting
- Outreach Ambassador Program
- Webpage on city website with ongoing resilience and other projects

POLICY & GOVERNANCE

- Adopt ordinances to state models and guidance
- Require GI on municipal properties
- Establish municipal stormwater utility
- Guidelines to facilitate stormwater projects on open space
- Track and publish development & construction activities in a publicly available place
- Expand state-managed databases to provide complete information on resilience-related factors

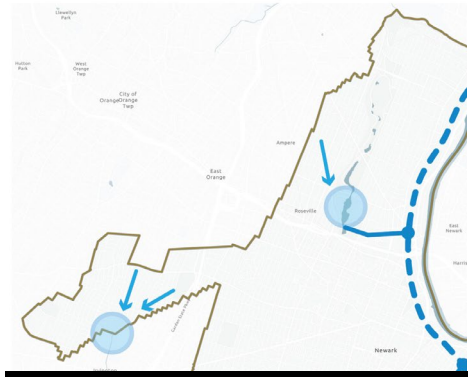
SERVICE & PROGRAM DEVELOPMENT

- Municipal trash clean-up / catch basin program & waste reduction campaign
- Lean into tree canopy increase programs
- Resilience hubs at city-agency properties

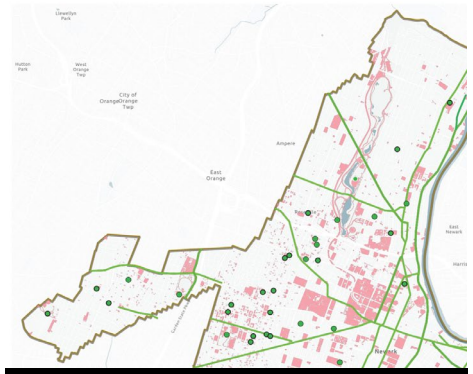
EMERGENCY RESPONSE & PREPAREDNESS

- Engagement with Emergency Managers
  What went well during Ida and recent storms? What could be done differently?
- Recommendations incorporated into Action Plan
  What actions can be taken to improve in the future?
- Data Request
  What did the response to Ida look like?

RESILIENT NORTHEASTERN NEW JERSEY



DRAINAGE IMPROVEMENTS



GREEN INFRASTRUCTURE

QUESTIONS TO CONSIDER

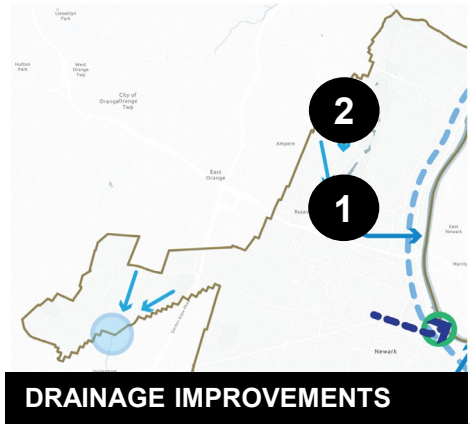
- Which streets or city properties do you want to see transformed?
- What greening projects would appeal to you most?
- Where would you like to see Resilience Hubs?

WHAT DO YOU **LIKE** ABOUT SCENARIO 1?

WHAT DO YOU **DISLIKE** ABOUT SCENARIO 1?

RESILIENT NORTHEASTERN NEW JERSEY

KEY CHANGES, SCENARIO 2 – SHARED RESPONSIBILITY



1. URBAN STORMWATER RETENTION PARK

Qunli Stormwater Wetland Park
Haerbin, China

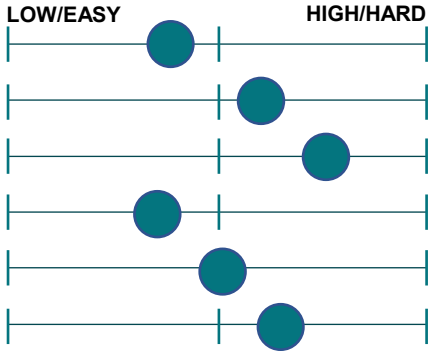
2. STORMWATER MEDIAN

OBJECTIVES, SCENARIO 2

Consolidate drainage infrastructure to create new and expanded conveyance pathways and expand retention areas, such as Branch Brook Park, in conjunction with partners, such as Seton Hall University.

