IMPACTS OF SUPERSTORM SANDY ON IRONBOUND IN NEWARK – A VULNERABLE, ENVIRONMENTAL JUSTICE COMMUNITY



• Harrison

Ironbound

Newark

Diamond-Alkali Superfund Site Covanta Incinerator

The Island

Essex County Correctional Facili

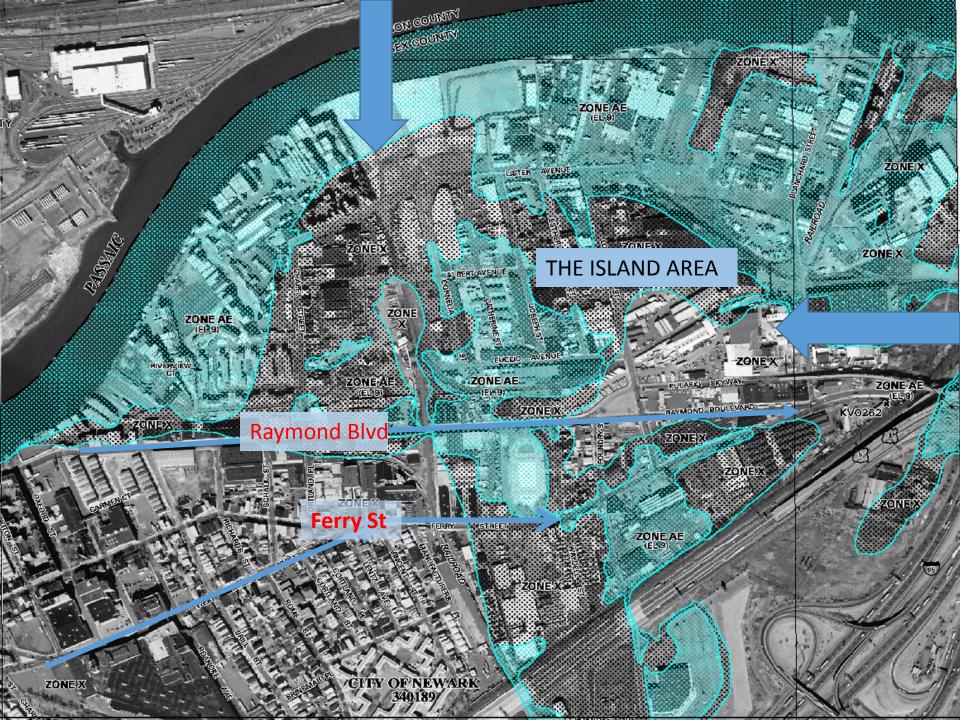
Surge topped 11' 9" at the mouth of the river

Newark Bay

N

PVSC







#### The "Island": Mixed Industrial-Residential Environmental Justice Community

Benjamin Moore

#### Dioxin Superfund Site

Convanta Incinerator

Condemned houses

En All

Terrell Homes

#### Hayes Park East

Imagery Date: 6/17/2010 40°44'13.27" N 74°07'50.70" W elev 8 ft eye alt 6836 ft 🔾

**∧**PSE&G

Google earth

## THE AFTERMATH

#### **NEWARK AIRPORT**







## WIDESPREAD POWER OUTAGES









## HOMES IN THE ISLAND DEVASTATED

Bobby McDuffie, worker drowned in the storm surge One of 12 deaths in NJ from Sandy

## FAMILIES STILL TRYING TO RECOVER







## **ICC** Response

- Immediate Relief Efforts on the Ground
- Partnership Development
- Community Assessment, Outreach & Organization
- Facilitate Access to Resources
- Ongoing Relief
- Clean-ups & Rehabilitation
- Case Management
- Mental Health Support
- Advocacy
- Establish Long Term Recovery Group
- Emergency Preparedness
- Resiliency Planning



# Early Relief Efforts 800 Families in the 1<sup>st</sup> months

- Hot Meals Daily
- Food, Blankets, Clothes
- Food & Goods Gift Cards
- Community Meetings: FEMA, Red Cross, etc.



