



A Seat at the Table: Integrating the Needs and Challenges of Underrepresented and  
Socially Vulnerable Populations into Coastal Hazards Planning in New Jersey

*Stakeholder Engagement Summary*

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## Executive Summary

While all people living in the United States are affected by climate change, some communities and some populations are more vulnerable to changing climate conditions than others. Extensive research here in the United States and across the world points to populations of concern including those that are low-income, some communities of color, immigrant populations, people with limited English proficiency, Indigenous people, older and younger adults, people with disabilities and compromised health and mental health conditions, and others.

Rutgers University is working in partnership with the New Jersey Department of Environmental Protection (NJDEP) Bureau of Climate Resilience Planning on the NOAA Project of Special Merit (PSM) project, *A Seat at the Table: Integrating the Needs and Challenges of Underrepresented and Socially Vulnerable Populations into Coastal Hazards Planning in New Jersey*. The project objectives are to:

- Update and enhance access to data that can be used by practitioners to identify socially vulnerable populations as part of community climate resilience planning;
- Develop guidance in the form of training curriculum and outreach materials to inform and support practitioners' efforts to engage socially vulnerable populations as part of community climate resilience planning;
- Offer recommendations for changes in coastal management and other policies that will support engagement of socially vulnerable populations in coastal climate resilience planning.

One project task is to conduct interviews with a set of key informants who are knowledgeable about the needs and challenges of socially vulnerable populations in New Jersey to inform overall project outcomes and outputs; and to conduct focus groups with socially vulnerable populations and/or organizations that serve socially vulnerable populations. As part of this task, the Rutgers team conducted more than 20 key informants and four focus group, three of which were with residents in Camden, Newark and Perth Amboy and one of which was with voluntary organizations that are active after disasters. This report summarizes the outcomes of those stakeholder engagement efforts.

### Key messages

The Rutgers team heard five overarching, consistent messages from both the key informant interviews and the four focus groups:

1. For socially vulnerable populations, underlying societal inequities and challenges create the biggest hurdles to achieving resilience. This observation was shared for all types of socially vulnerable populations including people with disabilities and mental health needs, low income and Environmental Justice residents, senior citizens, among others. Perhaps the most consistent message heard from key informants and focus group participants is the extent to which socially vulnerable populations are already living under highly stressed conditions that are exacerbated by changing climate conditions. The Rutgers Team heard that the conditions that cause an emergent condition for a socially vulnerable household are much more sensitive for the population. Overall, the input received through the stakeholder process was that resilience processes need to focus on addressing the factors that increase social vulnerability so that residents can be better equipped to prepare for changing climate conditions.

2. For socially vulnerable populations, resilience is a factor of individuals AND whole communities. In other words, an individual may be somewhat resilient but the condition and level of cohesion of their community may make them less resilient or not resilient at all. During focus groups in urban communities, participants pointed to examples such as the built environment, community safety, availability of parks and open spaces, and infrastructure contributing to their inability to adapt to and recover from a climatic event. Other stakeholders pointed to the level of social cohesion in a community, the transparency and effectiveness of information sharing within a community, and the availability of community-based social services as contributors to resilience.
3. Most of the stakeholders engaged for this report conveyed a perception that government resources and funds to support resilience and recovery disproportionately benefit communities that are more resourced, meaning they have the capacity to apply for state and federal grants. For example, organizations that serve socially vulnerable populations after disasters indicate that, while their organization is not necessarily mission-focused on resilience and recovery, it had no choice but to serve the needs of socially vulnerable populations after storm events. These organizations, as well as organizations represented by focus group hosts and key informants, indicate that they are typically operating on organizational budgetary “margins” and are then even more pressed when their organizations are called into service during a climate event. Many indicate that they do not feel consulted in upfront design and implementation of resilience and recovery policies and programs.
4. A resounding message heard from key informants and focus group participants alike is the need for participatory processes to inform climate resilience planning with specific provisions to engage socially vulnerable populations. Key informants and focus group participants indicated that when stakeholders that are or represent socially vulnerable populations are engaged in resilience planning, new issues will be introduced to the process such as affordable housing, transportation mobility, public health and community safety. Stakeholders indicated that new processes will be needed to ensure the participation of socially vulnerable populations including convenient meeting times and locations, cultural competency, family support services, home visits, partnerships with trusted local sources, and compensation. When key informant interviewees and focus group participants were asked who they trust, often the answer was a local organization that is embedded in the community. Focus group participants also emphasized the need for residents themselves to inform community decision-making regarding resilience-related planning and decision-making, citing that residents best know what actions will be most effective in their own community.
5. In general, key informant interviewees and focus group participants identify an important role for government to play, especially with regard to ensuring that socially vulnerable communities and populations receive the resources and capacity needed to address underlying conditions that may be exacerbated by climate conditions, and prepare for and recover from climatic events. However, focus group participants and key informant interviewees were clear to emphasize that the role of government must be in partnership with organizations, leaders and residents of socially vulnerable communities and populations that may not traditionally have been involved in resilience planning.

This report also includes more in-depth discussion on specific input received from stakeholders regarding actions for state and local agencies as well as specific insights from the focus groups and key informant interviews. In general, an overarching message heard by the Rutgers team is that, to address needs of socially vulnerable populations, resilience planning needs to take a multi-sector approach that is sufficiently broad to address underlying challenges that are exacerbated by climate conditions.

## Background

Rutgers University is working in partnership with the New Jersey Department of Environmental Project (NJDEP) Bureau of Climate Resilience Planning on a NOAA Project of Special Merit (PSM) project titled, *A Seat at the Table: Integrating the Needs and Challenges of Underrepresented and Socially Vulnerable Populations into Coastal Hazards Planning in New Jersey*. The objectives of the project are to:

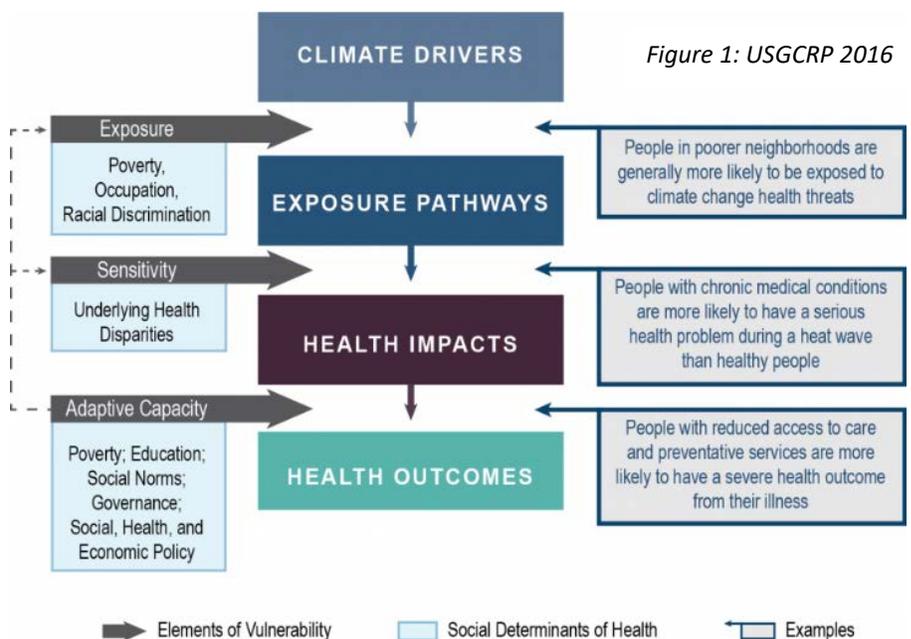
- Update and enhance access to data that can be used by practitioners to identify socially vulnerable populations as part of community climate resilience planning;
- Develop guidance in the form of training curriculum and outreach materials to inform and support practitioners’ efforts to engage socially vulnerable populations as part of community climate resilience planning;
- Offer recommendations for changes in coastal management and other policies that will support engagement of socially vulnerable populations in coastal climate resilience planning.

A task the PSM project is focused on stakeholder engagement and is intended to engage socially vulnerable populations and key informants knowledgeable about the needs and challenges of socially vulnerable populations to inform overall project outcomes and outputs. The Rutgers team led the performance of key informant interviews with 22 knowledgeable individuals and 4 focus groups through partnerships with organizations that are mission-focused on working with socially vulnerable populations. This report summarizes the outcomes of stakeholder engagement efforts. All efforts associated with this task were conducted in consultation with the NJDEP Bureau of Climate Resilience Planning and the Office of Environmental Justice.

## Social Vulnerability

While all people living in the United States are affected by climate change, some communities and some populations are more vulnerable to changing climate conditions than others. The United States Global Change Research Program

Climate and Health Assessment find that “vulnerability to climate change varies across time and location, across communities, and among individuals within communities. Populations of concern include those with low income, some communities of color, immigrant groups (including those with limited English proficiency), Indigenous peoples, children and pregnant women, older adults, vulnerable occupational groups, persons with disabilities, and persons with preexisting or chronic medical



conditions. Some groups face a number of stressors related to both climate and non-climate factors. For example, people living in impoverished urban or isolated rural areas, floodplains, coastlines, and other at-risk locations are more vulnerable not only to extreme weather and persistent climate change but also to social and economic stressors. Many of these stressors can occur simultaneously or consecutively. Over time, this “accumulation” of multiple, complex stressors is expected to become more evident as climate impacts interact with stressors associated with existing mental and physical health conditions and with other socioeconomic and demographic factors” (see figure 1).<sup>1</sup>

Volume II of the Fourth National Climate Assessment, released in 2018, concludes that existing societal inequalities and stressors already faced by certain populations and communities will be greatly exacerbated by climate change. Such inequities may include unequal access to social, community-based, and economic conditions that contribute to health and well-being, disproportionate exposure to environmental hazards, and social isolation. The assessment calls for governments to involve populations most affected by climate change into development of policy solutions.<sup>2</sup>

Research points to historic under investment and under representation of certain communities and populations based on factors including race and income that increase their vulnerability to changing climate conditions.<sup>3</sup> Research also points to the intersection of these stressors with other social, economic, environmental, and community factors that influence health inequities.<sup>4</sup>

These messages are underscored by the American Public Health Association that calls climate change and health inequities the “defining public health issues of our time” and that “they are inextricably interconnected.” APHA points to the following three connections:

1. *Climate change disproportionately impacts the health of low-income communities and communities of color. The same physical, social, economic, and services environments that are associated with poor health outcomes for low-income communities and communities of color also increase exposure and vulnerability to the health impacts of climate change. People in low-income communities and communities of color generally experience greater burdens from preexisting health conditions which increase susceptibility to climate-related health threats. These communities are often historically disenfranchised, lacking the political and economic power and voice to ensure that decision makers take their perspectives, needs, and ideas fully into account. This lack of power contributes to health inequities and constrains the ability of low-income communities and communities of color from building climate resilience and to contributing fully to climate change solutions.*

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<sup>1</sup> USGCRP, 2016: The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. Crimmins, A., J. Balbus, J.L. Gamble, C.B. Beard, J.E. Bell, D. Dodgen, R.J. Eisen, N. Fann, M.D. Hawkins, S.C. Herring, L. Jantarasami, D.M. Mills, S. Saha, M.C. Sarofim, J. Trtanj, and L. Ziska, Eds. U.S. Global Change Research Program, Washington, DC, 312 pp. <http://dx.doi.org/10.7930/JOR49NQX>

<sup>2</sup> USGCRP, 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 1515 pp. doi: 10.7930/NCA4.2018

<sup>3</sup> Susan Cutter. The Geography of Social Vulnerability: Race, Class, and Catastrophe. Social Science Research Council: Understanding Katrina; Perspectives from the Social Sciences. Social Science Research Council. June 11, 2006. Available at: <http://understandingkatrina.ssrc.org/Cutter/>

<sup>4</sup> Brulle, Robert & Pellow, David. (2006). Environmental Justice: Human Health and Environmental Inequalities. Annual review of public health. 27. 103-24. 10.1146/annurev.publhealth.27.021405.102124.

2. *Climate change and health inequities share the same root causes. The same systems (e.g. transportation, food and agriculture, energy) that are major sources of climate pollution also shape the living conditions that comprise the social determinants of health. These systems are shaped by current and historical forces that include structural racism and the persistent lack of social, political, and economic power of low-income communities and communities of color.*
3. *Addressing climate change and health inequities requires transformational change in our systems and communities. Many climate solutions offer tremendous health benefits and opportunities to promote greater equity, which are vital to increasing climate resilience. But to assure that all Americans have opportunities for health requires that we preserve a healthy planet. We cannot have healthy people without healthy places, and we cannot have healthy places without a healthy planet.<sup>5</sup>*

For several decades, the University of South Carolina Hazards and Vulnerability Research Institute has synthesized research regarding social vulnerability to natural hazards to form the Social Vulnerability Index (SoVI®) that is designed to measure the social vulnerability of U.S. counties to environmental hazards. The index is a comparative metric that facilitates the examination of the differences in social vulnerability among counties using data from 2010-2014.<sup>6</sup>

Informed by national research regarding social vulnerability and well as the index built by the University of South Carolina, the U.S. Centers for Disease Control and Prevention has developed a Social Vulnerability Index (SVI) that uses updated data and is currently used in many states to guide resilience planning efforts. The CDC defines social vulnerability as a “community’s capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills.” CDC considers factors that contribute to social vulnerability to include:

- Socioeconomic status – including employment, income, housing status, education level, health;
- Age – the old and young are especially vulnerable to changing climate conditions;
- Gender – Gender itself is not a characteristic of social vulnerability but, rather, gender inequalities in society can point to social vulnerabilities. During a climate event, females might be more vulnerable because of differences in employment, lower income, and family responsibilities;
- Race and ethnicity - Social and economic marginalization, societal underinvestment, racism and other factors contribute to the vulnerability of these groups;
- English language proficiency – People who have limited English ability may have difficulty understanding direction during a climate-related event; and
- Medical issues and disability – This category may include people with a physical, cognitive, physical, or sensory impairment, people with behavioral or mental health issues, people who

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<sup>5</sup> Climate Change, Health and Equity: A Guide for Local Health Departments. American Public Health Association. 2018. Available at: [https://www.apha.org/-/media/files/pdf/topics/climate/climate\\_health\\_equity.ashx?la=en&hash=14D2F64530F1505EAE7AB16A9F9827250EAD6C79](https://www.apha.org/-/media/files/pdf/topics/climate/climate_health_equity.ashx?la=en&hash=14D2F64530F1505EAE7AB16A9F9827250EAD6C79)

<sup>6</sup> Cutter, S.L.; B.J. Boruff; W.L. Shirley. 2003. Social Vulnerability to Environmental Hazards. *Social Science Quarterly* 84(2):242–261.

dependent on electric power to operate medical equipment, people with chronic medical conditions (e.g. asthma).<sup>7</sup>

CDC's SVI uses 15 U.S. census variables at tract level to help local officials identify communities that may need support in preparing for hazards; or recovering from disaster. These variables are organized into 4 themes:

- Socioeconomic Status - income, poverty, employment, and education variables;
- Minority status & language – minority status, English proficiency;
- Housing & transportation – multi-unit structures, mobile homes, crowding, no vehicle ownership, group quarters;
- Household composition/disability – Age 65 and older, age 17 and younger, older than age 5 with a disability, single parent households<sup>8</sup>

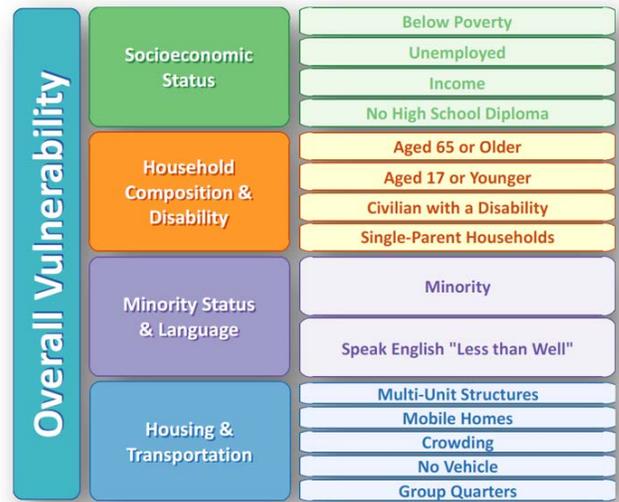


Figure 2: CDC SVI

For the purpose of this Project of Special Merit and in consultation with its Project Working Group, NJDEP has adopted a more expansive understanding of social vulnerability from three perspectives:

- Definition of resilience –
    - CDC: The focus of CDC’s definition of social vulnerability is on a community’s capacity to *prepare for and respond to the stress of hazardous events*.
    - FEMA: The Federal Emergency Management Agency (FEMA) refers to building a culture of preparedness in which “every segment of our society, from individual to government, industry to philanthropy, must be encouraged and empowered with the information it needs to *prepare for the inevitable impacts of future disasters*.”<sup>9</sup>
    - NOAA: The National Oceanic and Atmospheric Administration (NOAA) defines coastal resilience as the ability of a community to ‘bounce back’ after hazardous events such as hurricanes, coastal storms, and flooding – rather than simply reacting to impacts.”<sup>10</sup>
- The NJDEP perspective on social vulnerability is that the most effective way to ensure that socially vulnerable communities and populations can “bounce back” and thrive after climate-related events is through the systematic advancement of equitable policies, investments, coordination of programs, infrastructure improvements and

<sup>7</sup> Centers for Disease Control and Prevention (CDC). Planning for an Emergency: Strategies for Identifying and Engaging At-Risk Groups. A guidance document for Emergency Managers: First edition. Atlanta (GA): CDC; 2015. Available at: [https://svi.cdc.gov/Documents/Publications/SVI\\_Community\\_Materials/atriskguidance.pdf](https://svi.cdc.gov/Documents/Publications/SVI_Community_Materials/atriskguidance.pdf)

<sup>8</sup> Flanagan, Barry E.; Gregory, Edward W.; Hallisey, Elaine J.; Heitgerd, Janet L.; and Lewis, Brian (2011) "A Social Vulnerability Index for Disaster Management," Journal of Homeland Security and Emergency Management: Vol. 8: Iss. 1, Article 3.

<sup>9</sup> <https://www.fema.gov/strategic-plan>

<sup>10</sup> <https://oceanservice.noaa.gov/facts/resilience.html>

other systems that inherently improve the socioeconomic and environmental conditions of socially vulnerable communities;

- Data sets – The NJDEP intends to complement use of the SVI index with other datasets that represent other factors of social vulnerability. As part of this project, the Rutgers team is exploring other authoritative data sets that may be used for identification of socially vulnerable populations including data regarding veterans, asset limited and income restrained employed residents, residents in communities with disproportionate environmental burden and others. Additionally, the NJDEP and Rutgers are exploring complementing use of the SVI index with individual indicators because both have heard that general users are often confused when using multiple indices;
- Engagement – The CDC SVI has a focus on preparing communities to prepare to environmental hazards. A strong focus of the NJDEP Project for Special Merit is on continuous engagement of socially vulnerable populations as part of overall resilience planning that is not necessarily tied to disaster-related events. The NJDEP approach is a more holistic community-based planning approach that is led by the community which may have ties to community design, health, transportation, energy and other types of local planning.

## Approach

Task 4 of this project involved the following strategies:

### Consultation with Project Working Group

The Rutgers Team and NJDEP consulted with the Project Working Group (PWG) on the design of the key informant interviews and focus groups. A draft list of invited key informants was shared with the PWG, who offered additional suggestions. The Rutgers Team also discussed the nature of the topics to be covered in both the key informant interviews and the focus groups with the PWG and added names to the interviewee invitee list based on input from the PWG. A draft overview of observations and insights gained from the key informant interviews and focus groups was presented to the PWG via webinar in June 2019 to inform organization of this report. A draft of this report was shared with the PWG and was the subject of a discussion of the PWG at its September 2019 meeting. This report was revised based on input of the PWG.

### Key Informant Interviews

In consultation with the NJDEP, the Rutgers team developed a list of potential key informant interviewees. Two members of the Rutgers Team led interviews with key informants: Dr. Karen Lowrie and Jeanne Herb. The interview protocol was approved by the Rutgers Institutional Review Board. All interviewees were provided informed consent with the interviewers stressing that the interviews were not for attribution. The Rutgers Team sent an email to all potential interviewees with an invitation to participate in a key informant interview with a choice of telephone or in-person interview. Twenty interviews took place by telephone; two interviews took place in person at the request of the interviewee. The interview protocol was based, in part, on discussion with the PWG, as well as insights provided via the project literature review. A total of 20 individuals were interviewed by phone and in person, most in leadership positions at statewide, county, or local nonprofit and government organizations that serve, as all or part of their mission, vulnerable populations such as the elderly,

mentally ill, low-income families, or immigrants. The questions were in three main areas: impacts of changing climate on vulnerable populations and proposed solutions to mitigate impacts; strategies for engagement of organizations and populations in resilience planning; and information, data sources, and needs. A list of interviewees is included in Appendix A along with the interview protocol. Each interview included the Rutgers interviewer taking notes which were then compiled into a complete set of notes that were shared with the NJDEP Project Manager.