KEY CONSIDERATIONS, SCENARIO 2

CONSTRUCTION TIME
IMPACT TO PUBLIC ACCESS & USE
COSTS
PERMITTING
CONSTRUCTABILITY
LEVEL OF PROTECTION

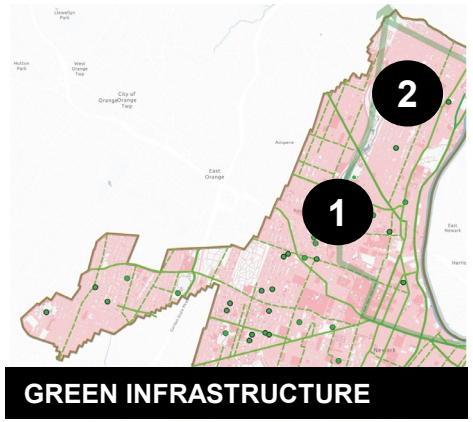


ISSUES TO CONSIDER

Expanding sewer separation and temporary storage areas further improves conveyance and water quality **BUT** requires significant investment and coordination before benefits can be realized.

RESILIENT NORTHEASTERN NEW JERSEY

KEY CHANGES, SCENARIO 2 – SHARED RESPONSIBILITY



GREEN INFRASTRUCTURE

1. GREEN INFRASTRUCTURE ON PRIVATELY OWNED SPACES

First Avenue Water Plaza
Manhattan, New York City

2. BLUE & GREEN ROOFS

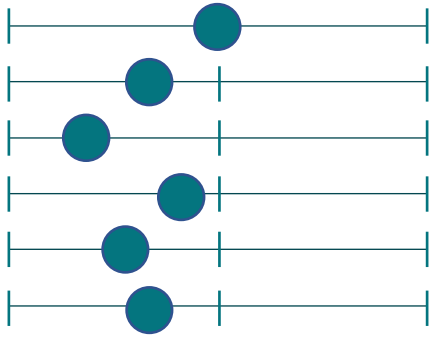
Osbourne Association
South Bronx, New York City

OBJECTIVES, SCENARIO 2

Expand green infrastructure to secondary corridors and beyond public sites to incentivize additional GI on private properties. Target large parcels to implement regional GI practices.

