

Exhibit E Soundness of Approach
New York State
ExhibitESoundApp_NYS.pdf

Consultation

Since its inception, the Governor’s Office of Storm Recovery (GOSR) has been committed to ensuring that all impacted populations are aware of, and given the opportunity to participate in, the State’s recovery and resilience programs. GOSR continues to leverage an expansive website platform; an integrated social media presence; traditional media in local, regional, and national markets; briefings with elected officials, municipal partners, and community advocacy groups; large scale public hearings; and frequent technical assistance sessions with program applicants and project implementation partners. As such, GOSR has established robust formal and informal stakeholder networks across sectors, needs, and geographies, which the State will leverage and build upon in Phase 2 of the NDRC. These stakeholder networks have been engaged throughout the recovery process, and the State has proactively consulted with a targeted subset of these networks for the development of the Phase 1 NDRC application. As discussed in Exhibit C, the NY Rising Community Reconstruction (NYRCR) Program has developed an extensive community stakeholder network, both through its Planning Committees and public engagement events (pages 33-40). This Program presents a scalable, replicable model for the deep systematic engagement of all community stakeholders as well as vulnerable populations. In addition, the NY Rising Infrastructure Program has held over 100 technical assistance meetings in ten months for FEMA-Public Assistance funds. The NY Rising Housing Recovery Program has established a strong partnership with the Long Island Housing Partners, which conducts case-referrals, outreach, and case-specific coordination with Social Services Block Grant (SSBG) funded Disaster Case Management firms, and also encompasses subrecipient agreements with pro-bono legal firms who provide support to vulnerable homeowners in need of special assistance in the rebuilding process. Also outlined in

Exhibit C (pages 36-40), these outreach efforts align with the State’s Citizen Participation Plan (CPP), which endeavors to provide citizens with an opportunity to participate in the planning, implementation, and assessment of the State’s CDBG-DR recovery programs.

The Phase 1 Framing Phase of this application, which constitutes a rigorous unmet recovery needs analysis, necessitates the targeted engagement of key stakeholders poised to contribute appropriate data and to identify funding sources, partnerships, and strategies that can be leveraged and developed in Phase 2.

For the express purpose of preparing this Phase 1 NDRC application, GOSR rolled out a targeted strategy to engage the following stakeholder groups: 1) the City of New York and State of New Jersey, 2) select state agencies, 3) NDRC Most Impacted and Distressed counties, 4) NDRC Declared counties, 5) Tribal Areas within NDRC Most Impacted and Distressed and Declared counties, 6) potential non-governmental organization partners, and 7) the general public.

As discussed in Exhibit C (page 41), the State has consulted with both the City of New York and the State of New Jersey to develop this Phase 1 application. All three parties participated in several calls to discuss and refine respective application approaches to ensure they are regional in scope and synergistic in nature. The City and State of New York maintain a critically productive working relationship in the administration of recovery programs. In particular, the City is a subrecipient to the State and will work with local NYRCR Planning Committees to implement several projects developed through the NYRCR Program. The State and City also coordinate closely to ensure the alignment of the State’s Acquisition for Redevelopment program. The City’s Phase 1 application approach to serve vulnerable coastal

communities throughout the five boroughs aligns with the State’s larger approach to ensure the development of resilient built and natural systems throughout the State.

The State will continue to coordinate with the City of New York and State of New Jersey to advance synergistic Phase 2 approaches that may include the advancement of specific projects, partnerships, or funding schemes. The City and State are in active consultation with the PANYNJ and the MTA to explore unique opportunities for cooperation on strategic resilience initiatives. In addition, the State of New York, City of New York, and State of New Jersey will continue to work together to ensure the successful administration of ongoing recovery programs.

In early January 2015 , GOSR convened senior staff from the key agencies outlined in Attachment D (pages 96-101) to participate in a NDRC Interagency Working Group to develop the State’s overall strategy for this Phase 1 NDRC application. GOSR then charged agencies with completing a detailed survey to identify data to document unmet recovery needs, existing funding sources, potential partnerships, and potential strategies (i.e. project concepts and programs) to further refine in the Phase 2 NDRC application.