## Focus Groups

Originally, NJDEP and the Rutgers Team intended to provide \$5,000 subawards to three organizations to facilitate and host focus groups. As per the NOAA-PSM workplan, Rutgers issued a Request for Qualifications to six established, non-profit organizations in New Jersey that have a history of working with socially vulnerable populations. All six organizations were invited to submit a statement of qualifications using a questionnaire designed by Rutgers and approved by NJDEP. Criteria for selection of the organizations to host the focus groups were included in the NOAA-PSM work plan and included as part of the Request for Qualifications. All subawards were processed following Rutgers financial procedures. Four organizations submitted statements of qualifications: Coopers Ferry Partnership, Ironbound Community Corporation, New Jersey Voluntary Organizations after Disasters, and the Jewish Renaissance Foundation. All four organizations met the selection criteria. Given the anticipated diversity of input that would be received from the four different focus groups, the Rutgers Team and NJDEP agreed to undertake some revision to the budget to allow the project to include focus groups with all four organizations.

The four focus groups took place on-site at each of the hosting organizations in July 2019:

- Jewish Renaissance Foundation – Perth Amboy, Middlesex County
- NJVOAD – Offices of Catholic Charities; Cape May, Cape May County
- Ironbound Community Corporation – Newark, Essex County
- Coopers Ferry Partnership – Camden, Camden County

Each focus group lasted approximately 1.5 hours. A total of 39 residents participated in the four focus groups. Each participating resident received a \$40 incentive. Each resident received and signed an Institutional Review Board-approved informed consent including a clarification that the focus groups were not for individual attribution. One of the focus groups necessitated translation to Spanish, which was provided by the host organization. Each of the four host organizations were required to: secure a location for the focus group, recruit participants per criteria provided by the Rutgers team, manage focus group logistics, participate in the focus group without a personal incentive, and provide refreshments for participants. Two representatives of the Rutgers Team led three of the focus groups and one representative of the Rutgers team led the NJVOAD focus group. At least one representative of NJDEP observed each focus group and took notes of the discussion. Notes from NJDEP observers and Rutgers Team leaders were combined to inform collective observations and insights. The focus group protocol was based on focus group best practices, such as use of defined and open-ended questions, and included questions that were informed by discussions with the PWG as well as the project literature review. The focus group interview protocol is included in Appendix B.

## Report Preparation

This report was prepared by the Rutgers Team based on observations and insights gained from both the key informant interviews and focus groups. Notes prepared by the Rutgers team leading interviews with key informant interviews were reviewed along with notes from Rutgers team focus group leaders and NJDEP focus group observers. The Rutgers Team held a dedicated team meeting to review all notes to prepare a cohesive summary of insights based on both the key informants and focus groups. A summary of those insights and observations were provided to the PWG on a June 2019 webinar to receive feedback on the organizational approach to inform preparation of this report. In addition to having a draft of this report reviewed and discussed by the PWG at its September 2019 meeting, each of the focus group host organizations reviewed a draft of this report. Changes were made to this report to reflect input from the PWG including the following:

- Providing a greater emphasis on the input received from focus group residents in addition to key informants;
- Emphasizing the key message that, for socially vulnerable populations, the goal is or should be “bouncing forward” to improved conditions rather than “bouncing back” to previous living conditions;
- Providing an early section in the report that gives context for the nature of social vulnerability, including the populations and communities that are most vulnerable to changing climate conditions and the causes for those vulnerabilities.

Minor comments were received and incorporated into the report from the focus group host organizations. In general, the focus group host organizations felt that the review draft of this report accurately represented the discussions at the focus groups.

## Key Messages

In general, the Rutgers team heard very consistent messages from both the key informant interviews and the focus groups. These messages are also generally consistent with the literature review conducted for this project as well as research that has been conducted nationally.

*“We are a bit more prepared for the next storm, but not by a whole lot!”*  
Key informant interviewee

## Overarching Messages

The Rutgers team heard five overarching, consistent messages from both key informant interviews and focus groups, including:

1. **Underlying societal challenges** - For socially vulnerable populations, underlying social inequities create the biggest challenge to achieving resilience. Perhaps the most consistent message heard from key informants and focus group participants is the extent to which socially vulnerable populations are already living under highly stressed conditions that are exacerbated by changing climate conditions. The Rutgers Team heard that the conditions that cause an emergent condition for a socially vulnerable household is much more sensitive for the population. Key informants and focus group participants also discussed how climatic events might have consequences that cause a cascading spiral of impacts, thus exacerbating a person’s ability to recover to the previous state of “normal.” Social conditions that were

*“Many of these people are ‘living on the edge’ already, so it doesn’t take much to go over the edge!”*  
Key informant interviewee

routinely identified as those that significantly affect the ability of a population to prepare for and/or recover from a climatic event include:

- Economic status, meaning having access to financial resources to be able to live in conditions that allow a base level of resilience so that an individual and/or family can easily adopt to climate events. An example is an individual who works an hourly wage job that is not paid if a climatic event prevents them from getting to work;
- Underlying health disparities and conditions – Participants pointed to examples of health disparities that are likely to worsen for socially vulnerable populations during climatic events. An example are households without the ability to afford air conditioners that may contribute to respiratory impacts during high heat events. Mental health is included among the health concerns identified by key informants. The Rutgers Team heard that underlying health conditions that are exacerbated by climate conditions includes pre-existing mental health conditions including dependence on alcohol and drugs. The Rutgers team heard that climatic events can build upon existing stressors that coincide with mental health conditions, forcing greater social isolation and disrupting stable conditions that might trigger mental health emergencies. Other practical measures were also discussed such as the fact that high temperatures can affect the function of mental health drugs, that in high temperatures people may not hydrate properly causing mental health distress, and that access to prescription medications may be limited during climatic events.
- Access to transportation, affordable & quality housing, safe and clean communities, educational attainment; and
- Immigration status – The Rutgers team heard frequently about distrust of government on the part of immigrant communities that preclude their use of social services. One key informant talked about immigrant families eating spoiled food after Hurricane Sandy because they were too fearful to go to the local food pantry.

2. **People and community** - For socially vulnerable populations, resilience is a factor of individuals AND whole communities. In other words, an individual may be somewhat resilient but the condition and level of cohesion of their community may make them less resilient or not resilient at all. During focus groups in urban communities, participants pointed to examples such as the built environment and infrastructure contributing to their inability to adapt to and recover from a climatic event. Examples include:

- Multiple sources of pollution that affect physical and mental health challenges that may be exacerbated during climatic events such as through combined sewer overflows, stormwater pollutant runoff;
- Overall poor infrastructure, such as inadequate road conditions, that can cause severe distress during flood events affecting ability to evacuate, etc.
- Extent to which a community has parks and “green” infrastructure to not only mitigate flooding and heat island effect but so also contribute to community vibrancy;
- Extent to which a community has systems and structures to promote community cohesion, information sharing, and educational opportunities – all factors that

*“Recovery depends on how capable or strong you were to start with!”*  
Key informant interviewee

interviewees and focus group participants pointed to as critical elements of enhancing resilience.

- 3. Resource inequity** – The perception of many of the key informants interviewed and participants in focus groups is that government resources to support resilience appear directed to communities and individuals that have the capacity to receive and apply for those resources. Regardless of whether this perception is true or not, key informant and focus group participants believe that government resilience and recovery monies disproportionately benefit communities that are more resourced, meaning they have the capacity to apply for state and federal grants. Organizational key informant interviewees indicate that their organization is not necessarily mission-focused on resilience and recovery but, following climatic events, had no choice but to serve the needs of socially vulnerable populations. They indicated that they “filled gaps” in current systems to address the needs of socially vulnerable populations during climatic events but that they have still not been provided with the capacity needed to continue in such roles, including applying for state and federal resilience grant monies to support their efforts. This comment was heard from organizations that serve a variety of populations: immigrant populations, people with mental health needs, people who are low-income or poor, etc. In general, the overarching message heard by the Rutgers team is that these providers are often operating on organizational budgetary “margins” which are then even more pressed when their organizations are called into service during a climate event. Many of these organizations also point to their experience that they are called into service during or after a climate event but that they are often not consulted in upfront design and implementation of policies and programs. Finally, they also indicate that, if their expertise is sought for planning new programs and policies, it is critical that they be given resources to participate given their limited basic operational capacity.

*If you want people to bounce back from a storm, make sure they have the resources they need to live a happy and healthy life now and then they can take care of themselves if there's a storm event!"*

Key informant interviewee

- 4. Building trust and capacity** – A resounding message heard from key informants and focus group participants alike is the need for upfront, barrier-free participatory processes to inform climate resilience planning. A second message is the need for resilience planning to not only focus on efforts to mitigate impacts of climatic events but to also address the underlying social inequities that are the cause of social vulnerability. Several pointed to adage “an ounce of prevention is worth a pound of cure,” meaning that a focus of state resilience efforts should be on addressing causes of social vulnerability so that people can be self-resilient during climatic events. In general, one clear message from the key informant interviews and focus groups was that planning for climate change should not be framed as a stand-alone, separate challenge facing a socially vulnerable community but, rather, a condition that exacerbates current community challenges that are often the result of social inequities.

Underlying these messages is the concept of trust. When key informant interviewees and focus group participants were asked who they trust, often the answer was a local organization that is embedded in the community. Focus group participants also emphasized the need for residents

themselves to inform community decision-making regarding resilience-related planning and decision-making, citing that residents best know what actions will be most effective in their own community. In two of the focus groups, held in urban communities, residents were surprised to learn that cities and counties adopt hazard mitigation plans because they indicated that they neither know about the plans nor were consulted in plan development.