KEY CONSIDERATIONS, SCENARIO 2

CONSTRUCTION TIME
IMPACT TO PUBLIC ACCESS & USE
COSTS
PERMITTING
CONSTRUCTABILITY
LEVEL OF PROTECTION

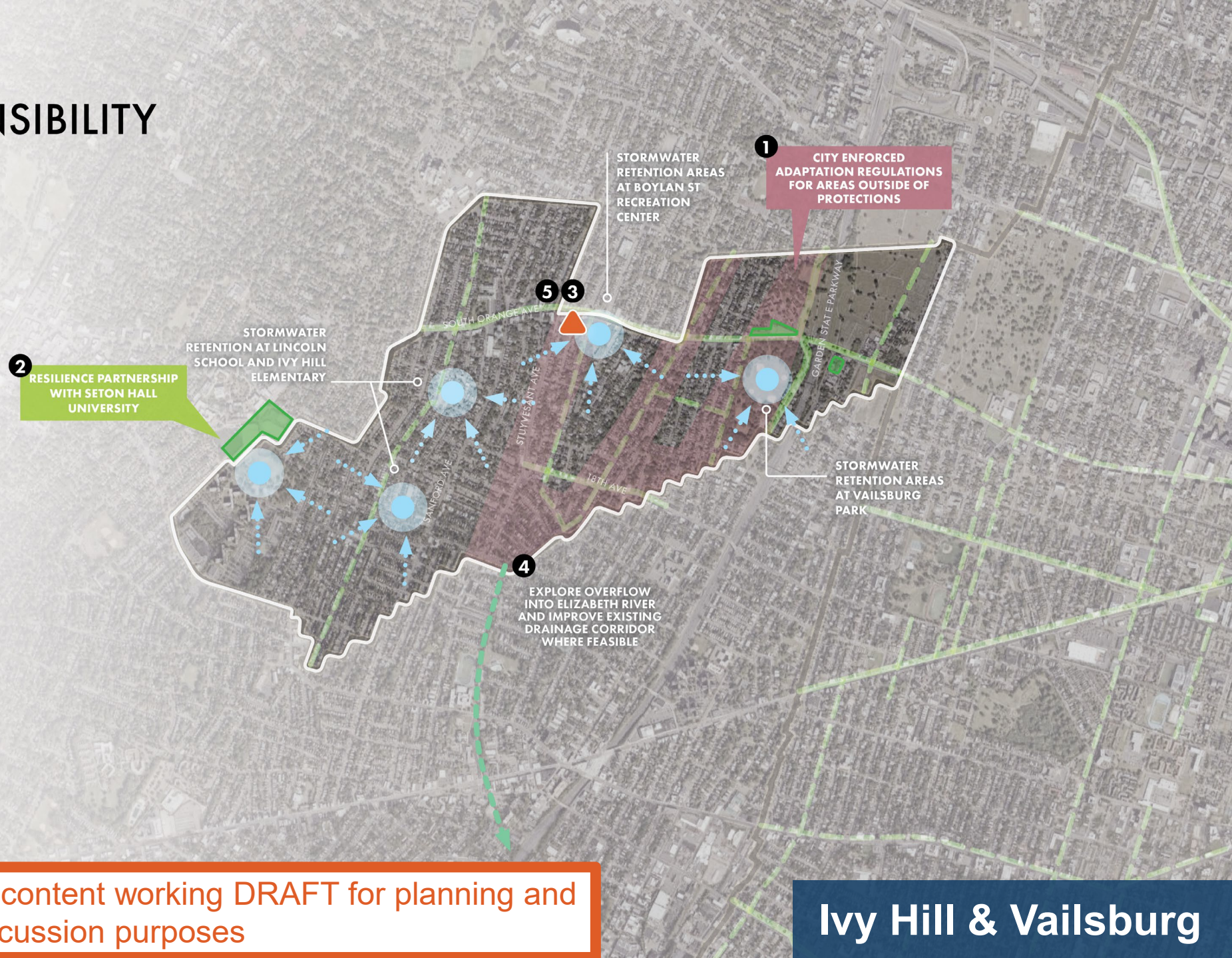


ISSUES TO CONSIDER

Expanding GI to private properties provides broader watershed management **BUT** results in a greater number of assets that need to be inspected and maintained to provide protection.

RESILIENT NORTHEASTERN NEW JERSEY

SCENARIO 2
SHARED RESPONSIBILITY



- ROW GREEN INFRASTRUCTURE
- SUGGESTED BLUE AND GREEN ROOFS
- SUGGESTED PIPED FLOW PATHS
- SUGGESTED PIPED FLOW PATHS TO RETENTION SITES
- SUGGESTED DITCH DRAINAGE FLOW PATHS
- RESILIENCE HUB
- AREAS TO ADAPT

NON-PHYSICAL SOLUTIONS

1. INCORPORATE RESILIENCE INTO REDEVELOPMENT PLANS
2. INCENTIVIZE GI ON PRIVATE PROPERTIES
3. RESILIENCE LEADER OUTREACH AND TRAINING PROGRAM
4. TRASH CLEAN-UP DAYS AND COMMUNITY GARDENS THROUGH PARTNERSHIPS
5. RAIN BARREL DISTRIBUTION & GUIDE FOR INSTALLATION

All content working DRAFT for planning and discussion purposes

Ivy Hill & Vailsburg

SCENARIO 2
SHARED RESPONSIBILITY

EXISTING CONDITIONS
- PROJECTS ALREADY PLANNED OR IN PROGRESS
- EXISTING OUTFALLS
- PROPOSED LTCP INTERCEPTOR

RESILIENT NJ MEASURES
- COASTAL PROTECTION ALIGNMENTS
- POTENTIAL ALTERNATE COASTAL ALIGNMENTS
- GREEN INFRASTRUCTURE CORRIDORS
- SUGGESTED FLOW PATHS
- SUGGESTED RETENTION AREAS
- NEW STORMWATER OUTFALLS
- PROPOSED GREENWAY CORRIDORS
- AREAS OUTSIDE PROTECTIONS
- SITES TO ADAPT
- POSSIBLE RESILIENCE HUB LOCATION

NON-PHYSICAL SOLUTIONS

1. INCORPORATE RESILIENCE INTO REDEVELOPMENT PLANS
2. INCENTIVIZE GI ON PRIVATE PROPERTIES
3. RESILIENCE LEADER OUTREACH AND TRAINING PROGRAM
4. TRASH CLEAN-UP DAYS AND COMMUNITY GARDENS THROUGH PARTNERSHIPS
5. RAIN BARREL DISTRIBUTION & GUIDE FOR INSTALLATION

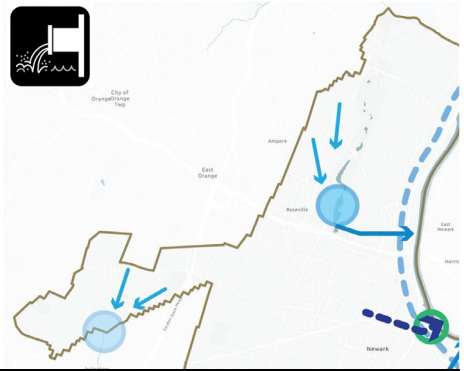
All content working DRAFT for planning and discussion purposes