GOSR convened two separate webinars in early 2015 —one for Most Impacted and Distressed counties and one for Declared counties—to brief senior county staff on the two-phased NDRC application. Tribal Areas located in these counties were also invited to participate in the appropriate webinar. GOSR then asked participating counties and Tribal Areas to complete a detailed survey to identify data to document unmet recovery needs, existing funding sources, potential partnerships, and potential strategies (i.e. project concepts and programs) to further refine in the Phase 2 NDRC application. Declared counties were also asked to provide sub-county specific data to document Most Impacted and/or Distressed characteristics.

GOSR continues to leverage and build upon the dynamic stakeholder networks established in the development and implementation of the State’s various recovery programs. For this NDRC Phase 1 application, GOSR engaged in ad hoc consultations with various non-governmental organizations (NGOs). The State may choose to engage a cross-section of NGOs as formal partners in Phase 2 application development. The NGOs engaged would depend upon the programmatic focus of the State’s Phase 2 application.

To inform the public about the NDRC, the GOSR homepage provides a comprehensive list of NDRC Frequently Asked Questions and a link to the HUD Exchange NDRC page, along with an email address to which interested parties can submit questions.

The State will continue to coordinate with the City of New York and State of New Jersey to advance synergistic Phase 2 approaches that may include the advancement of specific projects, partnerships, or funding schemes. The City and State are in active consultation with the Port Authority of New York and New Jersey (PANYNJ) and the Metropolitan Transportation Authority (MTA) to explore unique opportunities for cooperation on strategic resiliency initiatives. In addition, the State of New York, City of New York, and State of New Jersey will continue to work together to ensure the successful administration of ongoing recovery programs.

Secondly, GOSR will formally reengage state agencies, eligible counties, and Tribal Areas, as appropriate, in the identification and enhancement of strategies to be developed in Phase 2. Select agencies and counties have already provided substantial input regarding potential strategies, partnerships, and funding sources. GOSR will continue to work with eligible target areas throughout the Phase 2 application process to demonstrate additional unmet recovery needs by examining new data and revisiting existing data, as appropriate.

Thirdly, GOSR will utilize existing relationships with NGOs—from advocacy groups to academic institutions to philanthropic foundations—to champion or create resilience strategies, additional partnerships, and funding and/or financing mechanisms in Phase 2. Whether these relationships were established through the State’s ongoing recovery programs, or specifically for the NDRC, NGOs will play an invaluable role in ensuring the development and implementation of truly transformative projects that will dramatically enhance the resilience of a region. Moreover, NGOs will assist in the essential engagement of vulnerable populations.

GOSR’s Phase 1 strategy builds upon GOSR’s Action Plan Amendment Eight (APA8), detailed in Exhibit B (page 6-7). Vulnerable populations, identified through APA8 and other outreach strategies, will be more directly engaged in Phase 2, as the application moves from a systematic unmet recovery needs “framing” analysis to a project refinement and “implementation” process with which beneficiaries and the greater public can engage more directly. GOSR’s direct engagement of eligible Tribal Areas, as well as partnerships with advocacy groups, represent the consideration of the needs of vulnerable populations in the development of this proposal. Consultations with these key stakeholders have deeply informed the systems-based approach to resilience outlined in this Phase 1 application. In particular, expert input from the New York State (NYS) Department of State (DOS), NYS Department of Environmental Conservation (DEC), and others has highlighted the cumulative impacts of coastal and riverine flooding—caused and exacerbated by climate change—on vulnerable populations and ecosystems. As discussed in Exhibit C (pages 40-41), the State is committed to advancing nature-based interventions, while simultaneously advancing critical upgrades to wastewater treatment facilities and sewer infrastructure that will reduce nitrogen loading and therefore safeguard investments in green infrastructure. Potential strategies, partnerships, and

funding sources identified by partners in Phase 1 will bear fruit in Phase 2, and the State is well-positioned to develop, implement, evaluate, and scale impactful resilience solutions.