Input received from the key informant interviews and focus groups indicate support for resilience planning efforts that:

- Create new models of citizen engagement in which socially vulnerable populations, who may not typically be engaged in formal planning processes, are sought out to inform ongoing efforts. Such efforts not only include community leaders in policy and program design but also involve residents in decisions about their own communities. On a related note, several key informants pointed to the need for financial support to advance community-based resilience processes;
- Promote processes in which a commitment to social equity is apparent which may require more holistic resilience planning that, for example, involve organizations and agencies involved in broader social equity issues such as public health, affordable housing, community-based transportation mobility, workforce development, open space, and the integration of planning for those issues with provision of social and health services; and
- Build capacity within communities so that community-based organizations and residents can ensure that:
  - resources are equitably directed to the residents and neighborhoods that need them the most;
  - outreach is conducted to socially vulnerable populations in ways that is culturally competent and sensitive to individual populations' needs and challenges;
  - specific needs of individual socially vulnerable populations can be tailored – for example, the Rutgers team head that the needs of people with mental health conditions may best be addressed through personal home visits while immigrant populations' needs may best be addressed through local trusted organizations;
  - focus on information coming from local sources is critically important for populations with mental health conditions to ensure trust and minimization of anxieties during climatic events;
  - solutions correspond to the needs of the most vulnerable populations in a community;
  - residents are educated about strategies to be most resilient from trusted sources but during “blue skies” as well as climatic events;
  - services can be provided locally by organizations most trusted by residents;

*“The most important thing to make people able to withstand storms is to give them a solid education so they can take care of themselves.”*

Key informant interviewee

- resilience strategies become sustainably integrated into a community's systems, culture and operations, rather than it being viewed as a standalone government requirement with no connectedness to the overall fabric of a community; and
  - strategies are adopted that can deliver broader social equity co-benefits to residents such as improved health and access to workforce development opportunities.
5. **Role of government** - In general, key informant interviewees and focus group participants identify an important role for government to play, especially with regard to ensuring that socially vulnerable communities and populations receive the resources and capacity needed to: address underlying conditions that may be exacerbated by climate conditions, and prepare for and recover from climatic events. However, focus group participants and key informant interviewees were clear to emphasize that the role of government must be in partnership with organizations, leaders and residents of socially vulnerable communities and populations that may not traditionally have been involved in resilience planning. In general, an overarching message heard by the Rutgers team is that, to address needs of socially vulnerable populations, resilience planning needs to take a multi-sector approach that is sufficiently broad to address underlying challenges that are exacerbated by climate conditions.

### Specific messages - Key informant interviews

Below is a summary of specific insights gleaned by the Rutgers team as a result of the interviews with key informants:

- **Impacts of climate change on vulnerable populations** - Vulnerable populations have less income and resource capacity, so dealing with climate-related hazards affects them disproportionately. Interviewees stressed that traumas related to weather hazards are worse because they build upon existing stresses. Specific impacts for vulnerable populations were detailed as:
  - *Trauma of repeated flooding*: People get traumatized by repeated flooding, now occurring more routinely, with severe problems from Nor-easters. Repetition of the events compounds the ability to recover between events. Plus, there is now a constant fear of heavy rains. It takes a lot of work to clean out, dry out, repaint, etc. It is like an "assault on the family." Dealing with recovery and recovery programs is very stressful. These traumas can exacerbate pre-existing behavioral health conditions. For example, it can enhance the effects of any problem they had – alcohol, drugs, etc. It also forces people to become more socially isolated.
  - *Impact on low-income populations*: Lower income and poor families are more likely to be in housing that is in locations that are more vulnerable to flooding, and in houses that are in poor condition and already less healthy. These populations are already relatively unhealthy and dealing with lots of health challenges. Lower income individuals are outside a lot (waiting for transit, manual labor jobs, walking, etc.) in neighborhoods that may not have much shade. They have fewer resources to allow them to be well-prepared, to evacuate, or to recover (e.g. replacing belongings, accessing food, etc.). Many low-income individuals own homes that they inherited. They are "just barely

getting by” before the storm, but emotionally connected to their homes. They cannot sell homes because they cannot afford to purchase another home. Excessive heat and cold are hard for people on limited income. Because of high utility bills, they may not turn on A/C or heat to keep bills down, and then suffer health effects.

- *Impact on homelessness:* Homeless populations suffer as they congregate in vulnerable areas. It can be hard to find sheltering space.
  - *Impact on renters:* Renters have less capacity to repair and remediate their homes, or to recover damages. “Renters were on the street after Sandy. If it was not bad water damage, it was severe mold. It was cheaper for the landlord to lock the house up than fix it.”
  - *Impact on immigrants:* Many immigrant families, if required to evacuate, have no place to go. Some people with families in Puerto Rico have lost everything there also and have had family from Puerto Rico come to live with them in New Jersey adding to daily stress. If they are limited English proficient, they may struggle with understanding information about hazards and response and may be taken advantage of by certain contractors. Fear of undocumented status means that populations do not speak up and, instead, just “take it.”
  - *Impact on elderly/people with disabilities:* The elderly are very vulnerable to heat island effects, are often in older homes that are not energy efficient, and may not have adequate heat or A/C. Seniors are also often taken advantage of by contractors. Many seniors strive to age in place. They also have more difficulty evacuating due to isolation and mobility issues. Some seniors need power for medications, oxygen, etc., so suffer disproportionately when power is out. Some need to make “hard choices” between food, utility bills and medical supplies. Many key informants stressed that a “cookie cutter” approach cannot be taken to addressing the needs of people with disabilities because the diversity of people with disabilities (developmental disabilities, autism, physical disabilities, etc.) are inherently different and necessitate tailored management).
  - *Impact on urban communities:* Key informants pointed to additional challenges faced by lower income residents in urban communities including typically older, deteriorating infrastructure and housing, urban heat island effect, and polluting industries. A related concern was about developing strategies and policies that mitigate displacement of existing residents when costs to increase resilience and fix aging infrastructure drives up property values of urban neighborhoods.
  - *Condition of neighborhoods:* The physical infrastructure is already bad in many lower-income neighborhoods with large vulnerable populations. Repeated rain and heat both make these conditions worse. Climate change can make leaky roofs more of a problem and make it more difficult to make homes lead-safe. There are already also fewer health providers in their neighborhoods.
- **Top priorities for improvement in resiliency of vulnerable populations** – The Rutgers team asked interviewees for the top priorities that would go the farthest to build resiliency. The items that emerged were increased income, more education/awareness, improvements in transportation and built infrastructure, housing and neighborhood conditions, interpretive

services, and more coordinated planning for service delivery. Specifically, this is what was heard:

- *Financial resources*: Income is a constant stress, so increased income, above all, would help vulnerable populations to be better able to deal with problems. Stable employment options that include insurance would help populations to be healthier.
- *Education*: There is a need to raise awareness about preparation activities and how to tap into resources. People should know more about local conditions and information. People do not know how to access the services that are available to them.
- *Transportation improvements*: Many poorer people have vehicles in poor condition and are not as able or prepared to move. Many also rely on buses to get to shelters. There should be more affordable and accessible transportation options.
- *Interpretive services*: Information needs to be available in multiple languages. Local officials or social services may not know who lives in their communities or how to communicate with them. Recognize that some populations (seniors) are isolated or may limit their social interaction to one local organization. Critically important to work with trusted local sources. What those sources are will vary for different populations: for seniors, it may be a senior center; for others, it may be a church; for others, it may be a community center; for immigrant populations, it may be something entirely different.
- *Safe, affordable housing*: This could include inclusion of more options for people to downsize to smaller residences to reduce costs, keeping utility and cost of living down, and options like “community land trust” to allow people to stay in homes.
- *Healthier and more resilient neighborhoods*: Roads should be repaired to handle/mitigate flooding, and better flood management practices should be utilized to keep neighborhoods safe. Urban greening and tree canopy installed in the city neighborhoods to mitigate heat island effect.
- *Better local planning*: Municipalities need to look at meeting needs of all populations in their master planning. For example, they need a coordinated plan for evacuation or shelter and informing people where to go, to reduce anxieties. A disaster planning group made up of faith-based communities, schools, social service agencies and emergency managers, should develop a coordinated plan for delivering services when disasters occur. The Rutgers team heard about the need for considering the diverse needs of multiple populations as part of community planning including overall community design, resilience planning, and emergency planning. Planning for one type of population is not adequate: planners need to consider all different age groups, all different income levels, all different levels of physical and mental capacity, all cultures and languages.
- *Improved communication during events*: Several key informants called for local community-based “hubs” in familiar community-based organizations where residents can gather during climate events where residents can get information and feel safe and that such hubs can be developed with community leaders. Many key informants pointed to the value of public libraries as critically important resources to socially vulnerable populations that can serve as important and trusted hubs of information during “blue skies” times as well as during climate events, especially for residents that have limited access to electronic sources of information. Making more information

about services, what to do during a climate event, etc. through libraries would be helpful. Several participants in focus groups identified libraries as places where they go to keep cool during high heat days.

- **Ongoing efforts** – To build resilience in socially vulnerable populations, many non-profit social service agencies provide support for New Jersey’s vulnerable populations in various ways. Many help to coordinate services in times of emergency, and as part of their day-to-day missions, operate numerous programs and services that help to improve lives and build capacities for lower-income, elderly, disabled, immigrant, homeless or other populations in need. Several key informants pointed to a need for greater coordination of various social services that are related to providing support to socially vulnerable populations both to increase their overall ability to be resilience as well as to respond during a climate event. Some of things these agencies reported doing related to building resilience to climate hazards are:
  - *Post-storm and crisis support:* Many agencies helped distribute supplies to families, obtain emergency services, and then to obtain the resources needed to safely return to their homes after Sandy. During storms, vulnerable families rely on local agencies to sometimes “man” temporary resource centers and run shuttles, and to relay information about where help is available. Some agencies have provided disaster-related crisis counseling. Through VOAD and COAD efforts, some multi-agency relationships have emerged to serve communities. Several key informants pointed to NJ 211 as a tool with tremendous untapped potential. It has multi-language ability, but is primarily used by English-speakers.
  - *Consumer protection:* It is important to recognize that vulnerable populations are the ones that are most preyed upon after climate events by dishonest contractors. There is an important role for government to play in identifying what are legitimate services and contractors.
  - *Outreach and education:* Many agencies engage in outreach to raise awareness about issues and challenges and build capacity of families to withstand emergencies. Information can get to vulnerable populations through unexpected sources: families in Middlesex County relied on the Nurse Family Partnership program to get information about where social services and other help was available during several storms. Thinking about programs such as that and other similar programs such as weatherization programs, where there is direct support for low income homeowners is important.
  - *Transportation services:* Some agencies have organized bus and shuttle systems that can operate during emergencies.
  - *Improving housing conditions:* There are organizations that are helping to weatherize and retrofit homes to make them more energy-efficient and healthy.
  - *Urban greening:* Some organizations are actively greening cities, including ripping out concrete and doing tree planting.