Upper Roseville

NON-PHYSICAL SOLUTIONS, SCENARIO 2 SHARED RESPONSIBILITY

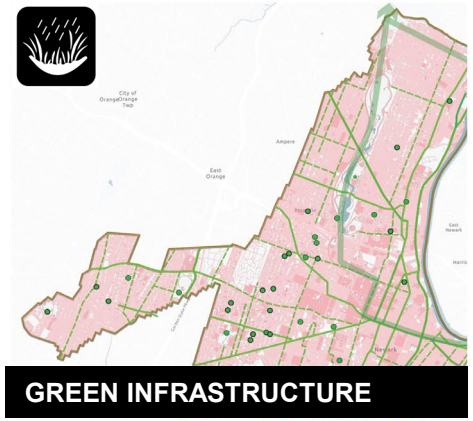
OVERALL RESILIENCE

Resilience advancements deepened through collaboration with community members, schools, and community-based organizations



DRAINAGE IMPROVEMENTS

Partnerships in composting and trash clean-up help reduce drainage system clogging



GREEN INFRASTRUCTURE

Public private partnerships expand green infrastructure benefits

OUTREACH, EDUCATION & CAPACITY BUILDING

- Resilience leader outreach and training program
- Flood Management 101 campaign in partnership with schools and community groups
- Engage Deaf and non-English speaking community advocates to collaborate on needs
- Crowd-source flood reports (and other input) in coordination with CBOs and academia

POLICY & GOVERNANCE

- Incorporate resilience into Redevelopment Plans
- Flood overlay zone
- Incentivize Green Infrastructure on private properties
- Support/coordinate funding for key projects (e.g., transformation of contaminated sites)
- Development of municipal or regional climate risk assessment and action plan for contaminated & remediated sites
- Standardize process between municipal & infrastructure entities

SERVICE & PROGRAM DEVELOPMENT

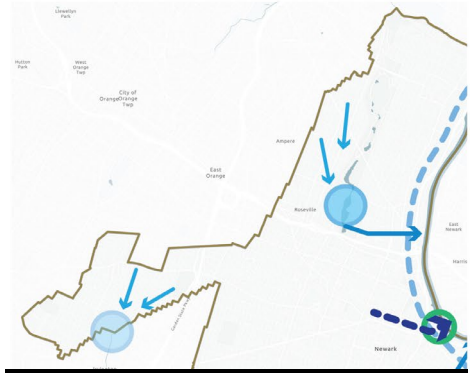
- Rain barrel distribution & guide for installation
- Partner with non-profits to manage resilience hubs and offer climate related programming
- Municipal composting program in partnership with housing complexes
- Trash clean-up days and community gardens through partnerships

EMERGENCY RESPONSE & PREPAREDNESS

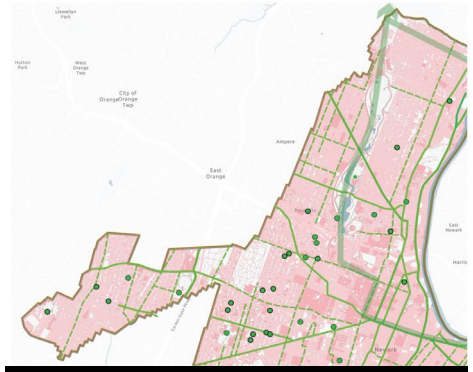
- Engagement with Emergency Managers
  What went well during Ida and recent storms? What could be done differently?
- Recommendations incorporated into Action Plan
  What actions can be taken to improve in the future?
- Data Request
  What did the response to Ida look like?

RESILIENT NORTHEASTERN NEW JERSEY

OVERALL RESILIENCE



DRAINAGE IMPROVEMENTS



GREEN INFRASTRUCTURE

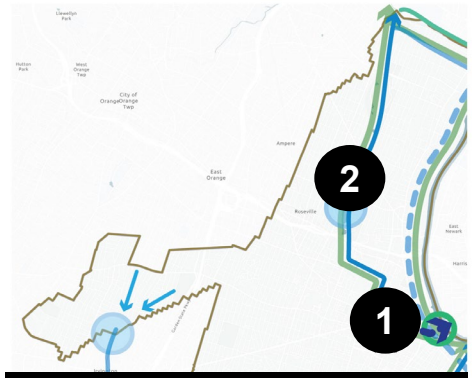
QUESTIONS TO CONSIDER

- Which streets or city properties do you want to see transformed?
- What Greening projects would appeal to you most?
- Where would you like to see Resilience Hubs?

WHAT DO YOU **LIKE** ABOUT SCENARIO 2?