Idea(s) or Concept(s)

State's Approach

New York State is looking to create regional, systems-based solutions for recovery and long-term resilience in riverine and coastal communities. The State's concept addresses environmental degradation risks in these communities. The NDRC presents an opportunity for the State to build upon and learn from its ongoing investments in long-term resilient recovery, acknowledging new and newly-understood risks and opportunities. Seizing this opportunity, the State endeavors to value, integrate, and operationalize a holistic approach to resilience in program and project development, implementation, and evaluation. This approach aims to realize a vision of physically, socially, economically, and environmentally resilient communities with access to fortified, integrated infrastructure; cutting-edge educational and business development opportunities; stronger and more resilient housing; and healthy, publically-accessible ecosystems. The State endeavors to engage partners across sectors to create scalable, systems-focused solutions to catalyze recovery and resiliency in vulnerable riverine and coastal communities. This approach aims to advance planning processes, programs, and capital projects that deliver multiple co-benefits, fostering systems that can most quickly respond to, and most effectively rebound from, severe weather events and other emergencies.

For the purposes of this Phase 1 application, GOSR has synthesized lessons learned from its recovery efforts to identify two dominant community typologies—coastal and riverine—which face extreme risk from severe flooding and climate change in the form of more frequent extreme weather events, increased precipitation, storm surge, sea level rise, and other factors.

While the communities in each of these two categories share many characteristics, they also face an array of unique challenges depending on geography and socioeconomics. Moreover, some communities, like those along the Hudson River, are vulnerable to both coastal and riverine flooding.

Should the State advance to Phase 2, GOSR will undertake a multi-systems analysis to better define the characteristics common to coastal and riverine community risk profiles. The State will then select pilot communities and work with partners to co-create innovative resilience solutions that are responsive to context and build upon GOSR’s experience. The ultimate goal is to develop, implement, evaluate, and scale projects that provide multiple co-benefits and improve everyday quality of life through cross-sector collaboration. Evidenced by the incorporation of resilience factors in the State’s funding and permitting processes discussed in Exhibit F (page 72), the State is beginning to operationalize resilience in tangible ways and NDRC funding will empower the State to leverage existing resilience efforts—and to catalyze new ones.

The State’s two Rebuild by Design projects demonstrate the approach the State is proposing: true resilience in riverine and coastal communities necessitates a multi-jurisdictional, systems-based, regionally-directed, holistic outlook squarely focused on both protecting vulnerable populations and acknowledging the need to live with water and embrace nature-based features. These projects address multiple unmet recovery needs and provide an array of co-benefits to catalyze longer term recovery, mitigate risk, protect existing recovery investments, and improve everyday quality of life. Other precedential projects that correspond to the State’s vision of resilience include:

- The Red Hook Integrated Flood Protection System in Brooklyn, which is an example of a City-State partnership to advance innovative large-scale infrastructure to protect and transform a vulnerable coastal community;
- The NY Rising Buyout Program’s effort at Oakwood Beach, Staten Island, where an entire coastal neighborhood is being bought out and replaced with publicly accessible natural buffers to reduce the impact of future storms on surrounding areas and create new social, economic, and ecological opportunities; and
- The buyout and affordable housing project proposed by the Sidney Planning Committee’s NY Rising Community Reconstruction (NYRCR) Plan, which is being implemented through the NYRCR Program and with FEMA HMGP funds, and involves buying out a vulnerable riverine neighborhood, converting that portion of the floodplain to green infrastructure, and building a new mixed-use neighborhood, including affordable housing, outside of the floodplain.

While these are excellent examples of systems-based, integrated resilience projects, New York State’s analysis, detailed throughout this Phase 1 application, indicates the importance of pairing these solutions with environmental remediation efforts to reduce nitrogen loading in bodies of water, which can undermine investments in green infrastructure and compound vulnerability.

The State’s approach builds upon lessons learned in New York’s ongoing recovery, strives to protect the State’s existing assets, including its storm recovery investments. GOSR is working with partner agencies and counties to incorporate the unmet need of coastal and riverine communities and is open to adapting the approaches should the State advance to Phase 2. New York State is seeking to augment its existing actions, ensuring the long-term benefits of the

State’s existing recovery investments. This holistic, systems-based approach addresses physical, economic, and social resilience risks that would otherwise not be met.