- *Emergency preparedness:* Organizations have been involved in training residents to serve as block captains during emergencies, and to work with their towns to ensure that emergency plans include services for vulnerable populations. One group created a “Disaster Preparedness and Response” guide. A voluntary program called “register ready” helps towns to know where people are who need services, or where they are during evacuations.
- *Local emergency planning councils:* These can include Health Department and Emergency Management coordinators, along with key nonprofit agencies from communities that meet regularly to review emergency plans. (Note: These differ across counties and municipalities. Some of these are more effective than others in addressing needs of vulnerable populations.)
- *VOAD and COAD:* While they work on the state’s emergency management plan and on resilience planning, interviewees felt that there was still not much planning occurring at municipal level.
- *Flooding assistance:* Some of the NJ community service agencies help neighborhoods to plan for flooding and have incorporated climate change impacts into neighborhood plans. Some educate families about healthy homes but addressing climate impacts is usually more on the periphery.

*“Emergency planning needs to be done from a ‘social services perspective.’”*  
 Key informant interviewee

- **Capacity needs** - Organizations report that they could do more to build resiliency and to engage in climate resiliency planning with more resources, and most want to do more, but key needs mentioned were better information about all service agencies shared among agencies, generally more coordination and connections, and increased capacities or resources to help population with complicated challenges. Supportive resources that are specifically tied to climate resiliency and emergency planning work would help agencies to become more involved, including:

- *Improved information resources:* Organizations want to know about any other groups that are serving people at risk. There could be a directory of “key organizations” that are working with vulnerable populations and organized by geography and type of population.
- *Increased ability to help with housing:* Agencies could do more to help people with repetitive flood loss houses if they had the resources and capacity to help them to either raze or remediate them and make them more able to withstand the next storm.
- *More connectedness and coordination:* Civic associations are important, but do not have enough resources to prepare localized plans. High-level plans do not work unless they can get to the house level. There is a need for the larger, stronger community organizations to work with civic groups to get to the “last mile.” There could be better planning for who is designated to lead in various areas like collection of food, clothing, etc. in time of emergency.

*“(Our agency) doesn’t get funding to do crisis work but we do it anyhow because it’s the right thing to do. Nothing has changed in terms of preparedness for the next storm.”*  
 Key informant interviewee

- *Specific funding for climate resilience work:* Most of the interviewees from social services agencies are willing to engage more in emergency preparedness and resilience planning work with families they serve, but they need specific resources and capacity to make it part of their agenda. Most Community Development Corporations are not working directly on environmental issues and have other missions but must deal with the impacts on the populations they serve. Funding that supports staff time would help them to have capacity to participate on a steady basis in disaster and resilience planning.
- **Role of municipalities** - Interviewees felt strongly that New Jersey municipalities and cities need to do more to support and coordinate with local agencies that are already serving vulnerable populations. They could serve as the “point” in providing consistent information and communication. Typical municipal functions like improving physical infrastructure that would build more resilience were also mentioned. Specially, these ideas were heard:
  - *Enhance infrastructure:* Interviewees mentioned that towns could do more to install parks and urban greening. They should also fix roads that make travel during heavy storms difficult, and deal with backed up storm sewers that dump garbage and contaminated water into some neighborhoods during storms.
  - *Improve existing community centers:* Work with local agencies to retrofit community centers to serve as disaster centers (equip with generators, etc.). Other neutral places like libraries should be prepared to serve as emergency centers, cooling or warming centers.
  - *Support a well-coordinated emergency service and planning system:* Local service providers already know their communities and their needs. Municipalities should help to build and support an organized network of what already exists, including trusted local social service agencies together with hospitals, OEM, etc. Set up “one-stop shops” for disaster response and recovery. Having a locally-based Head of Social Services at each city would help. Larger cities could appoint and support a “resiliency coordinator” in each ward or area.
  - *Communication and information:* Interviewees told us that they look to towns to communicate from the top-down. In other words, Mayors need to let people know what they need to do by helping to compile and distribute information, and to “connect the dots” between agencies. To help disadvantaged populations, government needs to set up a point person that people can go for help. That point person may not be a government person but another organization that people trust and will not fear.
  - *Support self-sufficiency:* Local government needs to make sure that people have the resources they need to take care of themselves. Some of the biggest problems that people face with climate change is that their whole community is not prepared. They need “concrete” services like helping with food access, fixing houses, finding transportation options, getting medical care, etc. Municipalities could use *additional* CSBG funds to help income-eligible families to be ready for emergencies.

*“The challenge is that NJ has “so many players” and so many jurisdictions, and counties have different strengths. Some are good and some are not so good. We need to figure out in each place whether towns and/or counties will have roles.”*

Key informant interviewee

- *Community education*: Municipalities could educate residents about storm hazards and preparedness actions. Towns could also educate planning and zoning board members about climate as a health issue, planning for vulnerable populations, sustainability and about the importance of taking action to build resilience. Towns could also do more community education about hazardous areas and educating about evacuation.
- **Role of the State** - Interviewees would like to see the state set up the structure for climate preparedness and provide more supportive resources to implement resiliency actions. Interviewees indicate that the state should show leadership from the top-down, and then empower local communities to act. Some specific strategies emerged from dialogues regarding new or better-structured programs and policies that the state could pursue. The Rutgers team heard these ideas and themes:
  - *Adopt policies that mitigate climate change*: The state needs a policy agenda that will work to *stop climate change*.
  - *Build Environmental Justice into policy-making*: People of color and poorer populations' needs are not well-integrated in the policy and decision-making process about their neighborhoods.
  - *Invest in building healthier neighborhoods for all*: The state should look to adopt more policies and programs that invest in home and community-based services, invest in enhanced transportation options, keep utility costs down, and policies to support safe, affordable, accessible housing.
  - *Multi-agency teams*: For disaster recovery, the state could institute a program for vulnerable families that would provide one-on-one counseling to understand people's needs and help them to make decisions. The team could be made up of Mental Health, DEP, DCA, Insurance, Finance, etc. to deal with many inter-connected needs. Most interviewees felt that programs are too "siloes" and not looking at bigger picture needs.
  - *Provide coordinated information*: The State could help to provide coordinated information about state resources, talking with mayors across the state to understand needs, state roles, etc.) Information should first be coordinated between departments, which would result in coordinated messaging outward from state agencies to towns and organizations.
  - *Incentivize local action*: The State could push cities to do climate resiliency and disaster preparedness planning, providing guidance, support and resources.
  - *NJ 211*: This program could better serve immigrant populations, many of whom do not know it exists.
- **Engaging vulnerable populations** - Most community organizations serving New Jersey's vulnerable populations are already engaging residents and families in numerous ways. They stress that many people want to be involved, but for effective engagement, it is important to understand the needs and constraints of the populations, and use a multi-faceted and multi-pronged approach. Some ideas presented include:

- *Strategic outreach:* Interviewees talked about the need to be creative about public engagement, such as building events around the engagement. Build the engagement around something that is interesting or important to them, like health or children.
- *Customize opportunities for input:* Some members of the populations will use the internet, so it is important to have apps or web-based resources that they can access. However, some have no internet at all, so reaching out with other formats is important. For example, one community uses magnets to list all important emergency numbers, etc. Some need ways to participate in other languages.
- *Advantage existing relationships:* It is important to build from existing relationships that social service agencies have with these populations. (e.g. “Could you bring 10 people from your served population to a meeting?”) These organizations have the trust of the people.
- *Recognize hard-to-reach populations:* Some residents will have great difficulty? providing input or becoming involved. Examples include homeless squatters and some immigrants. Collaborating with organizations that serve more isolated populations, like Meals on Wheels, could work.

*“Nothing about us without us. Community residents must be involved in the process. We need to actually put the resources into the trusted community organizations that are permanently in the community.”*  
Focus group participant

- **Information sources**

- *For vulnerable populations:* Members of vulnerable populations tend to strongly trust the local organizations that serve them directly. This is where they go to find out how to access services and meet basic needs. However, they also look to more “official” sources for climate and weather information, underscoring the need for clear, consistent information that communities can trust regarding climate hazards. Specifically, interviewees told the Rutgers team about information sources:
  - *Importance of community sources and word of mouth:* People tend to rely on neighborhood organizations, neighbors and faith-based organizations for information about what to do in emergencies. Some vulnerable populations are a “tight-knit” group and wary of outsiders. Trust needs to be earned.
  - *Government sources:* Government sources do not seem reliable and it is such a “mixed bag” of information that it can be confusing. Often, local government is not well-trusted. But institutions like local libraries can be trusted repositories of information. People already go there for many reasons and can access information there.
  - *NIXEL:* Some residents use this voluntary text messaging service.
  - *Social media:* Some social media platforms are active and used by younger members of populations, such as local Facebook groups.
  - *Local news:* Some residents would look to local news or weather-related websites for trust information on upcoming weather hazards.
- *For organizations:* Many of the organizations report using a good deal of data to drive decision-making and priorities. Much of it is provided by national headquarters or regional offices of major charitable and service agencies to their state or local chapters.

Many though, particularly those that are independent of national organizational frameworks, use a variety of government data. Specifically, interviewees discussed use and trust of information:

- *Government information sources:* Agencies use open source federal and state official government information and standard GIS layers to help to support planning. Some specific agencies mentioned include FEMA, EPA, HHS, NOAA, National Weather Service, US Census, and DCA, DEP and DOH at state level. Some of the larger organizations use online tools like Floodmapper, NJAdapt and EJScreen.
  - *Working with local experts and academics:* A number of the interviewees mentioned working with academic institutions to support their data and/or mapping needs and to assist in data collection and assimilation. They may also read reports from universities or research centers about what is happening in other cities or the region.
  - *Original data collection:* Some organizations conduct their own primary research, like surveys of the conditions of abandoned properties and assessments of local housing conditions. Some collect information from clients served when, for example, they are conducting a periodic needs assessment for planning purposes.
  - *Local news for weather:* The caveat with local news is that understanding where flooding will occur is problematic, as information is not very reliable at the county level. County OEM's send alerts about emergencies.
  - *NIXEL and Reverse 911:* Some organizations partner with their police departments to access their NIXLE services to learn about road closures, emergencies, etc.
- *Data needs:* There are some specific types of data or datasets that would be helpful for community-based organizations to better serve the resiliency needs of their clients. Also important and very useful, however, would be a packet of useful information that communities need to know that is prepared by an official government and/or scientific source and could be distributed to local agencies to share with their communities. Data and information needs to be both relevant and practical. These are some of the data needs as described by interviewees:
- *Essential information to share with communities:* It would be very helpful to have vetted, consistent information that community members should know about climate hazards, preparedness and recovery in forms that are easy to share. For some populations with limited education, for example, the information should contain pictures and graphics, etc. It could be in multiple formats such as presentation slides, handouts and posters. It could then be customized to “tell the story” of climate change in specific localities, to get the attention of local policy-makers and also residents.
  - *Identification of flood prone areas and vulnerabilities:* It would help organizations to better serve vulnerable populations if flood prone areas could be better identified. Even though the agencies know their areas well, they do not always know *exactly* where the local storm impacts will be, where water

levels will rise, and how it will specifically affect different subpopulations at a more “pinpointed” level.