WHAT DO YOU **DISLIKE** ABOUT SCENARIO 2?

KEY CHANGES, SCENARIO 3 – REGIONAL COORDINATION



DRAINAGE IMPROVEMENTS

1. DEEP TUNNEL STORMWATER CONVEYANCE & STORAGE

DigIndy
Indianapolis, Indiana

2.INLAND STORMWATER DETENTION POND

Louisiana

OBJECTIVES, SCENARIO 3

Complete sewer separation and re-direct to dedicated drainage pathways, leveraging large properties such as Branch Brook Park for extended storage and peak flow mitigation.

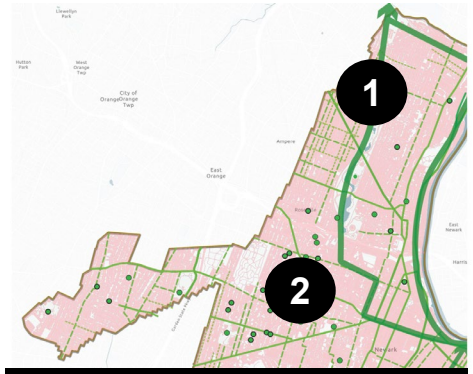
KEY CONSIDERATIONS, SCENARIO 3

ISSUES TO CONSIDER

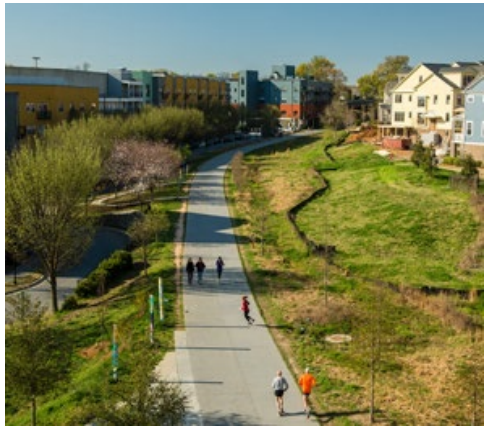
Interior drainage corridors align with natural topography **BUT** require land use changes for surface conveyance or pumping for subsurface conveyance.

RESILIENT NORTHEASTERN NEW JERSEY

KEY CHANGES, SCENARIO 3 – REGIONAL COORDINATION



GREEN INFRASTRUCTURE



1. REGIONAL URBAN GREENWAY

The BeltLine
Atlanta, Gerogia

2. CORRIDOR GREEN INFRASTRUCTURE FOR STORMWATER MANAGEMENT

Swale on Yale
Seattle, Washington

OBJECTIVES, SCENARIO 3

Build additional green infrastructure improvements into drainage corridors and other projects to promote a “dig once” approach.