New York State has made recovery investments setting the region on the path toward building back smarter and more resilient. GOSR’s recovery programs in housing, infrastructure, small business development, and community reconstruction go beyond recovery activities that would return damaged communities to pre-disaster conditions—and instead implement activities that address disaster-related impacts and leave communities sustainably positioned to meet the needs of their post-disaster populations and to further prospects of growth.

New York State already has in place tools to ensure that its projects will be feasible and effective at supporting resilience. For example, the State utilizes cost-benefit analyses, risk analyses, and meetings with stakeholders. Should the State advance into Phase 2, it is expected that it will use these tools, and others.

Co-Benefits

This systems-based approach to recovery inherently creates co-benefits. Protecting riverine and coastal communities at risk of flooding creates or retains a strong social sphere, which ensures healthy community members and considers the needs of future generations; protects the environmental sphere, which creates a diverse ecological system that performs life-sustaining functions and provides essential resources for humans and other species; and ensures a healthy and diverse economy which adapts to change, provides long-term security to residents, and recognizes social and ecological limits. These spheres can appear separate from one another but they are intimately related.

As the State moves into implementation of its large-scale infrastructure projects, the State has developed and will continue to exemplify the general administrative and technical capacities

discussed in Phase 2 of the Capacity Factor, including procurement, contract management, rapid program design and launch, management of project design, and green (nature-based) infrastructure planning and implementation.

Vulnerable Populations

The impacts of climate change affect all New Yorkers, but those with low- and moderate-income, limited English proficiency, functional needs, the elderly, and the isolated, are often disproportionately burdened. In addition, small businesses often have less of an ability to recover. The holistic approach the State is pursuing not only knits together multiple spheres of recovery and rebuilding, it also seeks to address the specific challenges faced by these individuals and small businesses.

Working Regionally

The State’s approach looks beyond traditional administrative boundaries and the minimum required geography, benefiting adjacent communities and the region at large. The State’s work is extensively detailed earlier in this Exhibit, and includes consultation with both the City of New York and the State of New Jersey to develop this Phase 1 application. In addition, GOSR has consulted with counties across New York State on this application specifically, and has worked with counties in the agency’s other recovery and rebuilding projects. State agencies are also central to this application as well as to GOSR’s broader work. Finally, interstate agencies such as the PANYNJ and the MTA have been key to this application’s development.

Adjacent areas will be positively impacted by the State’s proposed regional approach as negative externalities that may go ignored in a more traditional, non-regional approach will be addressed. However, one drawback of regional approaches is that they may be more complicated

to pursue. Despite this, the State has successfully pursued a regional approach throughout its previous recovery and rebuilding work and continues to have the capacity to pursue this type of approach, as is clearly shown in Exhibit C (pages 30-42).

In addition, the State realizes that to fully address resilience, its approach must capitalize on the tremendous interdependencies among sectors. For example, connecting communities to public transportation is tied to economic opportunities for the community.

New York State's Overall Approach to Resilience

New York State's approach to resilience through GOSR's comprehensive recovery and rebuilding programs, as well as through other State agency's initiatives is to conserve and develop systems that can most quickly respond to, and most effectively rebound from, severe weather events and other emergencies. As discussed in Exhibit D (page 48), the State's Hazard Mitigation Plan informs the State's approach to analyzing need by identifying natural, technological, and human-caused hazards that have impacted, or have the potential to impact, the State. It then focuses on 15 natural hazards considered most likely to affect New York residents. The State also boasts the second greatest total number of U.S. Green Building Council Leadership in Energy and Environmental Design certified projects, second only to California.

In addition, many of the State's target areas and storm-impacted communities have demonstrated a commitment to community resilience, including ten communities within in the New York City metro area that participate in the National Flood Insurance Program Community Rating System (CRS). Seven of these communities are included in the Most Impacted and Distressed counties referenced in this application and this competition may provide an opportunity for New York State to encourage more communities to participate in the CRS.