- *Data gaps about subpopulations:* Agencies need to know more about some of the subpopulations they serve. Some mentioned were: transient workers in terms of their disabilities or vulnerabilities, children age 0-5.
- *Scenario exercises:* Organizations need to think about scenarios that could potentially happen and how local resources can meet needs in those circumstances.
- *Infrastructure information and data:* Service agencies could use more information about how climate change affects storm and sanitary sewers, water systems, heating/cooling systems, etc.
- *Health indicators and quality of life indicators:* It could be helpful to obtain subsets of data at a local level and across time. For example, indicators could evaluate how prepared a community is and where gaps are.
- *Mapping support:* Interviewees desired better mapping of urban heat and heat-island effects, and of cumulative impacts of multiple hazards.
- *Compiling “local” information:* There could be an effort to gather and organize local knowledge that could help to better prepare for the future. For example, people know where storms have occurred and where people were affected.

### Specific messages – focus groups

The four focus groups offered important insights regarding needs and challenges of socially vulnerable populations about resilience planning. All the focus groups were highly constructive and interactive with highly vocal participants offering candid insights. The Rutgers team offers several suggestions as to why the focus groups were especially constructive:

- Local engagement – The workplan for this project was specifically designed to establish a partnership with trusted local organizations to host the focus groups. Working with the four non-profit partners created an ease of participant recruitment as well as candor in the actual focus groups.
- Participant incentives – Providing a financial and refreshment incentive was important both in terms of recruiting active focus group participants as well as promoting candor. Participants conveyed a feeling of respect for their time and opinions and an appreciation that their time in the focus group was valued.
- Confidentiality – The Rutgers team took care to explain the concept of confidentiality pursuant to the Rutgers Institutional Review Board meaning that the focus group discussions were not for attribution.

This approach to the focus group created a sense of “partnership” with the focus group host that allowed for an openness of dialogue. It also led to a sense of “ownership” of the outcomes of the focus groups as reflected by the fact that the focus group host organizations have all expressed an eagerness in understanding and commenting on the outcomes of the stakeholder engagement process. It is this sense of “partnership” that seemed to echo many of the recommendations from the focus groups in terms of the ways in which resilience planning can be address the needs of socially vulnerable populations, including: partnerships with residents and with existing, trusted community-based

organizations; partnerships and coordination among social service providers; and a greater role for residents in identifying “what will work” in their own communities.

Specific input received from the focus group includes:

- **Worries and Impacts of Extreme Weather** - Main areas of impact mentioned by focus group members were:

- *Routine Flooding* – Some roads are now almost inaccessible in normal to heavy rains, so people need to look for alternate routes. This causes delays in getting to work and getting home, which is difficult for vulnerable populations. There are concerns about reaching schoolchildren when roads near schools are flooded. In some areas, it is difficult to park cars due to tidal-related routine flooding. Participants discussed street conditions getting increasingly worse.

*There are so many expenses, it's hard to "keep up." We have to pick and choose which bills to pay.*  
Focus group participant

- *Hard financial choices* – Residents in the three community-based focus groups conducted for this project were generally low income. A general theme was the difficulty of making choices for financial obligations that becomes even more difficult when a climate event causes additional financial burden (e.g. loss of food or income).
- *Severe Storms and Flooding* – Heavy rains make emergency access difficult. Participants discussed trees falling damaging houses and cars. If local stores and gas stations close after a severe storm, populations cannot access necessities. Some told stories of not being able to access or afford fresh food after food spoiled during power outages after Superstorm Sandy.

*"The heat is worse in the city because we have no shade."*  
Focus group participant

- *Heat* – As it is noticeably hotter each year, people with outdoor jobs are affected. Urban residents pointed out the increased heat due to minimal shade.

- *Sewer Backlogs/Overflows* – Backup of sewers is causing dirty water and water-related sickness. Backed up stormwater can damage community gardens, not only contaminating the produce, but also reducing the community-building benefits of the gardens.

- *Pest/Vectors* – Participants talked about a noticeable increase in mosquitoes and poison ivy.
  - *Smells* – On high heat days, smells of garbage or from industrial plants become worse. Some residents talked about being able to smell trash and garbage in the streets on high heat days.
  - *Stress* – In general, focus group residents talk about the general stress of life and how climate-related events can exacerbate that stress. “You can’t feel comfortable in your own home because of the worry.”
- **Interaction of climate stressors with other stressors** - The interaction of other life stressors in vulnerable populations with climate-related stressors is strong. These are the key areas of vulnerability that create disproportionate impacts on these populations:
    - *Poverty or low-income status* - Having limited income makes it harder to deal with any of the many problems that arise in extreme weather like flooding, high heat and severe storms. This is an over-riding stressor/condition that affects severity of impacts and ability to both prepare and recover from impacts. We heard often, for example, that if an A/C or heater breaks down, people must “pick and choose” what bill to pay. For some, they either do not have A/C at all or do not turn it on to save utility costs. Poverty also severely affects the ability to pay to fix damages and remediate unhealthy conditions.
    - *Cost of living/housing* – Costs are so high in New Jersey already, that it is “hard to keep up”, much less to add costs like insurance or housing upgrades. Utility rates are very high too – a significant burden. Many talked about not using their air conditioners if they had them to avoid a high bill.
    - *Renters* – Particularly lower income renters are more severely impacted and less able to recover because renter insurance is either not available (too expensive) or does not cover flood loss. They are also dependent on property owners to fix damages and many do not, leaving homes in unhealthy conditions. Recovery money goes to owners and not to renters! Recovery funds do not necessarily get passed along to renters in the form of building repairs.
    - *Transportation access* – Many of the participants in the focus groups do not own personal vehicles. They typically take buses, taxis or use bikes, all of which are difficult during flood events.
    - *Other Health Conditions* – Climate emergencies can make other health conditions worse, like stress and anxiety, respiratory diseases, arthritis. Electrical failures can create impacts for those dependent on oxygen. Heat and molds can also create new diagnoses of asthma, and storms can create PTSD.
  - **Municipal or community-based solutions** – Focus group participants pointed to several areas of focus for municipalities to advance solutions to address needs of socially vulnerable residents:

One poignant personal story is of a man living in rural south Jersey, who has been flooded out of his home and lost all personal belongings on four separate occasions from different flood events. During one of the events (Storm Jonas), no warnings were issued that flood gates broke. The man indicated that, if his dog had not woken him up, he may have died. He has had to replace two vehicles and everything he owned.

- *Education* – Many focus group members felt that it was very important to educate children about environmental-friendly actions, as well as parents/families.
  - *Infrastructure* – We heard calls for cities and towns to do a better job fixing storm drains and roads to be better able to handle storms and flooding. Rain gardens would be beneficial also.
  - *Urban Greening* – Cities should plant more trees in neighborhoods and at bus stops and install more parks to mitigate heat island effects. (e.g. as in the “East Ferry Plan.”)
  - *Cooling/Warming Stations* – More local stations that cover the entire city in a coordinated fashion.
  - *Transportation options* – More free or low-cost options to transport seniors and those with disabilities to warming/cooling stations, or to coordinate evacuation during storms.
  - *Early Warning Systems* – More timely notices through smart phones.
  - *Construction/building codes and policies* – Restrict building in flood prone areas.
  - *Emergency planning* – A participant said that towns need to be “proactive to be reactive.” A common theme was that if plans exist, no one knows about them. Plans need to be communicated to let people know where to go for help. The municipality should have a plan for helping low-income populations during emergencies, like helping them to get to work, etc. Emergency services need to be *coordinated* and *available* for low-income, elderly, disabled and children. It should be coordinated with agencies, hospitals, and utilities. An idea arose that block captains could be assigned to be activated in times of emergency. “Tell us what to do and where to go!”
  - *Coordination with existing community organizations and facilities* – Municipalities should focus on improving existing community centers so that each neighborhood has a center that serves multiple purposes and has capacity.
  - *New definitions* – Government officials need to re-define what “low-income” means and what “state of emergency” means, because sometimes one inch of rain causes problems for people who already have difficulty getting around.
- **State-level solutions:** Focus group participants pointed to several areas of focus for state agencies to advance solutions to address needs of socially vulnerable participants:
    - *Cumulative impacts* – State should develop policies on cumulative impacts of hazards.
    - *Enforcement* – State should exercise stronger enforcement of environmental laws on companies.
    - *Community-based and community-engaged hazards planning* – In the three community-based focus groups held for this project, no participant was aware of the existence of a county or municipal hazard mitigation plan.
    - *Better information/communication* – State needs to provide consistent, trustworthy information about how climate is affecting state, like SLR specific to towns. The state should not be afraid to “tell it like it is.” Many people felt that if there were official, objective (scientific) information presented by an official government representative, people would listen. It should be “straight facts” that are easily understandable.
    - *Attention to Cities* – The state should pay more attention to the needs of cities. In general, there was a perception that state resources are largely directed to more affluent, suburban communities.