#### Hot Lunches & Dinners at Terrell Homes





# **Ongoing Relief Efforts**

- Clean-ups & Rehabilitation
- Case Management
- Mental Health Support
- Advocacy
- Establish Long-Term Recovery Group
- Emergency Preparedness
- Resiliency Planning

# ARE YOU READY FOR THE NEXT STORM?



## **CHANGING CLIMATE CAN BRING**

ALLENGES

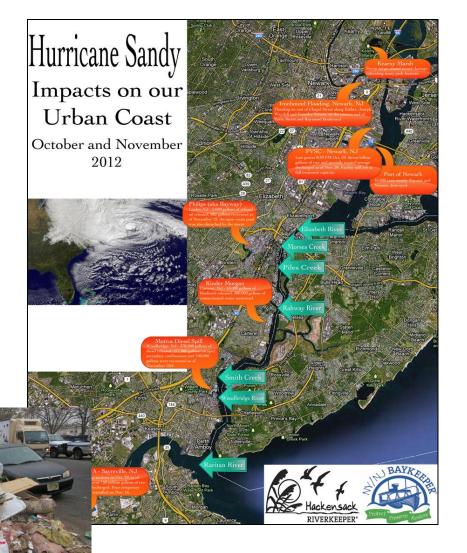
AHEAD

CH

- FLOODING
- HURRICANES
- BLACKOUTS
- EXTREME HEAT
- EXTREME COLD/SNOW
- AIR POLLUTION

### WHAT SANDY REMINDED US ABOUT VULNERABILITY

- Vulnerable Industrial waterfronts
- Surrounded & inundated by environmental hazards
- Aging, failing infrastructure
- Limited resources to prepare & recover
- Weak communications & disaster systems
- Importance of local social networks



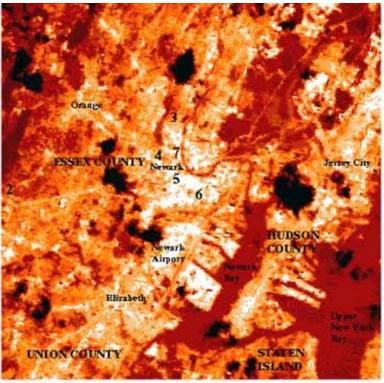


#### SNAPSHOTS of VULNERABILITY

Research shows that future climate scenarios will disproportionately affect those who are socially and economically disadvantaged (Morello-Frosch, 2009).

#### Sandy Storm Surge Areas in Blue





Extreme Heat Map Areas in White are Hottest (over 100 dF) (C. Rosenzweig, 2005)

## **RESILIENCY & ADAPTATION**

<u>Climate Change RESILIENCE</u> = the ability to anticipate and prepare for, and to survive and recover from, the effects of climate change.

<u>Climate Change ADAPTATION</u> = actions taken to help communities and ecosystems cope with changing

climate conditions





## Climate Resiliency & Adaptation Measures

Some Examples of Resilience and Adaptation Measures:

- Emergency/ Disaster preparedness Plans
- Local community based first responders
- Cooling centers
- Local food sources
- Green infrastructure -- permeable pavements, rain gardens, etc.
- Rooftop solar power local power sources

CRITICAL to EJ is the INCLUSION & DIRECT INVOLVEMENT OF IMPACTED, VULNERABLE COMMUNITIES in the PLANNING & IMPLEMENTATION OF MEASURES