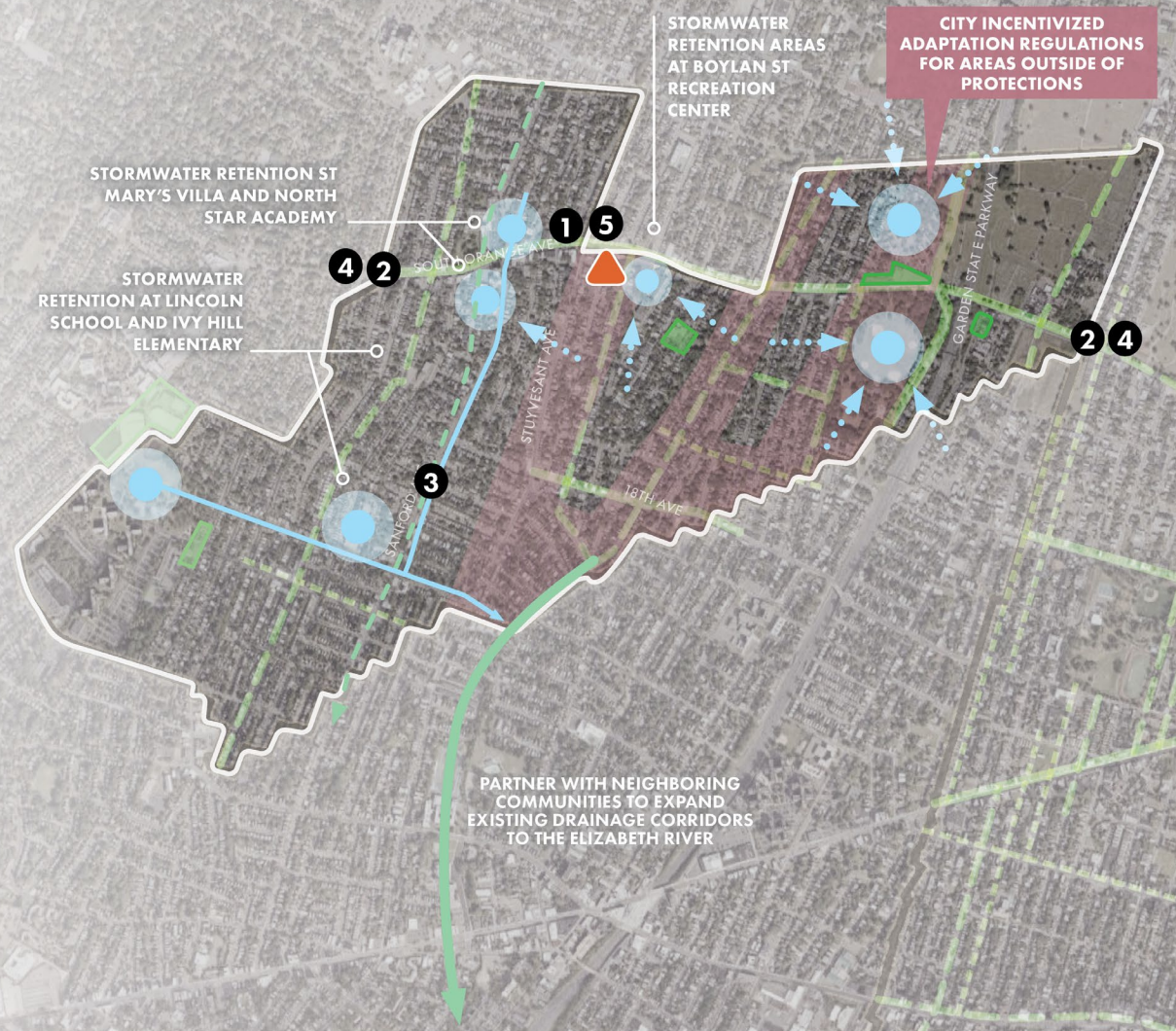
KEY CONSIDERATIONS, SCENARIO 3

ISSUES TO CONSIDER

Incorporating additional GI into drainage corridors and other projects improves cost-effectiveness **BUT** requires conversion of existing uses to natural stormwater management.

RESILIENT
NORTHEASTERN
NEW JERSEY

SCENARIO 3
REGIONAL RESPONSIBILITY



- ROW GREEN INFRASTRUCTURE
- SUGGESTED BLUE AND GREEN ROOFS
- SUGGESTED PIPED FLOW PATHS
- SUGGESTED PIPED FLOW PATHS TO RETENTION SITES
- SUGGESTED DITCH DRAINAGE FLOW PATHS
- RESILIENCE HUB
- AREAS TO ADAPT