- *Utility Bill Assistance* – There should be more or better funded state programs to help seniors and low-income people to pay electricity bills.
  - *FEMA* – FEMA staff need to be more sensitive to vulnerable populations and to mental stresses. It also needs to be clearer about programs and eligibilities. Sometimes people have major damage but do not qualify because the storm was not classified as “major.”
  - *More localized state offices* – The state should put more DEP and Health Dept. offices in some cities to be closer to the community and be easier to contact. Another idea is to “deputize” the community to deal with problems, i.e. train locals to enforce or run programs, and build capacity.
- **News/information sources and engagement of populations** – As part of the focus group, the Rutgers team initiated discussions about access to information regarding climatic events, trusted information sources. Overall, focus group participants expressed a strong willingness and desire to participate in climate resilience planning efforts. Input received includes:
    - Regarding severe weather emergencies, people generally rely on alerts to come through phones, weather apps, radio or TV. Some elderly people receive landline calls if they are already in a senior services program.
    - Regarding other information, e.g. how to prepare for storms, where to go for cooling/warming and other services, etc., most people prefer to rely on trusted local organizations like social service agencies or faith-based entities. Many mentioned that “word-of-mouth” from neighbors and relatives is how they find out about things, with some younger people using more social media like Facebook, Twitter and other internet sites.
    - In terms of locations to access information, libraries are used often to distribute information that gets to residents, many of whom take their children to libraries for programs. Libraries are increasingly viewed as trusted sources for socially vulnerable populations including immigrant populations, and homeless individuals, often providing privacy and access to services and resources. Family centers or community centers are also good repositories for information. Some populations, like immigrants, can be reluctant to go to City Hall or government locations for information or services. That said, the city or state government are generally viewed as “credible” sources of information that can provide answers. People often fear approaching them, however, or do not know who to approach. Therefore, if the City can work with trusted local community organizations/NGO’s that have direct ties to the communities, that is the ideal way to convey information.
    - Some of the ways to spread information that were mentioned were:
      - “canvassing” the community with flyers, door-to-door outreach
      - sending information home with school children, with an incentive for them to show to parents
      - distributing during community events and meetings – meetings should be held at convenient times for both working people (e.g. evening) and parents (e.g. morning or afternoon)

## Observations and Insights

A cornerstone of the key messages received from both the key informant interviews and the focus groups echo dialogue being held throughout the United States regarding the critical importance of participatory processes and community-based strategies and efforts to engage traditionally under resourced and socially vulnerable communities regarding resilience planning. These new approaches reflect growing awareness of the extent to which some populations and communities are disproportionately affected by climate change as well as the recognition of the exacerbating effect that climate change will have on underlying social inequities.<sup>11,12</sup> Emerging practices seek to:

- Address resilience challenges associated with whole communities, and not just individuals;
- Engage traditionally under resourced communities and populations in resilience planning; and
- Broaden the scope of resilience planning outcomes to address underlying multi-sector social inequities that are exacerbated by climate change.

The goal of such efforts is inherently addressing the societal, economic and environmental conditions of socially vulnerable populations social and environmental factors that undermine the adaptive capacity of a community and its residents.<sup>13,14</sup> These approaches include strategies that:

- Take a “whole community” approach rather than focusing solely on the resilience of individuals. A whole community approach includes using resilience planning to address challenges in multiple sectors, including but not limited to health, housing, transportation, workforce development, economic opportunity, etc.;
- Seek to address underlying social, economic and environmental inequities that contribute to some populations being socially vulnerable;
- Set priorities for addressing the needs of socially vulnerable populations;
- Provide streamlined, easily accessible processes resources to residents;
- Creating partnerships with trusted local leaders and organizations and providing the capacity that residents and communities need to contribute to solutions leading to resilience; and

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<sup>11</sup> USGCRP, 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 1515 pp. doi: 10.7930/NCA4.2018

<sup>12</sup> Crimmins, A., J. Balbus, J.L. Gamble, C.B. Beard, J.E. Bell, D. Dodgen, R.J. Eisen, N. Fann, M.D. Hawkins, S.C. Herring, L. Jantarasami, D.M. Mills, S. Saha, M.C. Sarofim, J. Trtanj, and L. Ziska, 2016: Executive Summary. The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. U.S. Global Change Research Program, Washington, DC, page 1–24. <http://dx.doi.org/10.7930/J00P0WXS>

<sup>13</sup> Foster, Sheila, R. Leichenko, K.Nguyen, et.al. New York City Panel on Climate Change 2019 Report Chapter 6: Community-Based Assessments of Adaptation and Equity. Annals of the New York Academy of Sciences. March 15, 2019. <https://doi.org/10.1111/nyas.14009>

<sup>14</sup> In the Eye of the Storm: An Action toolkit. NAACP. 2018. Available at: [https://live-naacp-site.pantheonsite.io/wp-content/uploads/2018/09/NAACP\\_InTheEyeOfTheStorm.pdf](https://live-naacp-site.pantheonsite.io/wp-content/uploads/2018/09/NAACP_InTheEyeOfTheStorm.pdf)

- Deploy use of participatory processes that remove challenges for involvement of populations that do not traditionally engage in government planning efforts.<sup>15,16,17,18,19</sup>

In many ways, these equitable, community-based approaches to resilience resonate with the idea of a “social service”-based model of resilience planning that the Rutgers team heard from several key informants. Similarly, these approaches are also consistent with emerging thinking regarding the future of public health planning in the United States. Often referred to as Public Health 3.0, these models promote cross-sector collaboration in which local public health agencies serve as critical agents to coordinate programs and policies to address underlying social determinants of health.<sup>20</sup>

Next tasks in the PSM project include development of training guidance and policy recommendations to inform state and local climate resilience planning in New Jersey. The outcomes of the PSM focus groups and key informant interviews offer important insights to inform both development of training guidance and policy recommendations. In particular, the cornerstone messages of the key informant interviews and focus groups point to the value of New Jersey advancing equitable, community-based resilience planning approaches as a mechanism to address needs of socially vulnerable populations. Advancing such approaches offers important opportunities for addressing needs of socially vulnerable populations but are likely to also present challenges regarding resources, capacity, authorities, creation of partnership models and ensuring the adequacy of data, tools and evidence-based strategies. Consideration of these challenges will be a focus of the remaining of the PSM project, particularly regarding development of training protocols and policy recommendations.

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<sup>15</sup> Moser, Susanne, J. Coffee, A. Seville. Rising to the Challenge Together. A Review and Critical Assessment of the State of the US Climate Adaptation Field: A Report Prepared for the Kresge Foundation. 2017.

<sup>16</sup> “Climate Resilience and Urban Opportunity.” The Kresge Foundation. Last accessed July 1, 2019. <https://kresge.org/content/climate-resilience-and-urban-opportunity-0>

<sup>17</sup> “Guide to Equitable, Community-driven Climate Preparedness Planning.” Urban Sustainability Directors Network. 2017. Available at: [https://www.usdn.org/uploads/cms/documents/usdn\\_guide\\_to\\_equitable\\_community-driven\\_climate\\_preparedness-high\\_res.pdf](https://www.usdn.org/uploads/cms/documents/usdn_guide_to_equitable_community-driven_climate_preparedness-high_res.pdf)

<sup>18</sup> Social Equity Report 2019, Carbon Free Boston. Last accessed June 28, 2019. [http://sites.bu.edu/cfb/files/2019/06/CFB\\_Social\\_Equity\\_Report\\_053119.pdf](http://sites.bu.edu/cfb/files/2019/06/CFB_Social_Equity_Report_053119.pdf)

<sup>19</sup> Community-driven Climate Resilience Planning. 2017. National Association of Climate Resilience Planners. Available at: [https://movementstrategy.org/b/wp-content/uploads/2017/05/WEB-CD-CRP\\_Updated-5.11.17.pdf](https://movementstrategy.org/b/wp-content/uploads/2017/05/WEB-CD-CRP_Updated-5.11.17.pdf)

<sup>20</sup> DeSalvo KB, Wang YC, Harris A, Auerbach J, Koo D, O’Carroll P. Public Health 3.0: A Call to Action for Public Health to Meet the Challenges of the 21st Century. *Prev Chronic Dis* 2017; 14: 170017. DOI: <http://dx.doi.org/10.5888/pcd14.170017>external icon.

## Appendices

### Appendix A – Key informant supporting materials

- Interviewee list
- Interview protocol

### Appendix B – Focus group supporting materials

- Request for Qualifications
- Focus group protocol

## Appendix A – Key informant supporting materials

**PSM Key Informant Interview List**

Keith Adams	Executive Director	VOAD
Gloria Aftanski	President/CPO	United Way of Central Jersey
Staci Berger	President/CEO	HCDNNJ
Alexandra Cross	CEO	JRFNJ
Drew Curtis	Sr. Equitable Dev. Mgr.	Ironbound Community Corp
Marty Johnson	President	Isles
Robert Kley	Vice Pres./COO	MHANJ
Daniel Krupinski	Health Officer	Long Beach Health Dept.
Ray Lamboy	President/CEO	Latin American Econ. Dev. Assn.
Jill Hoegel Mary Ciccone		Disability Rights New Jersey
Meishka Mitchell	VP of Community Initiatives	Coopers Ferry Partnership
Pat Sermon	COO	Urban League of Essex County
Lisa Wilson	Executive Director	Coastal Family Success Center
Avery Grant	Executive Director	Concerned Citizens of Long Branch
Candace Crane	Dir., Commun. Investment/Eval.	United Way of Central Jersey
Rodric Bowman	Regional Disaster Officer	American Red Cross – NJ Region
Shivi Pasad		Legal Services of NJ – Poverty Research Inst.
Meghan Wren	Former Director	Bayshore Discovery Center
Stephanie Hunsinger	State Director	AARP of NJ
Amanda Devecka-Rinear	Founder	NJ Organizing Project
Linda Brown	President	NJ SOPHE

## Key Informant Questions

### **Part 1 – Stressors on the populations that may be exacerbated by coastal hazards**

1. What are your perceptions about the effects of a changing climate (flooding, sea level rise, extreme weather) on the populations you serve?
2. What types of stressors and challenges do the individuals and families that you serve face on a day-to-day basis?
  - Where do climate stressors fall in relation to other stressors?
3. Socially vulnerable populations are those that have limited access to the resources and conditions that allow them to prepare for, cope with and recover from changing climate conditions. What type of resources and conditions (that you currently do **not** have adequate access to) would assist the socially vulnerable populations' ability to prepare, recover and cope?
  - Prompts: transportation in the event of a disaster, disposable income to pay their bills, interpretive services, housing that can withstand flood and extreme weather event conditions, etc.
4. For the stressors that individuals and families face, what do you think are the top three that, if improved, could improve their ability to prepare for, cope with and recover from changing climate conditions?
5. What stories have you heard about the individuals and families that you serve being affected by flooding and/or extreme weather events (nuisance flooding as well as event-related)?
  - How did the individuals and families overcome these challenges?
6. Are there any examples of where your organization or other organizations like yours worked closely with socially vulnerable individuals and families to increase their ability to prepare for, cope with and recover from changing climate conditions?
  - If yes, what is an example of how the organization helped?
  - Prompt: what challenges were faced and how were they overcome
7. Is there anything that you would like to see the *state of New Jersey* do to increase the ability of the socially vulnerable populations that you work with prepare for, cope with and recover from changing climate conditions?
8. Is there anything that you would like to see *municipal and county governments* do to increase the ability of the socially vulnerable populations that you work with prepare for, cope with and recover from changing climate conditions?