## WHAT RESILIENCY LOOKS LIKE



TAKE THESE THREE STEPS • TEACH 3 OTHERS

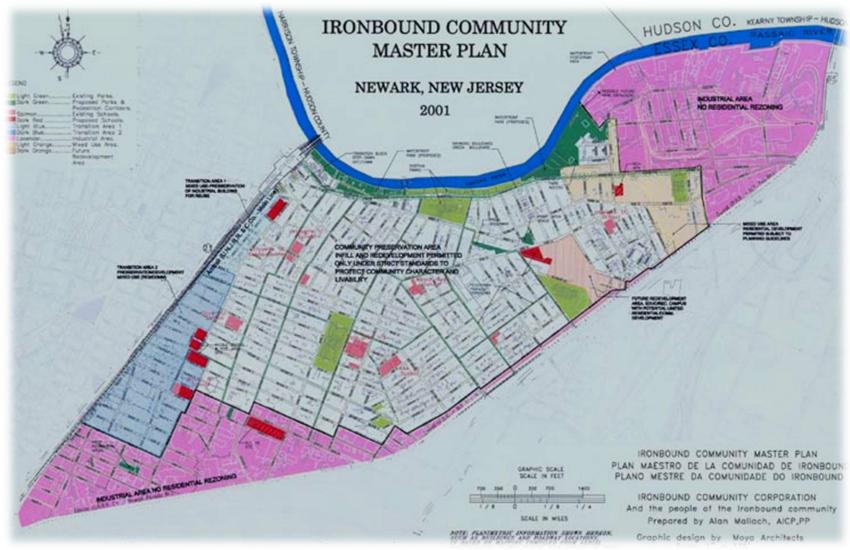


#### Essex County Riverfront Park – Adjacent to Terrell Homes





#### **Community Master Plan**



## CLOSING THE CLIMATE GAP

- Close the Climate Gap by Investing in Communities Hardest Hit
- Maximizing Reductions in Greenhouse Gas Emissions and Toxic Air Pollution in Neighborhoods with the Dirtiest Air.
- Close the Health Impacts Gap Between People of Color and the Poor, and the Rest of the Population.
- Focus Planning and Intervention in Poor and Minority Neighborhoods.
- Use New Mapping Technologies to Identify Vulnerable Neighborhoods

Rachel Morello-Frosch, Ph.D., MPH | Manuel Pastor, Ph.D. | James Sadd, Ph.D. | Seth B. Shonkoff



## HOW DO WE BEGIN TO PREPARE

#### NY-NJ Sandy Regional Assembly Recovery Agenda

- 1) Integrate regional rebuilding efforts with local resiliency priorities;
- 2) Strengthen vulnerable communities & reduce public health threats,
- 3) Expand community-based climate change planning, disaster preparedness & response.



Recovery from the ground up Strategies for community-base resiliency in New York and New Jerse



April 2013

## CAN YOU ANSWER YES?

- I know what emergencies or disasters are most likely to occur in my community
- $\boldsymbol{\cdot}$  I have a family disaster plan and have practiced it
- I have an emergency preparedness kit
- I know where to get information about evacuations, weather reports, and shelters in times of emergency
- I have taken action to help my community prepare

## PREPARING MY FAMILY

#### Step 1 – Get a Kit

#### **Step 2 – Discuss Kit Rules**

#### **Step 3 – Personalize Your Kit**

#### **Step 4 – Make an Evacuation Plan**

#### **Step 5 – Be Informed**

## PREPARING MY COMMUNITY

- Learn about the hazards most likely to affect your community.
- Learn about local emergency response plans, drills, and exercises.
- Find out what your community is doing to prepare.



## PREPARING FOR CLIMATE CHANGE

#### **EXAMPLES**

- Check out the Maps of potential hazards
- Help us create a Community Preparedness Plan
- Get Trained to be a first responder
- Get to know your neighbors and neighborhood
- Planting more Green -- rain gardens, trees
- Creating more local power sources like solar

## HOW DO WE BEGIN?

#### TONIGHT!

- Get an Emergency Kit
- Sign up for Training
- Find out about local resources
- Tells us what hazards you've faced and what new hazards may come -- MAPS
- Talk to your kids check out the ART
- Spread the word



## CLIMATE CHANGE SURVIVORS