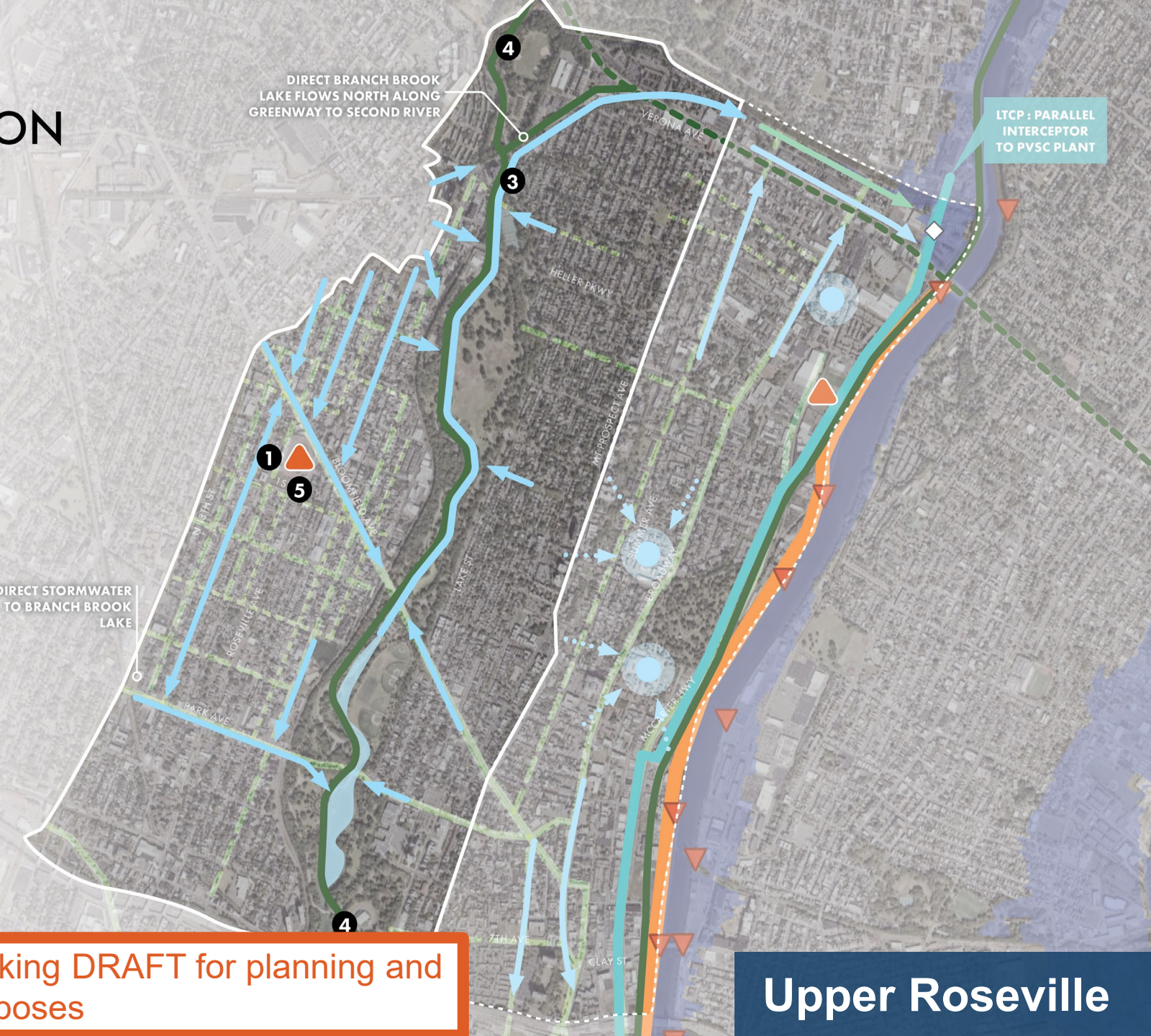
NON-PHYSICAL SOLUTIONS

1. CREATE A "SINGLE SOURCE OF TRUTH" FOR RESILIENCE-RELATED INFORMATION AND RESOURCES
2. REGIONAL GI CHAMPIONS TRAINING PROGRAM
3. DEVELOP PIPELINE OF SITES FOR STORMWATER MANAGEMENT / RESILIENT TRANSFORMATION OF BROWNFIELDS & CONTAMINATED SITES
4. REGIONAL TREE PLANTING PROGRAM
5. REGIONAL NETWORK OF RESILIENCE HUBS
6. REGIONAL PROGRAM DEVELOPMENT AND SUPPORT FOR COMPOSTING AND WASTE REDUCTION CAMPAIGNING

All content working DRAFT for planning and discussion purposes

Ivy Hill & Vailsburg

SCENARIO 3
REGIONAL COORDINATION



EXISTING CONDITIONS
- PROJECTS ALREADY PLANNED OR IN PROGRESS
- EXISTING OUTFALLS
- PROPOSED LTCP INTERCEPTOR

RESILIENT NJ MEASURES
- COASTAL PROTECTION ALIGNMENTS
- POTENTIAL ALTERNATE COASTAL ALIGNMENTS
- GREEN INFRASTRUCTURE CORRIDORS
- SUGGESTED FLOW PATHS
- SUGGESTED RETENTION AREAS
- NEW STORMWATER OUTFALLS
- PROPOSED GREENWAY CORRIDORS
- AREAS OUTSIDE PROTECTIONS
- SITES TO ADAPT
- POSSIBLE RESILIENCE HUB LOCATION

NON-PHYSICAL SOLUTIONS

1. CREATE A "SINGLE SOURCE OF TRUTH" FOR RESILIENCE-RELATED INFORMATION AND RESOURCES
2. REGIONAL GI CHAMPIONS TRAINING PROGRAM
3. DEVELOP PIPELINE OF SITES FOR STORMWATER MANAGEMENT / RESILIENT TRANSFORMATION OF BROWNFIELDS & CONTAMINATED SITES
4. REGIONAL TREE PLANTING PROGRAM
5. REGIONAL NETWORK OF RESILIENCE HUBS
6. REGIONAL PROGRAM DEVELOPMENT AND SUPPORT FOR COMPOSTING AND WASTE REDUCTION CAMPAIGNING

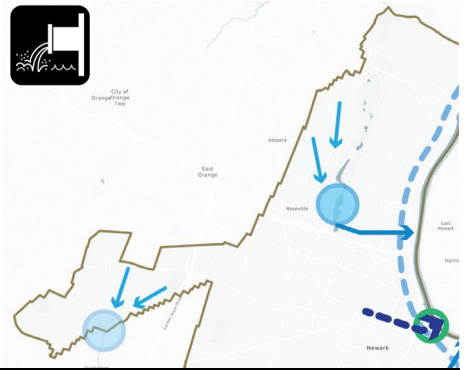
All content working DRAFT for planning and discussion purposes

Upper Roseville

NON-PHYSICAL SOLUTIONS, SCENARIO 3

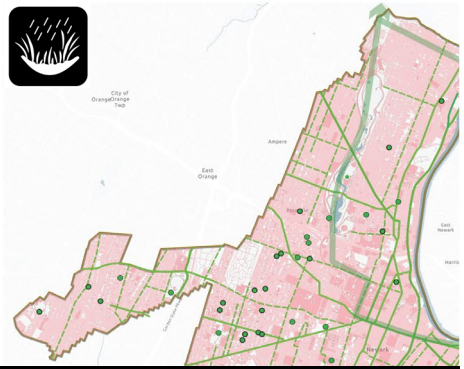
OVERALL RESILIENCE

Continuing and expanding the Resilient NENJ program could allow the region to learn from, build on, and advance work completed to date



DRAINAGE IMPROVEMENTS

A regional infrastructure coordination council help maximize resilience in planned infrastructure improvements and limit disruption to communities



GREEN INFRASTRUCTURE

A regional network of resilience hubs could help CBOs and municipalities coordinate and share resources and information in times of disaster

OUTREACH, EDUCATION & CAPACITY BUILDING

- Continuation of Resilient NJ Program
- Expansion of sustainability measures of livability
- Regional-scale distribution of Flood Management 101 campaign
- Leverage RNJ as a coordinated engagement platform around resilience-related issues
- Create a 'single source of truth' and go-to resource/messaging for all things resilience-related

POLICY & GOVERNANCE

- Ensure LTCP projects incorporate climate change
- Regional coordination to increase standards beyond minimum
- Regional GI champions training program
- Develop pipeline of sites for stormwater management/resilient transformation process
- State/regional climate risk assessment for contaminated/ remediated areas
- Create regional Infrastructure Coordination Council (and dig once)
- Regional stormwater utility

SERVICE & PROGRAM DEVELOPMENT

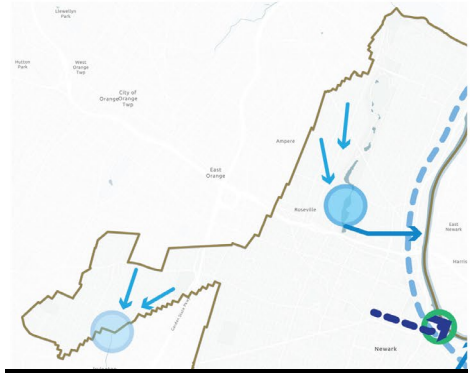
- Regional tree planting program
- Regional network of resilience hubs
- Regional program development and support for composting and waste reduction campaigning

EMERGENCY RESPONSE & PREPAREDNESS

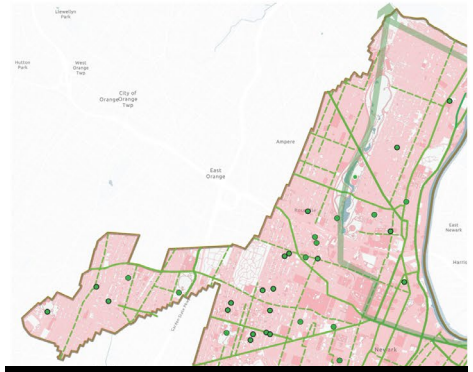
- Engagement with Emergency Managers
  What went well during Ida and recent storms? What could be done differently?
- Recommendations incorporated into Action Plan
  What actions can be taken to improve in the future?
- Data Request
  What did the response to Ida look like?

RESILIENT NORTHEASTERN NEW JERSEY

OVERALL RESILIENCE



DRAINAGE IMPROVEMENTS



GREEN INFRASTRUCTURE

QUESTIONS TO CONSIDER

- Which streets or city properties do you want to see transformed?
- What Greening projects would appeal to you most?
- Where would you like to see Resilience Hubs?

WHAT DO YOU **LIKE** ABOUT SCENARIO 3?

WHAT DO YOU **DISLIKE** ABOUT SCENARIO 3?

DISCUSSION & QUESTIONS

Of everything we've discussed, what is the most important thing to advance in this area?

What do you want to make sure does not happen?