### **Part 2 – Effective strategies to engage populations AND organizations in resilience *planning* efforts**

9. Communities all across New Jersey are working to develop plans to improve the ability of their community to prepare for, cope with and recover from changing climate conditions, including flooding and extreme weather events. Have you or your organization been involved in any such planning efforts at the county or municipal level?
  - Prompt: Please tell us about your experience(s)?

- What do you think might be some effective ways that would make it easier for organizations and leaders such as your organization and you, that are not resilience-mission focused, to be engaged in resilience planning?
10. What do you think are the barriers to socially vulnerable populations from being engaged in community-based resilience planning?
    - Prompt: Can you think of ways in which those barriers can be overcome?
  11. What do you think are the barriers to organizations such as yours and individuals such as you being engaged in community-based resilience planning?
    - Prompt: Can you think of ways in which those barriers can be overcome?
  12. What are the sources of information that the socially vulnerable populations that you work with trust?
  13. What are the sources of information that you and/or your organization trust?
  14. What are the three biggest needs of socially vulnerable populations that would prompt your organization to become engaged in a *planning* effort if you thought it would address those needs?

### **Part 3 – Identification of data resources and data needs for resilience planning**

15. With regard to your own organization, what are the sources of data that you use the most to better understand the needs of the populations and communities that you serve?
  - Which data do you find especially accurate or useful?
16. What three types of data would be most helpful to you in the work that you and your organization do with regard to socially vulnerable populations?
17. Are there any specific sets of data related to vulnerable populations and climate conditions that you think our project team should be aware of?

## Appendix B – Focus group supporting materials

## Focus Groups Questions

1. How long have you lived in this community?
2. Are flooding and extreme weather events something that you think about or worry about?
  - How does this compare to other day-to-day stressors in your life?
3. What are some of your experiences and hardships with flooding, heat and extreme weather events here in New Jersey?
4. If you could change one thing to make it easier for you and your family to deal with flooding and extreme weather events, what would it be?
5. What are some things that organizations could be doing help you to cope with flooding and extreme weather?
  - What could your municipality be doing?
  - What could the state be doing?
6. Where do you get your news generally?
7. Where do you get your information about climate hazards, the weather, etc.?
8. What organizations or sources of information do you trust and use the most?
  - Prompts: doctor, local community-based organization, church, newspaper, social media, etc.
9. What types of information would be helpful to you that you don't currently have access to?
10. What are the best ways to get information to you?
11. If you could, would you participate in community meetings related to climate resiliency planning?
  - Prompts: At what level? (neighborhood, town, etc.) What types of meetings?
  - What would make it easy for you to do that?

## **Request for Qualifications: *Engagement of Socially Vulnerable Populations in Coastal Resilience and Hazard Mitigation Planning***

Contact: Jeanne Herb, Executive Director; Environmental Analysis and Communications Group, Rutgers the State University of New Jersey; [jherb@ejb.rutgers.edu](mailto:jherb@ejb.rutgers.edu)

*Issued: March 29, 2019 – Deadline for Response: 5:00 on April 19, 2019*

### **Background:**

Two programs at Rutgers University, the [Jacques Cousteau National Estuarine Research Reserve](#) and the [Bloustein School of Policy and Planning](#), are working with the New Jersey [Coastal Management Program](#) as administered by the Office of Coastal and Land Use Planning within the New Jersey Department of Environmental Protection on a project to identify effective strategies to engage populations identified in the social science literature as socially vulnerable to environmental hazards, as well as Environmental Justice communities, and traditionally underrepresented populations (herein *socially vulnerable* populations) in state, regional and local coastal resilience and hazard mitigation planning.

With climate change, people across the United States are increasingly exposed to coastal hazards. However, some populations are disproportionately affected. Factors that influence the extent to which people can prepare for, cope with, respond to and recover from coastal hazards includes their exposure to particular stressors, their sensitivity to impacts, and their ability to adapt to changing conditions. Characteristics that make a population less able to adapt to coastal hazards include age, physical limitations, race and income, English proficiency, social status, and exposure to other environmental, health or social burdens. The term ‘*social vulnerability*’ is used to describe these populations – more information on social vulnerability can be found at: <https://svi.cdc.gov/>. The term “environmental justice” is used to describe populations that are socially vulnerable, in part, due to their exposure to a disproportionate amount of industrial pollution and other environmental hazards. More information on “environmental justice” can be found at: <https://www.nj.gov/dep/ej/>. For the purposes of this Request for Qualifications, the term “socially vulnerable populations” will be used to inclusively describe the terms social vulnerability, environmental justice and traditionally underrepresented populations.

As part of this project, Rutgers University will work with three organizational partners to host three focus groups in spring 2019 with coastal residents that represent characteristics associated with socially vulnerable populations. It is Rutgers’ intent to choose three organizational partners that are viewed as trusted local sources within socially vulnerable communities for the purposes of assisting with organizing the focus groups. It is important to note that the New Jersey coastal zone includes 239 municipalities with diverse populations and many different types of municipalities – see: <https://www.state.nj.us/dep/cmp/docs/new-detailed-cafra-map.pdf>. The focus groups will allow the Rutgers research team to hear from residents regarding challenges they face that may be exacerbated by coastal hazards as well as regarding strategies that would be effective to engage socially vulnerable populations in state, regional and local resilience and hazard mitigation planning efforts.

### **Purpose**

The purpose of this Request for Qualifications is to identify three organizations to which Rutgers will provide \$5,000 individual subawards. The three chosen organizations will each work with Rutgers to organize and host a spring 2019 focus group of at least 12 residents representing socially vulnerable populations that reside in New Jersey's coastal zone. Each focus group will be held in person on-site at the three chosen organizations and will last for approximately 1.5 hours. Each participant in the focus group will receive a \$40 participation stipend. Rutgers University researchers will: develop the focus group questionnaire, conduct the focus groups, provide Spanish language translational services if needed, take notes at the focus group, and provide the \$40 stipend per participant. The chosen three organizations will be responsible for:

- Physical hosting of the focus group
- Recruitment of residents to participate in the focus groups
- Logistical organizing of the focus group
- Providing refreshments for focus group participants
- Provide translational services for languages other than Spanish (if needed)
- Collaborating with Rutgers to summarize the results of the focus group discussions

Note: the \$40/participant stipend does not come out of the host organizations' \$5,000 budget.

#### **To respond to this Request for Qualifications**

This Request for Qualifications (RFQ) is being sent to several New Jersey organizations that are known to provide services and/or resources to socially vulnerable populations in the New Jersey coastal zone. Three organizations will be chosen to receive individual \$5,000 subawards for purposes of organizing and hosting individual focus groups.

To respond to this RFP, please complete the attached form and send to Jeanne Herb, Rutgers University, at [jherb@ejb.rutgers.edu](mailto:jherb@ejb.rutgers.edu) by **5:00 pm on Friday, April 19**. If you have questions about this RFP, please send an email to Jeanne Herb with the subject line: *questions about RFQ* with your question by April 5. All questions received will be answered within two days and sent via email to all organizations to which this RFQ has been sent.

#### **Selection criteria**

Three organizations will be chosen to receive the \$5,000 subawards for purposes of organizing and hosting the focus groups based on the following criteria:

- Demonstration of 501(c)3 status and a Board of Directors/Trustees (10%)
- Demonstration of having a focused organizational mission that includes a commitment to:
  - Providing support to voluntary organizations that offer direct support to residents after disasters, including but not limited to socially vulnerable populations;
  - Provides other services and/or resources to socially vulnerable populations. (25%).
- Demonstration of having a headquarters in New Jersey including office space in the New Jersey coastal zone that is adequate and appropriate to host a focus group at which approximately 20 people may be in attendance, including focus group participants and Rutgers and the focus group host's staff. (20%)
- Demonstration of having staff available to organize, recruit and host a focus group. (20%)

- Demonstration of current and well-established engagement with socially vulnerable populations in the New Jersey coastal zone and an awareness of issues associated with coastal hazard impacts to such populations in New Jersey. (25%)

**Response to Rutgers University Request for Qualifications: Request for Qualifications: Engagement of Socially Vulnerable Populations in Coastal Resilience and Hazard Mitigation Planning**

*Instructions: please write or type answers to the 14 questions below. Please complete and send completed form by email to [jherb@ejb.rutgers.edu](mailto:jherb@ejb.rutgers.edu) by 5:00 on April 19, 2019*

1. Date completing this form: \_\_\_\_\_
2. Name of Organization: \_\_\_\_\_
3. Contact person: \_\_\_\_\_
4. Name of person who will be leading the focus group effort if your organization is chosen to be given a subaward: \_\_\_\_\_
5. Organizational address, telephone and email address for contact person: \_\_\_\_\_  
\_\_\_\_\_
6. Organization website: \_\_\_\_\_
7. Number of paid full-time staff in organization: \_\_\_\_\_
8. Location of physical office in the New Jersey Coastal Zone: \_\_\_\_\_  
\_\_\_\_\_
9. List of Board of Trustees/Directors or link to list: \_\_\_\_\_  
\_\_\_\_\_
10. Does your organization have 501(c)3 status? Please attach your 501(c)3 statement: \_\_\_\_\_
11. Summarize the qualifications of the person who will be leading the focus group effort for your organization (no more than 300 words): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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12. In the space below and in less than 1,000 words, please tell us about your organization's past and current work with regard to:

- Providing support to voluntary organizations that offer direct support to residents after disasters, including but not limited to socially vulnerable populations; and/or
- Provides other services and/or resources to socially vulnerable populations.

13. In the space below and in less than 1,000 words, please tell us about your organization's past and current engagement with socially vulnerable populations in the New Jersey coastal zone and an awareness of issues associated with coastal hazard impacts to such populations in New Jersey. Please note that this question asks you to focus on your organization's past and current efforts in coastal communities.

14. Please use this space to point to any materials/links that you believe demonstrate your organization's qualifications to undertake the focus groups associated with this project: